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INTERNATIONAL CRITICAL CARE AND EMERGENCY MEDICINE CONGRESS

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COMPARISON OF LAPAROSCOPIC SLEEVE GASTRECTOMY WITH VERSUS WITHOUT STAPLE LINE STITCHING IN MORBID OBESE PARTICIPANTS

INTRODUCTION: Laparoscopic sleeve gastrectomy (LSG) promotely described as a part of a metabolic procedures operation, has become a popular stand-alone procedure for weight loss surgery (1-3). LSG is a popular bariatric procedure with a low complication rate.

Serious complications after LSG include gastric leak and staple line bleeding.

In order to reduce these complications, staple line reinforcement has been applied variably by bariatric surgeons. There is no precise proof to suggest that routine stitch of the staple line or reinforcement with buttressing material after LSG decreases these complications.

In view of some recent reports (4-6) suggesting that oversewing of the staple line may not be necessary, we conducted a study to compare the outcome in two groups of patients undergoing LSG with and without oversewing of the staple line.

We therefore undertook a retrospective controlled research l to assess the efficacy of oversewing of the staple line in preventing complications after LSG.

PATIENTS AND METHODS: Of 90 patients undergoing LSG were randomly separated into 2 groups. In Group A, the entire staple line was reinforced with continuous suturing, and in Group B, no reinforcement was used. Thirty patients were enrolled in each group. We followed the standard National Institute of Health guidelines for selection of patients .Indications for this procedure were morbidly obese (body mass index >40 kg/m²) patients with comorbidities including type 2 diabetes mellitus, hypertension, and sleep apnea,. Complications including gastric leak, bleeding, and stricture were recorded.

Statistical analysis

Statistical analysis was done using SPSS software version 24(IBM, NY). Descriptive statistics comprised means and standard deviations for quantitative variables. Individual comparison of parameters before and after the operation was analyzed by Student's t test. The relation between categorical variablesin both groups in our study was studied by the chi-squared test. P value of < 0.05 was considered to indicate statistical significance.

RESULTS: The demographic parameters were comparable in the two groups. Two cases of early gastric leak

occurred in Group B and none in Group A. There was no case of staple line bleeding or stricture in either group,

although 1 patient in Group B had bleeding from the omentum that required re-operation. The overall surgical

complication rate was 5%. The mean operative time in Group A (95 ± 10 minutes) was significantly greater than in Group B (88 ± 19 minutes) (P = 0.02).

DISCUSSION

LSG was initially used as the first step of a staged operation for superobese patients (7). Many researchs adviced that LSG could be a promising standard procedure for treatment of morbid obesity (2,3,8)

Among the various complications of LSG, staple line leak is the most scared.

Due to the long and curled staple line in LSG, there is a propensity for leak, especially near the fundus site(9).

The incidence of gastric leak after LSG has been declined as 0%–12%.(4,9,10,11) Depending on the etiology, leaks are divided into two types: mechanical and ischemic.

Mechanical leaks usually obtained within 2-3 days latter the surgical process and are mainly according to technical faults, inappropriate staple size, and also distal obstruction. İschemic Leaks appear nearly latter 5 days of surgery (9).

Burgos et al.10 reported seven leaks in a series of 214 LSGs. In all the patients, the staple line was reinforced by continuous sutures (10). In a large multicentric series of 2834 patients of LSG,13 the reported leak rate was 1.5%. Of these 44 cases of leakage, 16 had reinforcement: 12 with oversewing and 4 with buttressing

Material. Besides that Bellanger et al.14 have reported a zero leak rate in a series of 529 patients. They have stressed avoiding creating stricture at the incisura angularis (12-14).

Our research , which was undertaken after an initial experience of more than 100 cases of LSG by a tertiary clinic bariatric surgeon , suggests that reinforcement of the staple line by over-sewing may lead to a decrease in staple line leaks. However, we cannot make any dogmatic conclusions about the efficacy of oversewing of the staple line in view of the small sample size.

Conclusions: stitching of the surgical staple line may lead to decrease the rate of leak ratio, although a larger study is needed to reach a decisive conclusion. The incidence of staple line bleeding can be minimized by following meticulous technique and adequate compression time after closure of the stapler rather than placing undue emphasis on oversewing and expensive buttressing materials.

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THE COMPARISON OF DIMENSION OF CAROTID INTIMA-MEDIA THICKNESS AFTER BARIATRIC SURGICAL PROCESS

INTRODUCTION: and metabolic Bariatric surgery (BS) promotes carotid intima media thickness (C-IMT) regression as 6 months post-surgery. To verify whether C-IMT regression occurs even

earlier, we aimed at the effect of laparoscopic sleeve gastrectomy (LSG) and transit bipartition (TB) on C-IMT 1– 3 months and 12 months post-surgery.

Methods Retrospective reserach, BS was performed on 85 patients either with (LSG = 42; BDP = 43) or without type 2 diabetes (LSG = 14). Healthy volunteers served as control group. Follow-up: baseline, 1–2 months, 12 months postsurgery. differences (Δ) in C-IMT, weight, body mass index, fat mass, waist and neck circumferences, blood pressure, HbA1c, glucose, insulin, insulin sensitivity ,HOMA-IR;, lipids, C-reactive protein, leptin.

Results : All surgery subgroups had similar levels of Δ-C-IMT. C-IMT in the pooled surgery group reduced from [mean] 0.75 (0.67–0.82) mm to 0.62 (0.53– 0.66)mm, p<0.001[–17.1 (–22.4 to –15.2)%] at 1–2months, and to 0.65 (0.56–0.68) mm, p < 0.001 [–20.4 (–24.3 to –16.4)%] at 12 months post-surgery. Δ-C-IMT 1–2 months and 12 months post-surgery correlated to baseline C-IMT, and with Δ-leptin at 1–2 months, but not at 12 months postsurgery. In linear regression analysis, Δ-leptin and baseline CIMT were predictors of Δ-C-IMT 1–2 months post-surgery.

Conclusions : A significant C-IMT regression detected in 1–2 months after BS in obese patients either with or without type 2 diabetes, which have a realtionship with the early decrease in leptin, levels regardsless of weight loss.

INTRODUCTION:

Atherosclerosis is most common reason of morbidity and mortality worldwide , also obesity and type 2 diabetes are major contributors for increasing in the future (1,2). The most effective therapy for obesity and type 2 diabetes is bariatric surgery , which also leads to reduce cardiovascular events (3–6).Early atherosclerotic development is associated with endothelial dysfunction and carotid intima-media thickening. The ultrassonographic measurement of carotid intima-media thickness (C-IMT) has been used as a proxy marker of atherosclerotic cardiovascular disease (7,8). C-IMT regression after bariatric surgery appears to occur to a greater extent and earlier than for any other medical intervention, including statins, any drugs

, and weight loss, which are related with slower increasing, or moderate C-IMT regression over several months or years(9–21). We hypothetized that bariatric surgery promotes C-IMT regression in patients with different degrees of obesity,and aimed at the effect of different techniques of bariatric surgery (LSG, TB) on C-IMT

in this population.

PATIENTS AND METHODS: Of 85 patients undergoing LSG were randomly separated into 2 groups. All trials were approved by the Ethics Review Board of the University of medicine. The inclusion criteria were: age 18 to 60 years-old; obesity (for patients without diabetes, BMI >40 kg/m2, or BMI >35 kg/ m2 with related co-morbidities; or BMI >30 kg/m2 with diagnosisof type 2 diabetes). For patientswith type 2 diabetes and grade

I obesity (BMI 30–30.9 kg/m2), additional inclusion criteria were: current use of insulin or oral antidiabetic drugs. In Group A, patients operated with LSG process, and in Group B, TB process was applied to patients

. We followed the standard National Institute of Health guidelines for selection of patients .

Statistical analysis

Statistical analysis was done using SPSS software version 24(IBM, NY). Descriptive statistics comprised means and standard deviations for quantitative variables. Individual comparison of parameters before and after the operation was analyzed by Student's t test. The relation between categorical variablesin both groups in our study was studied by the chi-squared test. P value of < 0.05 was considered to indicate statistical significance.

RESULTS: The demographic parameters were comparable in the two groups. Compared to non-diabetic patients, those with type 2 diabetes were older [46.7 (44.9–48.6) vs 36.1 (33.3–38.9) years, p < 0.005], had lower BMI [36.0 (34.7–37.3) kg/m2 vs 44.5 (42.5–46.4) kg/m2, p < 0.005], and had higher HbA1c [8.1 (7.7–8.6) % vs 5.6 (5.2–6.0) %, p < 0.005]. C-IMT The surgery group had higher C-IMT at baseline than the Control group [mm vs 0.62 (0.53– 0.66)mm, p < 0.001]. A significant reduction was observed 1–2 months post-surgery, which represented most of the long-term (12- month) reduction in C-IMT.

DISCUSSION

The major detected point is the significant C-IMT thickness measurement showed in 2 months after bariatric process, according to the long-term result, in patients with or without diabetes mellitus, regardless of the surgical technique.

The pathway of C-IMT regression after the surgical process are unclear. The correlation to other variables is inconsistent across bariatric surgery studies, including weight loss, blood pressure reduction, and change in lipids. likely the significant factor is the decrease in the mechanical stress on the vessels (including the decrease in blood pressure) according to the weight loss causeto an cumulative remodeling of the carotid vascular tissues (7). The C-IMT increase predicts an elevated risk of cardiovascular diseases, so bariatric surgery-induced C-IMT regression may be related with reduction in the cardiovascular risk, if sustainable in the long-term period (8-10). Furthermore Leptin is an adipokine involved in the long-term regulation of energy balance, suppressing food intake . Caloric restriction promotes a rapid reduction in leptin levels and subsequent weight loss is accompanied by proportional serum leptin reduction (22,23). There are a some limitations of this study. Alternative measurements were not included, like as vascular measurements, secondly is the lack of follow-up longer than 12 months.

In conclusion,

Dimension of C-IMT decreasement is detected significantly after bariatric surgery and may occur as early as 1–2 months in the postoperative period. The connection of the early regression of C-IMT to the reduction of serum leptin, at least partially independent of weight loss, The clinical relevance of bariatric surgery-induced C-IMT regression is may be a marker of reduction in cardiovascular events for the future researchs.

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MIDTERM COMPARISON OF OPEN VERSUS LAPAROSCOPIC TRANSIT BIPARTITION

INTRODUCTION: metabolic surgery has been proposed as the most efective and also common treatment to resolve morbid obesity. The aim of this study was to show and evaluate the impact of the laparoscopy on weight loss parameters in morbid obese patients who underwent surgery according to transit bipartition (TB) and evaluate early and late complications related to the open and laparoscopic approach of this method.

MATERIALS AND METHODS: This is a longitudinal retrospective study in consecutive patients undergoing TB due to morbid obesity between 2004 and 2019. In both approaches, open and laparoscopic surgery, the procedure performed consists of a proximal gastric section with a long Roux-en-Y reconstruction. The following variables were assessed in the two groups: intervention duration (min), estimated blood loss (mL), conversions to open approach (%), preoperative stay, postoperative length of stay in hospital (days). Complications were divided into early and late postoperative complications.

RESULTS: Of 68 patients were consecutively enrolled and divided in two groups: open TB and laparoscopic TB. There were no signifcant diferences in the comparison of the two groups and the mean age was 43.9 years (29–64) with a mean BMI of 52.5 kg/m2 . A statistically signifcant reduction was observed in favor of the laparoscopic group with respect to the reduction in hospital stay and in the incidence of incisional hernia as a late complication. No statistically significant diference were detected with respect to early postoperative complications

Conclusions Laparoscopic TB is a safe technique that allows a shorter hospital stay compared to open surgery and that allows a drastic reduction in the incidence of incisional hernias

BACKGROUND

Morbid Obesity is a chronic multifactorial disease with an epidemic and growing tendency. Multiples diseases are related to obesity and this reduces the quality of life (1). Bariatric surgery has been proposed as the most efective treatment to resolve this disease. With the aim of obtaining the patient's weight reduction and maintaining the loss thereof, multiple techniques have been described. TB was proposed as one of the most efective techniques in this regard (2). its use is decreasing and in recent years it has been replaced by other mixed bariatric techniques, such as gastric bypass [3]. The aim of this study was, first, to assess the impact of the introduction of laparoscopy on the results in weight loss parameters in morbid obese patients who underwent surgery according to the technique described by Scopinaro [2] and, secondly, to study early complications after bariatric surgery using of the Clavien–Dindo classifcation [3-6].

MATERIALS AND METHODS

The technique used was frst described by Scopinaro et al. [2]. From 2006 the laparoscopic technique was introduced in our group for obesity surgery. The same surgery was done in both groups. In both approaches, the procedure started at the level of the proximal gastric body. The patients were independently assessed by the Surgery Department to control all aspects relating to the surgical process. The postoperative controls were performed at the first month of the surgical intervention, at 3, 6, 9,and 12 months. The analysis of the data was carried out using the SPSS™ software, version 24. The homogeneity of the sample between the two groups was tested by the Chi-square test for discrete variables and the t test for independent data for continuous variables.

RESULTS

Our series includes 68 patients who underwent TB from 2004 to January 2019. The data analyzed correspond to a 15-year clinical follow-up. The follow-up has been fulflled during the frst year in 98.1% of the sample, at the ffth year of 80.8% and at the tenth year controls of 57.4% of the initial sample were maintained. After the frst year of surgery, a decrease in BMI was evident in the open surgery group of 37% and 42% in the laparoscopy group (p=0.66). To better interpret the efect of the surgery on the variable weight, it is possible to observe that the weight loss reaches its maximum at 5 years with a %EWL of 70.2% and 69% (p=0.12) respectively.

DISCUSSION

The benefts of laparoscopy are well established, both in bariatric surgery like in other surgeries [7]. Laparoscopic bariatric surgery is considered as safe as many common general surgery operations and is associated with low general morbidity and mortality [13]. The large abdominal incision in open bariatric surgery can lead to a high risk of postoperative wound complications: seroma, infection and, ultimately, incisional hernia [8,9]. Of the various bariatric surgical procedures, TB is one of the most efcacious surgical procedures for obesity in weight loss and the reduction of related comorbidities [10]. The laparoscopic version of TB is considered an advanced, complex and feasible technique in bariatric surgery, even if it has a steep learning curve [11, 12]. The need for conversion from laparoscopic to open surgery was 5.5%, a result comparable to the data show by international literature [13,14]. Laparoscopic TB has reduced hospital stay and complications, mainly due to a lower rate of wound infections and dehiscence [15-17]. Regarding late complications, our data show that in open TB, wall problems are a widely described and frequent complication. The introduction of laparoscopy dramatically reduces the incidence of this complication, efectively producing less morbidity and providing patients with a better quality of life, avoiding the need for multiple reoperations.

CONCLUSION

In conclusion, even if the topic is not very current, this retrospective work confrms the positive efect of laparoscopy in the treatment of morbid obesity through the transit bipartition. In order to affirm that laparoscopic TB is a safe technique with good results in reducing hospital stay and duration of surgery, we should get more powerful data to support the trend demonstrated in this study.

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COVID19 IN MORBID OBESE PATIENTS WHO HAVE UNDERWENT SLEEVE GASTRECTOMY : TERTIARY CLINIC RESULTS

INTRODUCTION: The coronavirus disease 2019 (COVID-19) outbreak caused by the SARS-CoV-2 virus, is considered a public health emergency of international concern by the World Health Organization (WHO),

Due to unknown face of the pandemic, elective surgical processes , including bariatric surgery, continued through the summer of 2020. The aim of this research to describe the experience of patients who underwent bariatric surgery during the early evolution of the COVID19 pandemic.

PATIENTS AND METHODS: This is a cross-sectional research including patients from a tertiary center who underwent sleeve gastrectomy from may 1st, 2019 to March 18th, 2022. A database was created to analyze patients' demographics, operative variables, and postoperative outcomes. All patients were contacted and a telephone survey was completed to inquire about COVID-19 exposure, symptoms, and testing 30 days before and after surgery.

Statistical analysis

Statistical analysis was done using SPSS software version 24(IBM, NY). Descriptive statistics comprised means and standard deviations for quantitative variables. Individual comparison of parameters before and after the operation was analyzed by Student's t test. The relation between categorical variablesin both groups in our study was studied by the chi-squared test. P value of < 0.05 was considered to indicate statistical significance.

RESULTS: A total of 190 patients underwent bariatric surgery during the study period. Laparoscopic sleeve gastrectomy was the most common procedure (71.6%). One hundred seventy-eight patients (93.7%) completed the telephone survey. Postoperatively, 19 patients (10.7%) reported COVID-19 compatible symptoms, and six patients (3.4%) went on to test positive for COVID-19. There were no COVID-19-related hospital admissions or mortalities in this population.

Conclusions: Morbidly obese patients are at high risk of severe disease secondary to COVID-19, and those undergoing sleeve gastrectomy during the evolution of the pandemic reported symptoms at a rate of 10.7% 30 days after the surgery. While none of these patients suffered severe COVID-19 disease, the temporal relationship of their symptomatology and increased exposure to the healthcare system as a result of their surgery suggest an increased risk of disease with elective surgery.

INTRODUCTION

While many cases of the coronavirus disease 2019 (COVID-19) are mild, patients with underlying medical conditions such as hypertension (HTN), diabetes mellitus (DM), older age, and morbid obesity are at higher risk of hospitalization and death. These conditions are characteristic of patients eligible for bariatric surgery, many of whom underwent weight loss procedures in the months prior to cessation of elective surgery in March 2020. The effects of the virus on these high-risk patients who had increased healthcare exposure in the early days of the pandemic are currently unknown still.[1-6].

The exposure risk of an active bariatric cohort in an area heavily afected by COVID-19 has not been researched and showed. While bariatric patients are at an increased risk for severe symptoms of COVID-19, they present to the hospital feeling well for elective procedures[7]. We aimed to research the diagnosis of COVID-19 in bariatric patients who underwent sleeve gastrectomy in the early phases of the pandemic.

METHODS

PATIENT COHORT

This is a cross-sectional study from the department of Surgery at Selcuk university medicine faculty. All adult patients, greater than 18 years, who underwent bariatric surgery from may 1st, 2019 to March 18, 2022 were included. This study was approved by local ethics commitee prior to data collection and analysis.

RESULTS

In total, 190 patients underwent bariatric surgery during the study period. Most (n=178, 93.7%) patients were

reached by phone for completion of the follow-up survey. The mean age of the cohort was 41.8 ± 12.3 years with a predominance of female patients (82.1%). With regards to the type of surgery, laparoscopic sleeve gastrectomy (LSG) was the most common procedure performed in 136 patients (71.6%) followed by Roux-en-Y

gastric bypass (RYGB) in 40 (20.9%) patients, and 14 (7.4%) who underwent conversion from prior LSG to RYGB. A total of 25 (14.0%) underwent testing for COVID-19,some due to symptomatology and others for close contact with individuals who either tested positive or were symptomatic. Others were required to undergo testing as screening for work. Of those 25 patients who were tested, the majority were negative (76%) and only six were positive (24%). None of the patients with postoperative complications reported.

DISCUSSION

During thefirst peak of the pandemic, the decision to stop all elective surgery was driven by both a dearth of resources and a desire to limit exposure of new patients[12].

Bariatric surgery is officially elective, but it is the most efective treatment for obesity and metabolic disease [13-15]. It also provides long-term benefts beyond weight loss including management of hypertension and diabetes [16]. There are negative consequences to delaying bariatric surgery with significant impact on the patient and on cost to the healthcare system [17]. Furthermore, because the comorbidities of obesity increase the likelihood of severe COVID-19 infection, bariatric surgery itself can improve the conditions that confer this increased risk of severe COVID-19 infections.

We found that 10.7% of the patients who underwent bariatric surgery at our institution during the evolution of the pandemic developed fu-like symptoms postoperatively and 3.4% were diagnosed with COVID-19. Our study has the limitations of cross-sectional studies including the possibility of recall bias. Our follow-up phone calls and Epic records are main strengths of our data; we were able to reach 97.3% of our patients by phone for a detailed conversation about their COVID-19 compatible symptoms and experience. One main question that our data raise is why our patients did not develop severe COVID-19 infections if, in fact, they were exposed when the virus was circulating and up to 10.7% of patients had some form of COVID-19 infection. We can conjecture that our study population did have the protective beneft of being young with mean age of the cohort of 41.8 ± 12.3, while age above 61 was associated with a greater risk of severe infection in patients at our center, as well as being predominantly female, as male sex was also associated with a statistically signifcant greater risk of mortality [12].

CONCLUSION

Morbidly obese patients are at high risk for COVID-19, and those undergoing bariatric surgery during the evolution of the pandemic were exposed with 10.7% reporting symptoms 30 days after the surgery. It would be benefcial for other centers to look at their outcomes in the 3 months prior to discontinuing surgery to give our data more context.

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THE IMPACT OF INTRACORPOREAL ANASTOMOSIS IN SIGMOIDECTOMY IN THE SURGICAL SITE INFECTIONS AND THE HOSPITAL STAY

INTRODUCTION: sigmoid anastomosis in laparoscopic left colectomy is especially performed extracorporeally. Intracorporeal anastomosis could be associated with short-term benefits. However, it is a more technically demanding procedure. The primary endpoint of the study aimed to evaluate the postoperative surgical-site infection rate and its impact on the length of stay in hospital after laparoscopic left colectomy with intracorporeal anastomosis compared to extracorporeal anastomoses

PATIENTS AND METHODS: Between 2012 and 2021, 216 patients underwent left colectomy. Acomparative study of variant anastomosis techniques, intracorporeal (IC) versus extracorporeal (EC), was conducted. Data were extracted from a retrospectively maintained colorectal surgery database of a tertiary university hospital.

RESULTS: Of 106 patients underwent right colectomy with IC, and 110 had extracorporeal anastomoses. The groups did not differ in demographics, anesthetic risk, intraoperative data, pathological outcomes, or overall survival. Mean surgery time was a bit longer in the IC group than EC. A significant reduction in the anastomotic leak rate was observed in the IC group compared with the EC group (0 vs. 7.3%; p = 0.045) with no differences in the intraabdominal abscess rate , The infection ratio was 5.7% for IC and 10.9% for EC (p = 0.324). The length of stay in hospital was significantly shorter for those who had intracorporeal anastomoses .

CONCLUSIONS: Left colectomy with intracorporeal anastomosis was associated with less surgical-site infections and a significantly stay shorter in hospital than EC technique. Surgeons should consider the IC as the first option when performing laparoscopic left colectomy.

INTRODUCTION

the laparoscopic-assisted colectomy with an extracorporeal anastomotic (EC) technique still is the standard for colon cancer located at the left colon. Associated morbidity includes prolonged ileus, pain-associated decreased pulmonary function and wound infection leading to subsequently increased length of stay [1, 2]. The primary endpoint of the study was to evaluate the postoperative surgical-site infection (SSI) rate of left colectomy and its impact resulting in a shorter length of hospital stay.

METHODS

STUDY DESIGN

This is an observational comparative cohort study of two anastomosis techniques, totally intracorporeal versus extracorporeal through an open assistance incision, for laparoscopic Left colectomy. Between 2012 and 2021, The study included patients older than 18-year candidates for scheduled surgery to resect a benign or malignant neoplasm of the left colon.

The categorical variables are presented as frequencies and percentages using the Chi-squared ($\chi 2$) and Fisher's exact tests to compare groups. All quantitative variables are expressed as the mean and standard deviation values, and the data were compared using the non-parametric Mann–Whitney U test. All results with P values < 0.05 were considered statistically significant. All statistical analyses were performed using the IBM SPSS version 25.0 (IBM Corp, Armonk, New York, USA).

RESULTS

The study included 216 patients, 124 men and 92 women, with a mean age of 65.3 years, that

were classified into two groups: 106 underwent IC, and 110 underwent EC. The groups did not differ in age, BMI, comorbidities, ASA risk or indication for surgery. Patients in the IC group experienced a significantly lower rate of anastomotic leak compared with the EC group, Patients in the IC group experienced a significantly lower rate of anastomotic leak compared with the EC group. The mean hospital stay was significantly shorter in the IC group , suggesting as a clinical reflection of its decreased morbidity rate.

DISCUSSION

In this study, laparoscopic left colectomy with IC resulted in less postoperative infections than EC. Taking into account that there were no remarkable differences in the anastomotic stapling technique, noteworthy was the significant reduction in the anastomotic leak rate. These results are consistent with other reports and meta-analyses published to date [3,4].

Both groups had similar intraabdominal abscess low rates. So, the abdominal contamination due to the colonic opening during the IC technique would not play a remarkable role in this complication. Every intraabdominal abscess should be likely first considered as a consequence of anastomotic leak [5].

Both of the groups had similar intraabdominal abscess low rates. So, the abdominal contamination due to the colonic opening during the ICtechnique would not play a remarkable role in this complication. Every intraabdominal abscess should be likely first considered as a consequence of anastomotic leak [6,7].

CONCLUSION

In conclusion, laparoscopic left colectomy with IC was associated with a lower rate of SSI and a significantly shorter hospital stay in this series. The IC technique seemsto have additional benefits, as the decreased postoperative morbidity and long-term hernia rate at the extraction site incision. Surgeons should make a strong effort to improve their skills and move to the IC as the first option for laparoscopic

left colectomy.

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IS PREOPERATIVE HBA1C LEVEL IS ASSOCIATED WITH CLAVIEN-DINDO MAJOR COMPLICATIONS AFTER THE PROCESS OF BARIATRIC SURGERY ?

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Background: Obesity and Type 2 Diabetes Mellitus (T2DM) are well established leading global health concern in the world. Type 2 Diabetes Mellitus (T2DM) is highly prevalent comorbidity in patients with morbid obesity. Approximately 90% of patients with T2DM have obesity or are overweightIt is still unclear whether a cutoff value of preoperative hbA1c represents an increased risk for major postoperative complications following Roux-en- Y Gastric Bypass (RYGB) and Sleeve Gastrectomy (SG).

METHODS: Retrospective analysis for evaluating the relationship between hb A1c and the 30 days postoperative major complications by Clavien-Dindo classification (III/IV). All patients with T2DM who underwent Laparoscopic or Robotic SG, and RYGB. We excluded patients without diabetes and 65 patients with Type 1 Diabetes Mellitus (T1DM), and those with age younger than 18 years old . We used univariate and multivariate logistic regression to analyze the outcome of the complications. Predicted probabilities were calculated for major complication. We divided our sample in two groups determined by preoperative HA1c levels. Patients with HbA1c of less than 7% were assigned to the controlled diabetes group, whereas patients with HbA1c equal to or above 80 7% were assigned to the uncontrolled diabetes groupAll statistical tests were two-sided with a p-value of less than 0.05 considered as a cut-off for statistical significance.

RESULTS: Of 453 patients that met the inclusion criteria, there were 234 identified with HbA1c <7%, and 219 patients with HbA1c >7%. Utilizing HbA1c <7% as a cutoff, we found no consistent statistical significance in the major postoperative complication in patients with HbA1c >7%, and when stratified with 1% increment between groups. On multivariable analysis of stratified preoperative HbA1c of the uncontrolled diabetes group, adjusting the primary outcome for age, gender, BMI, insulin-dependence type 2 diabetes mellitus, preoperative gastroesophageal reflux disease (GERD) and hypertension requiring medication, preoperative hyperlipidemia and obstructive sleep apnea, preoperative renal insufficiency, , the risk of postoperative complications did not consistently increase with higher preoperative HbA1c. We also found no significance between groups with risk adjustment.

Conclusions: In conclusion, Extensive analysis of the research study didn't result in a clinically significant association between hb A1C and 30-day Clavien-Dindo majör complications (III/IV) following bariatric surgery. Further studies are warranted to assess whether stratified HbA1C are associated with other long-term outcomes, such as diabetes remission and the need for further Bariatric procedure

INTRODUCTION

Obesity and Type 2 Diabetes Mellitus (T2DM) are well established leading global health concern in the world. Among US adults with diagnosed diabetes, T2DM accounted for 91.2% of the diagnoses [1]. Type 2 Diabetes Mellitus is highly prevalent in patients with severe obesity.

Several clinical trials and meta-analyses, have shown significant and sustained weight loss in patients with severe obesity in addition to dramatic improvement or remission of the T2DM following bariatric surgery [2-7]. This study aims to review the association between stratified preoperative HbA1C levels and 30 days postoperative Clavien-Dindo major complications, in attempt to identify a cut-off that represents significant worse outcomes following laparoscopic RYGB and Sleeve Gastrectomy.

METHODS

We retrospectively analyzed the Metabolic and Bariatric Surgery Accreditation and Quality

Improvement Program (MBSAQIP) Participant Use Data File. All patients with T2DM who underwent Laparoscopic or Robotic SG, and RYGB, with documented preoperative HbA1c, were included in the study. The primary outcome of our study was 30-day postoperative Major Complication defined by Clavien-Dindo Classification III and IV. We excluded patients without diabetes and 65 patients with Type 1 Diabetes Mellitus (T1DM), and those with age younger than 18 years old . We used univariate and multivariate logistic regression to analyze the outcome of the complications. Predicted probabilities were calculated for major complication We divided our sample in two groups determined by preoperative HbA1c levels. Patients with HbA1c of less than 7% were assigned to the controlled diabetes group, whereas patients with HbA1c equal to or above 80 7% were assigned to the uncontrolled diabetes group.

RESULTS

total of 453patients met our inclusion criteria, The mean age and BMI were respectively, 49 years and 45.6 kg/m for the controlled diabetes group, compared to 50.2 years and 44.6 kg/m for the uncontrolled diabetes group. Major complication was identified in 335 (1.6%) patients amongst the controlled group, significantly lower when compared to 477 (2.2%) in the uncontrolled group. On multivariable analysis of stratified preoperative HbA1c of the uncontrolled diabetes group, adjusting the primary outcome for age, gender, BMI, insulin-dependence type 2 diabetes mellitus, preoperative gastroesophageal reflux disease (GERD) and hypertension requiring medication, preoperative hyperlipidemia and obstructive sleep apnea, preoperative renal 115 insufficiency, history of myocardial infarction, history of tobacco use within one year,

DISCUSSION

There are conflicting data with respect to the association of preoperative HbA1c with early postoperative complications following Bariatric Surgery. The purpose of this investigation was to analyze the relationship of preoperative HbA1c and thirty-day postoperative complications. Meister et al conducted a single institution retrospective study to assess the clinical significance of perioperative hyperglycemia on patients undergoing Bariatric Surgery and found perioperative hyperglycemia to be associated with higher composite infectious complications in patients with diabetes and non-diabetes [8]. On the other hand, Rawlins et al performed a single institution retrospective analysis of 42 patients with T2D undergoing Bariatric Surgery and 140 found no difference in combined complication rates when comparing groups [9]. In this study, on univariate analysis we found a positive association with complications with HbA1C stratified by increment of 1%, from levels >7 to 10. The association then fell off with

HbA1C 10-11, was depicted again from 11-12, and consistently disappeared with HbA1C >13.

The limitations of this study was the sizable sample excluded due to lack of preoperative HA1c reported. This could have 18 empowered the results of our measurement of HA1c as continuous variable towards a significant finding one-way or the other. It has been shown previously by Still et al that patients with preoperative controlled diabetes had a higher probability of achieving early and late remission of T2D following Bariatric Surgery [9].

CONCLUSION

In conclusion, following extensive analysis of stratified preoperative HbA1c, we identified aslight increased risk of 30-day postoperative Clavien-Dindo major complications (III/IV) with high HbA1c, however not statistically significant. We do recommend attempting the best medical treatment to achieve optimal HA1c control prior to undergoing surgery.

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SELÇUK UNIVERSITY,MEDICINE FACULTY,DEPARTMENT OF SURGERY IS HIGHER PREOPERATIVE WEIGHT LOSS IS ASSOCIATED WITH MORE WEIGHT LOSS : 1 ST YEAR OUTCOMES

BACKGROUND: Prior research suggested presurgical weight loss is associated with greater total weight loss, resulting in more effective bariatric intervention. We aimed to assess whether preoperative weight loss is a predictor for total weight loss, and which patient factors are associated with successful weight loss.

METHODS: All patients (N=125) that underwent primary bariatric surgery between June 2019 and

september 2021 were included in this single center retrospective study. Outcome measures were preoperative weight loss (%preopWL) and total weight loss (%TWL) up to 1 year postoperatively. Patients were divided in 4 groups based on quartiles of %preopWL.

RESULTS: Total weight loss after 1, 6, and 12 months for the upper quartile was 14.2%, 26.9% and 33.6%, and for the lower quartile 10.2%, 25.3%, and 34.8%, respectively($p<0.001$). 115 patients (92.4%) were available for the 1 year follow-up. Preoperative weight loss was not associated with the incidence of complications. Independent factors predicting increased %preopWL were mandated preoperative weight loss program (MWP) ($p<0.001$), older age ($p=0.005$), weight measurement in the week before surgery ($p=0.031$), and non-diabetic status ($p=0.010$). Predictors for superior%TWL were MWP ($p=0.014$), younger age ($p=0.001$), non-diabetic status ($p=0.005$), female gender ($p=0.001$), higher Body Mass Index ($p=0.006$), and gastric bypass surgery ($p=0.001$).

Conclusions: Higher preoperative weight loss is associated with persisting greater weight loss up to at least 12 months post-surgery. In order to optimize preoperative weight loss, we recommend extra preoperative support to younger and diabetic patients. We were suggest that nutritional counseling and additional weight measurement in the week before surgery.

INTRODUCTION

Morbid Obesity prevalence is increasing worldwide. Since 1982, the number of obese people has nearly tripled (1). Bariatric surgery is considered the most effective treatment of ensuring significant and sustained weight loss for patients with morbid obesity. Thereby improving overall quality of life and curtailing comorbidities, such as insulin resistance or type 2 diabetes and inducing remission of hypertension and lipid defects (2-5). In the present study we aimed to examine whether preoperative weight loss is a predictor for total weight loss and consequently which patient characteristics are associated with successful weight loss.

METHODS

This is a retrospective study including all patients that underwent bariatric surgery in the university hospital, between June 2019 and september 2021. All patients who met the IFSO criteria and received primary bariatric surgery in combination with a multidisciplinary, group-based, lifestyle change program were included. The preoperative lifestyle change program consists of weekly 4- hour group visits in the six weeks prior to surgery to prepare patients for surgery. During the last 4 weeks of this period, patients were prescribed a low calorie diet (960-1000kcal). Data was collected from the patient records and. national data registry including all bariatric interventions and consists of patient information during the bariatric program such as comorbidities, surgical details, complications and follow-up weight. Data was analyzed using IBM SPSS Statistics version 26. Descriptive statistics were used to

describe the basic characteristics. One-way ANOVA analyses and chi square tests were applied to indicate the similarities or differences between the groups.

RESULTS

We included 125 patients who underwent bariatric surgery and were weighed at the day of

surgery. Number of patients available for follow-up at 1, 6 and 12 months were 122 (93.4%),

117 (96.4%) and 116 (92.4%) respectively. The mean %postopWL for all patients at 1, 6 and 12 months follow-up was 7.9%, 25.9% and 31.7%, respectively. The different preoperative weight loss groups followed an overall similar postoperative weight loss curve. After multivariate analysis adjusted for age, baseline BMI, gender, diabetes, hypertension, type

of surgery, frequency of preoperative weight measurements, and additional nutritional

counseling, the following factors were associated with an increased %preopWL: MWP

($p<0.001$), older age ($p=0.005$), undergoing a weight measurement in the week before surgery

($p=0.031$), and a non-diabetic status ($p=0.010$).

DISCUSSION

Our results indicate that higher preoperative weight loss is an advantage that persists up to one

year after bariatric surgery. This confirms the importance of the preoperative treatment program and the prolonged effect of weight loss before bariatric surgery. This finding is in line with other studies that show preoperative weight loss to be associated with greater total weight loss, thus resulting in a more effective bariatric intervention. (6-9). Our results indicate that higher preoperative weight loss is an advantage that persists up to one

year after bariatric surgery. This confirms the importance of the preoperative treatment program and the prolonged effect of weight loss before bariatric surgery. This finding is in line with

other studies that show preoperative weight loss to be associated with greater total weight loss, thus resulting in a more effective bariatric intervention. (10-15).

The major strength in our study lies in the accurate calculation of the preoperative weight loss

due to the weight measurement on the day of bariatric intervention and in the consistency of

the preparation program in the weeks before surgery

CONCLUSION

Higher preoperative weight loss is associated with a persisting greater weight loss up to at least 12 months post-surgery. In order to optimize weight loss, we recommend extra preoperative support to especially the younger and diabetic patients. We advise nutritional counseling in the period right before the treatment program and additional weight measurement shortly before surgery.

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CHANGES İN CLINICAL DEPRESSION FOLLOWING SLEEVE GASTRECTOMY PROCESS

INTRODUCTION

The prevalence of obesity has tripled in the last 40 years, and almost half of the world's adult population is predicted to be overweight or obese by 2030. Obesity is not only a cosmetic concern, but also is a medical problem that increases the risk of other diseases, such as diabetes, cardiovascular diseases, mental problems and some kinds of cancers (1-6). Bariatric surgery is one of the safest and best choices for treatment of obesity and has evolved in the United States and worldwide over the past two decades and is done to help patients lose excess weight and reduce the risk of potentially life-threatening weight related health problems. Moreover, many patients have symptoms of depression after BS, but there are few prospective studies to specify their prevalence after surgery. The neurological findings diagnosed with common post-operative malnutrition include encephalopathy, polyradiculoneuropathy, optic neuropathy, myelopathy and polyneuropathy. These symptoms are more frequent in subjects who are noncompliant to medical visits in the long term after surgery. We aim to evaluate the prevalence of depression after SG in morbidly obese subjects in a narrow period of time on turkish population (7-9).

MATERIALS AND METHODS

In this retrospective study, data including enzymatic and hormonal parameters, anatomical imaging records and mental assessments were obtained from 156 adult individuals undergoing Bariatric surgery (Only SG) in university hospital. All subjects were performed as a stand-alone surgery and were evaluated by their surgeon and psychology team before and after the operation. Subjects with incomplete and unclear data or due exclusion criteria including any background of drug addiction, alcoholism, abnormal use of alcohol, hyperthyroidism and any psychological disorders rather than depression that made subjects unable to have stabilized mood were excluded. Data from preoperative psychological symptoms were collected in the bariatric clinic 1–3 months before undergoing the bariatric surgery. We included subjects who underwent SG in order to find out more psychological aspects of this method.

STATISTICAL ANALYSIS

All descriptive findings are presented as mean/median and SD for quantitative variables and count and percentage for qualitative variables. After checking the normality of variables using histogram graphs and the Kolmogorov-Smirnov test, the Wilcoxon rank test was used to compare the non-parametric variables and t test to compare other continuous variables before and after SG. The statistical significance level is defined as 0.05 ($\alpha = 0.05$). Statistical analysis was performed using IBM SPSS Statistics 25 (SPSS Inc.).

RESULTS

Of 156 patients, 110 cases were females (65%) and 46 subjects were males (37) and range from 26 to 64 years with, 108 middle income (63.1%) and 48 (36.9%) high income subjects. Mean age was 42,28 years, and mean BMI was 45.7 kg/m2 (±4,4; range, 40-55). We also evaluated the influence of BMI in relation to postoperative clinical depression and significant differences were noted (p =0 .025). The resolution of diabetes and hypertension and reduction in anti-depressant after surgery were not statistically significant. There were no significant differences for the prevalence of depression and economic levels (p = 0.116). Divorced subjects indicated more depression symptoms compared to other subjects (p= 0.025).

DISCUSSION

Over the last two decades, the popularity of bariatric surgery, especially SG, has increased dramatically worldwide.Based on clinical studies, bariatric surgery is the most effective treatment for obesity. The number of SG complications is relatively low, and with a rate of about 1.6% to 2.3%, this type of operation can be considered safe.(10-13)

SG procedure is the choice of more than 70% of patients all over the World who tend to undergo obesity surgery which has been trending among various types of bariatric surgery in the past 20 to 25 years. Although bariatric surgery is safe and has many health benefits, as mentioned, there are some complications reported in patients, which nutritional deficiencies leading to clinical depression are one of the major complications in post-operative periods. Depression after operation affects the quality of life and increases the cost and complications of surgery, among morbidly obese subjectsleading to enhanced rate of morbidity and mortality in surgery patients.(14-15)

Although, there are several reports on bariatric surgery and psychological complications, but no comprehensive and specific study was found on the effect of SG on post-operative depression on proper scale of subjects following SG. Based on a study on extremely obese patients who underwent gastric banding or gastric bypass, the prevalence of depressive disorders declined significantly after surgery.

One another report stated that, RYGB, LAGB and SG surgeries, may lead to a mild alleviation in clinical depression in subjects over the initial post-operative years but this was not maintained.(16,17). In our study, comparing the pre- and post-operative BMI, the results illustrate a significant weight loss from 45,7 kg/m2 before surgery to 27.3 kg/m2 after surgery (<0.001).

However, due to the very low complication occurrence of SG and its numerous health benefits, patients and surgeons should focus more on complication prevention in vulnerable groups. The strengths of our study were the higher number of patients of all ages, independent data collection, focus on specific type of bariatric surgery (SG), a defined surgeon, specific surgical team with the same surgical equipments for all patients in a tertiary hospital.

CONCLUSION

This survey examined the prevalence of depression after SG in subjects with or without a prior history of depression. BMI, dyslipidaemia, good feelings about body size and weight and clinical depression changes were statistically significant. For patients considering bariatric surgery and their physicians, this research provides a clearer estimate of post-surgical depression risk and associated exacerbating and mitigating factors.

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EMERGENCY DEPARTMENT THORACOTOMIES: A RETROSPECTIVE ANALYSIS

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INTRODUCTION:

Emergency department thoracotomy is performed in patients whose general condition is poor or deteriorating. It is divided into two: emergency and urgent thoracotomy. This distinction arises from thoracotomy performed in the emergency department without transporting the patient, or thoracotomy performed in the operating room outside the emergency department (1). Its main purposes are the evacuation of pericardial tamponade, control of intrathoracic bleeding, control of cardiac bleeding, treatment of massive air embolism, emergency cardiac massage, and clamping of the descending aorta (2). In our study, we aimed to share the patients who underwent emergency thoracotomy in the last 6 years.

MATERIAL AND METHODS:

A total of 65 cases who presented to the emergency department and underwent urgent thoracotomy between 2016 and 2022 were retrospectively reviewed. Age, gender, localization of the disease, radiological findings, treatment methods, complications, mortality, and morbidity were recorded. In statistical analysis, continuous variables were expressed as mean ± standard deviation, while categorical variables were explained as number-ratio.

RESULTS:

55 (84.6%) of the patients were male while 10 (15.3%) were female. The mean age of the patients was found to be 31.42±13.47 years. 63 (96.9%) of the patients had penetrating trauma whereas 2 (3%) had blunt trauma. 33 (50.7%) had gunshot wounds, 30 (46.1%) had stab wounds, 1 (1.5%) had an out-of-vehicle traffic accident, and 1 (1.5%) had an in-vehicle traffic accident. Hemothorax were detected in 43 (66.1%) patients, hemopneumothorax in 10 (15.3%), chest wall defect in 6 (9.2%), diaphragmatic rupture in 3 (4.6%), pneumothorax in 2 (3%), and intraparenchymal foreign body in 1 (1.5%). 51 (78.4%) patients underwent thoracotomy and 14 (21.5%) underwent sternotomy. Parenchyma repair was performed in 51 (78.4%) patients, diaphragmatic repair in 6 (9.2%), vascular repair in 5 (7.6%), cardiac repair in 2 (3%), and foreign body removal in 1 (1.5%). While 63 (96.9%) of the patients were discharged from the hospital, 2 (3%) died. The mean hospital stay of the patients was 7 days.

DISCUSSION

Emergency thoracotomy is divided into 2 as emergency (emergency) or rapid (urgent) thoracotomy. This distinction is due to thoracotomy performed in the emergency room without transporting the patient, and thoracotomy performed in the operating room outside the emergency room (1). Objectives of Emergency Service Thoracotomy; Evacuation of pericardial tamponade, control of intrathoracic bleeding, control of cardiac bleeding, treatment of massive air embolism, emergency cardiac massage, clamping of the descending aorta (2). Indications; Patients with penetrating injury who underwent CPR for less than 15 minutes prehospital, blunt trauma patients who underwent CPR less than 5 minutes prehospital, severe post-traumatic hypotension, cardiac tamponade, intrathoracic hemorrhage and air embolism. Emergency thoracotomy is fatal in cases of greater than 15 minutes resuscitation time during transportation, absence of breathing and pulse on arrival, and common severe injuries. Indications; for thoracotomy for bleeding control after tube thoracostomy in a bleeding patient: 1000-1500 cc instantaneous drainage (20 cc/kg) after tube thoracostomy, 100 cc/hour drainage for the first 6-8 hours after tube thoracostomy, 250 cc/hour drainage in the first 3 hours after tube thoracostomy and signs of ongoing bleeding (1, 3, 4). In our study, patients who underwent urgent thoracotomy were in the majority and hemothorax were detected in 43 patients, hemopneumothorax in 10, chest wall defect in 6, diaphragmatic rupture in 3, pneumothorax in 2, and intraparenchymal foreign body in 1.

Anterolateral thoracotomy is suitable for pericardial tamponade or cardiac massage. Right or left anterolateral thoracotomy can be performed depending on the location of the injury. If necessary, the mammary arteries can be ligated to complete the clamshell incision. Sternotomy is particularly useful in heart injury due to gunshot wounds. Bleeding control in patients with lung injury can be achieved most easily with posterolateral thoracotomy. Mortality is high in injuries from thoracic great vessels and pulmonary vessels. A vessel clamp should be used to control large vessel and atrial hemorrhages. In case of extensive lung laceration, a Satinsky clamp should be placed on the hilum. Bleeding vessels should be found and ligated by performing a “tractomy” if necessary in bleeding from the lungs, resection should not be performed unless it is very necessary (1). Mortality is up to 55% in lobectomies performed due to trauma and up to 100% in pneumonectomies (3, 5). In our study, 51 patients underwent thoracotomy and 14 underwent sternotomy and parenchyma repair was performed in 51patients, diaphragmatic repair in 6, vascular repair in 5, cardiac repair in 2, and foreign body removal in 1. While 63 of the patients were discharged from the hospital, 2 died.

It has been observed that internal cardiac massage produces an increased cardiac index when compared to external cardiac massage. It is performed from the base of the heart to its apex by creating ventricular compression with one or both hands. Two-handed technique is generally recommended. One hand is placed on the back of the heart and one on the front. The heart is tried to be adjusted to be 80 beats per minute. Alternatively, the one-handed technique can be used. In this technique, the fingers are on the back of the heart, the palm and thumb are on the front of the heart. Whatever technique is used, it should remain in a horizontal position during heart massage. Elevating the apex of the heart too high above the chest may prevent venous return. Internal cardiac massage with one hand has a small risk of myocardial perforation. Internal defibrillation may be required, especially in ventricular fibrillation events or tachycardia, despite sufficient filling pressure to generate cardiac output. While performing internal defibrillation, it is necessary to avoid touching the coronary arteries with spoons (6).

CONCLUSION:

Emergency thoracotomy is a surgical approach with high mortality. However, early diagnosis and urgent thoracotomy are life-saving.

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ÇOCUKLARDA YABANCI CİSİM ASPİRASYONLARI: RETROSPEKTİF ANALİZ

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GİRİŞ

Yabancı cisim aspirasyonları(yca) pediatrik yaş grubunda ciddi morbidite ve mortalitesi olan bir sağlık sorunudur(1). 3 yaşından küçüklerde kaza sonucu ölümlerin dördüncü en yaygın nedenidir. Erkek çocuklarda daha sık görülür(2).Çocuklarda yaygın olarak aspire edilen yabancı cisimler çekirdek içi, gıda parçacıkları, oyuncak parçalarını içerir(3). Ani başlayan öksürük ve morarma en sık görülen semptomlardır. Yca da şikayetler havayolunun kapanma miktarına , yabancı cismin yerleştiği yere , yc in tipine, çocuğun yaşı ve aspirasyon üzerinden geçen zamana göre değişir.(4) Yabancı cisimler solunum yolunda herhangi bir yer olabilirse de daha çok trakeanın devamı olarak görülebileceği üzere sağ ana bronşa daha sık aspire olurlar. Akciğer grafisi yabancı cisim varlığında tanı için yardımcı bir araçtır fakat kesin tanı için kullanılmaz.Grafide atelektazi veya tek taraflı havalanma artışı yca bulgusudur.(5) Bilgisayarlı tomografi(bt) yabancı cisim anamezi veren hastalarda duyarlılığı neredeyse %100 dür. Yabancı cisim anamnezi veren veya şüphelenilen hastalarda fleksibl bronkoskopi yapılabilir fakat yabancı cisim çıkarmak zordur. Pediatrik hastalarda rigit bronkoskopi hem tanı hem tedavi açısından en çok tercih edilen yöntemdir.

GEREÇ VE YÖNTEM

2018 nisan ile 2022 nisan tarihleri arasında yabancı cisim aspirasyonu ya da şüphesi nedeniyle kliniğimize yatırılan ve rijid bronkoskopi yapılan 1-15 yaş arası toplam 85 hastanın dosyaları incelendi. Yabancı cisim tespit edilen 70 hasta çalışmaya dahil edildi. Çıkarılan yabancı cisimlerin karakteristik özellikleri ve, çocukların yaş ve cinsiyet dağılımları, yabancı cisimlerin yerleştiği lokalizasyonlar değerlendirildi.

BULGULAR

Hastaların ortalama yaşları 3.91 ± 1.71 idi. hastaların %57'si erkek(n:40), %43'ü(n:30) bayan idi. Yabancı cisim 39 hastada sağ, 17 hastada sol, 11 hastada trakea ve 3 hastada her iki ana bronşta lokalizasyonlu idi. Yabancı cismin 32 hastada sağ ana bronş, 4 hastada sağ alt lob bronşu, 3 hastada intermedir bronş, 13 hastada sol ana bronş, 4 hastada sol alt bronşta olduğu görüldü. Yabanci cisimlerim 14 ü inorganik(iğne, kalem kapağı, conta vb), 56 tanesi organik gıda ürünleriydi(çekirdek, havuç, fındık, fıstık ceviz vb). hastaların 6 sı entübe halde kabul edildi ve bunlardan bir hasta hipoksik kaldığı için yoğun bakım takibinin 3. günü ex oldu.

TARAF	SAĞ	SOL	TRAKEA	BİLATERAL
n:70	Ana bronş 32	Ana bronş 13	11	3
	İnt bronş 3	Alt bronş 4		
	Alt bronş 4			
	39	17	11	3

YABANCI CİSİM	N:70
Çekirdek	20
Plastik parçaları	5
Ceviz	4
Fındık	5
Fıstık	7
FASÜLYE	4
MISIR	4
NOHUT	4
Metal	5
KALEM KAPAĞI	4
Diğer	8

TARTIŞMA

Yca en çok 3 yaş altı çocuklarda görülür._Çalışmamızda ortalama yaş 3,9 olup e/k oranı 1,25 daha öce yapılan çalışmalar ile benzer sonuçlar vermiştir(6).Aspire edilen yabancı cisimlerin %78 i organik ürünlerdi(ayçiçeği çekirdeği, karpuz çekirdeği, fıstık vs) Benzer şekilde, karpuz, ayçiçeği ve balkabağı tohumları sırasıyla Mısır, Türkiye ve Yunanistan'da daha yaygındır. Bunun nedeni, kültürel bir etkiyi yansıtan yemek alışkanlıklarındaki farklılıklardır.(7) Ayrıca 2 hastamızda eşarp iğnesi aspirasyonu mevcuttu. Kesin tanı için ayrıntılı bir anamnez, fm ve bunları destekleyen radyolojik bulgular mevcut olduğunda hastaya tanı ve tedavi amaçlı rigit bronkoskopi yapılmalıdır(7). Rijit bronkoskopinin anestezi işlemi altında ve riskli bir müdahale olması nedeni ile yüksek şüphe olarak yca olduğunu düşündüğümüz veya emin olduğumuz fakat ebeveynlerin müdahaleye izin vermediği hastalara bt çekilerek trakeobronşial ağaçta yc olduğu kesin kanıtlanarak hastalara müdahale edildi.

SONUÇ

Yabancı cisim aspirasyonlarının çoğunlukla sağ yerleşimli olduğu, erkek cinsiyette daha fazla görüldüğü ve özellikle ilk 3 yaş civarında sıklığının arttığı tespit edildi. Sonuç olarak yaşamı tehdit eden yabancı cisim aspirasyonlarını önlemede öncelikli olarak ailelerin bilgilendirilmesi ve farkındalıklarının arttırılması yaklaşım olmalıdır.

KAYNAKLAR

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BACKGROUND: Obesity is a significant health problem and additional therapies are needed to improve obesity treatment. Recently, endoscopically placed and/or removed bariatric therapies have emerged as viable treatment options. A new 12-month intragastric balloon system filled balloons which are applied successively over time has been developed for weight loss. the aim of our study is to determine the efficacy and safety of one year filled intragastric balloon system for weight loss.

METHODS: This was a double blind randomized trial of the filled intragastric balloon system plus lifestyle therapy compared with lifestyle therapy alone for weight loss at 12 months in participants age 22-60 years old, BMI 30-40 kg/m2, across the turkey. The endpoints included: difference in percent total body weight loss (TBWL) in Treatment Group vs Control Group is > 2.1%, and a Responder Rate of > 35% in the Treatment group.

RESULTS: of 57 subjects applied gastric balloon. 93.3% of participants completed all 12 months of blinded study testing. Non-serious Adverse events occurred in 91.1% of patients, but only 0.4% were severe. One bleeding ulcer and one balloon deflation occurred. In the completer analysis, the Treatment and Control Groups achieved 7.1±5.0% and 3.6±5.1% TBWL respectively, and a mean difference of 3.5%, p= 0.0085.

CONCLUSIONS: Treatment with lifestyle therapy and the 12-month filled intragastric balloon system was safe and resulted in twice as much weight losscompared with a sham control, with high weight loss maintenance at 48 weeks.

INTRODUCTION

Obesity continues to be a significant medical problem for all over the world, with a prevalence of 37.7% and an increase in overall obesity rates in women from 2005 to 2014(1). Multiple etiologies are likely contributing to the increasing prevalence of obesity, including lack of treatment options that are acceptable to patients. These approaches have less weight loss than bariatric surgery, but are also associated with significantly lower complication rates and are approved for use in lower BMI categories2-5. Lowering complication rates further while maintaining weight loss benefits may increase patient acceptance and increase obesity treatment rates. The aim of the 12 Month Weight Reduction Trial was to determine the safety and efficacy of the balloons in a retrospective randomized trial with all patients receiving the same lifestyle therapy program. We hypothesized that %TBWL and the Responder Rate (defined as ≥5% TBWL) would be higher in the subjects receiving the gastric balloon compared with control subjects and that the rate of serious adverse events and non-serious adverse events rated severe would be low.

Methods This was a tertiary center one year retrospective trial with 12 months follow-up and control arm cross over after unblinding conducted across. the study participants and registered dietitians performing follow-up visits were blinded to study assignment. The study was approved by each individual study site institutional review board, registered with FDA, and written informed consent was obtained from all participants in accordance with the guidelines of the Declaration of Helsinki. Adults age 22-64 years old weight stable for 12 months with a BMI between 30-40 kg/m2, at least one attempt to lose weight through a medically or non-medically supervised weight loss program without success and willing to avoid non-commercial air travel during the study period were eligible for enrollment in the trial. All subjects were treated prophylactically for balloon administration symptoms with an anti-emetic medication and anti-spasmodic medication, which were required to start the night before the administration and continue for 5 days after application.

RESULTS

Of 57 subjects were randomized, successfully applied the balloon and were included in the modified intention to treat analysis (Treatment Group n=38 and Control Group n=19)). subjects completed the 48-week study testing with three successful balloon aplication and were included in the analysis. The balloon administration and inflation time was 9.8 ± 4.0 minutes. The balloon removal procedure time was 15.6±7.2 minutes, and 98.5% of removals occurred with conscious sedation or monitored anesthesia care using propofol. %TBWL in the analysis at 48 weeks was 6.6±5.1% in the Treatment Group and 3.4±5.0% (p=0.0354) in the Control Group, with a difference of 3.2% (95% CI 2.2, 4.2) meeting the first co-primary endpoint.

DISCUSSION

Additional therapies with the possibility of widespread adoption are needed to improve obesity treatment rates (1,2). The present study was the trial of a liquid filled balloon system to treat obesity The balloons were well tolerated with only 0.4% of non-serious adverse events rated as severe.

A case series in 17 adolescents treated with one or two 3-month SIGBS also found a weight reduction of 95.8 ± 18.4 kg to 83.6 ± 27.1 kg ($p < 0.05$), but also extendedthe treatment time to 18.6± 2.4 weeks(10). Additional publications of the earlier 3-monthversion of the gastric balloon include a prospective analysis of 72 patients undergoing therapy who experienced 19.4% median excess weight loss (EWL) at 12 months, and demonstrated the highest median %EWL in patients with class 2 obesity(3).

Initial published results with the 12 month balloon described in this manuscript include two published abstracts from our trial group(4,5), which support the data presented in this manuscript. Weight loss compared to sham control in the present study is similar to a saline-filled dual balloon in a similarly designed randomized sham-controlled trial (6).

The percent of weight loss that was maintained for week of 48 weight loss was higher in this study than previously reported trials (4). The mechanism for this difference is not clear, but could be related to the rate of weight loss during balloon implantation in the stomach. Studies have demonstrated that most of the weight loss with fluid filled balloons occurs in the first 3-4 months after balloon placement (7,8).

CONCLUSION

Treatment with the gastric balloon resulted more weight loss compared with lifestyle therapy alone in a randomized sham controlled trial with a low rate of serious adverse events and non-serious adverse events rated as severe. In addition, weight loss maintenance 12 months after balloon system removal was high. The weight loss and safety profile seen in this trial support the gastric balloon as an effective safe treatment option for patients with Class I and Class II obesity.

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GASTRIC PERFORATIONS AFTER THE APPLICATION OF INTRAGASTRIC BALLOON TREATMENT FOR MORBID OBESITY

BACKGROUND: Intragastric balloon (IGB) is a widely used, minimal invasive treatment for obesity. The IGB reduce gastric capacity and enhance feeling of fullness, thereby inducing weight loss. A rare, but severe complication to IGB treatment is gastric perforation. We aimed to show a rare cases of gastric perforations, occurring shortly after IGB treatment and discussed literature review.

METHODS: Orbera® IGB was applied to the patients for 12 months, exceeding the recommended treatment period of 6 months. We have detected esophagitis and gastritis after the removal, proces. The month after the insertion of IGB to the patients were admitted to the hospital, due to extensive vomiting and hard epigastric pain. gastric perforation was found by the aid of abdomen CT. The patients underwent endoscopic removal of the IGB and also laparoscopic suture of the perforation lodge. The postoperative course was not detected any complications.

RESULTS: Patients treated with antibiotics, and proton pump inhibitors. on several occasions. We suggest that patients should be carefully evaluated before IGB treatments are repeated, especially when gastritis is present. If the gastric mucosa is affected, sufficient time to let it heal is needed. The recommended treatment period should not be exceeded, and perforation should always be suspected as a differential diagnosis when patients present with abdominal symptoms after IGB insertion.

CONCLUSIONS: Our cases demonstrates the benefit of this approach leading to quick patient recovery. Thus, early detection of perforation after IGB placement and close collaboration between endoscopists and surgeons may assist in optimising IGBrelated complications

INTRODUCTION

Intragastric balloon (IGB) is a non-operative, temporary treatment for obesity. IGBs are introduced into the stomach through an endoscopic procedure, which is subsequently inflated with saline or air, depending on the type of device. Its function is to reduce gastric capacity and increase the sensation of satiety, thereby inducing weight loss. The treatment should have a maximum duration of 6–12 months,depending on the type of balloon, due to increased risk of deflation and migration of the balloon after this point (1).Reviews show a significant weight loss during the treatment period, but the patients tend to gain weight after removal of the balloon (1), giving a modest total efficiency (2-5). The most common side effects are nausea and vomiting(23.3%), abdominal pain (19.9%) and gastro-esophageal reflux disease (GERD) (14.4%). More severe complications include gastric ulceration (0.3%), intestinal obstruction (0.8%), gastric perforation (0.1%) and death (0.05%) (4). This case report describes a rare case of gastric perforation, occurring during the second, consecutive IGB treatment.

METHODS

This was a retrospective study of adults above age 18, with a BMI > 27 kg/m2 who were unable to achieve weight loss through intense diet and lifestyle modification attempts and subsequently underwent orbera IGB insertion between march 2018 and January 2021 The study protocol was approved by the ethical committee and institutional review board of all three clinics. Written informed consent was obtained from all study participants prior to balloon insertion. Patients who were unable to tolerate the IGB for 12 months, had a personal or family history of medullary thyroid cancer and multiple endocrine neoplasia syndrometype 2, or had a prior serious hypersensitivity reaction were excluded from the study. Of 5 patients were diagnosed by gastric perforation (GP) in the population of 130 patients who have applied intragastric ballons. All of the participants were admiited to the hospital in early phase of 1 month later the application. Abdominal examinations were applied to all patients and also revealed tenderness and peritonitis in all of them . Laboratory evaluations showed elevated leucocytosis and elevated C-reactive protein resultys. An urgent CT scan of the abdomen with oral contrast was performed, which showed extraluminal air and extravasation of contrast material, demostrating a GP (gastric perforation).

RESULTS

A total of 133 patients underwent Orbera IGB placement, for 6 months. Three patients were excluded from the final analysis, as they discontinued the medication. One hundred and thirty patients were eligible for propensity score matching at a 1:1 ratio, there were no adverse events detected for intra-procedural period One patient (0.4%) required hospitalization due to Nausea, vomiting, abdominal pain and treated by conservatively.

We decided to treat the perforation using a combined endoscopic and laparoscopic approach. We performed an endoscopy for removing the balloon and localized the site of perforation for laparoscopic closure. Generally approximately 1 to 4-cm acute perforated ulcers were identified particularly in the anterior wall of the greater curve and antral section of participants. Under laparoscopic assistance, the defects of patients was repaired using a double layer 2/0 V-lock suture. We cleaned and washed all of the peritoneal cavities. The defect closure was confirmed laparoscopically, and no air leak was observed. We have placed a nasogastric tube for bile flow controlly. Patients progressively tolerated diet and was discharged 9 days after surgery. No symptoms were noted during follow-up period. On the 3rd postoperative day all of the patients were discharged with oral. Antibiotics and ppi for 10 days, weekly controls with blood tests . patients conditions improved, and final follow-up were 3 months after the surgical process , where they were free of symptoms.

DISCUSSION

Gastric perforation is a rare, but severe complication for IGB procedure (4). The mechanisms behind these perforations are not well described. It is suggested that the IGB can cause excessive pressure on the gastric wall, with subsequent erosion, ulceration and perforation (6,7). A review by Caruso et al. (8), found 21 cases with perforation after IGB treatment, between 2001 and 2018. The onsets of the perforations were ranging from 2 hours after the IGB insertion, to 22 months after. Only 3 of the perforations occurred under 10 days after insertion. Five of the cases in the study had exceeded the recommended treatment time.Eight of the patients had former gastric surgery, which is now recommended to be an absolute contraindication for IGB treatment (9,10). It is recommended that the Orbera® IGB is removed after 6 months (11). The patient in our case report had an Orbera® IGB for 12 months before inserting a second shortly after, thereby exceeding the recommended treatment period. The prolonged treatment period might have resulted in excessive pressure on the gastric wall and gastritis.

A study by Joffe et al. found significant macroscopical and histological inflammation in the stomach after IGB removal, and also found that the stomach mucosa took14 days to normalize. Thus, it is recommended that radical bariatric surgery is not performed until 14 days after removal (12). Another study revealed diffuse mucosal inflammatory infiltrate in the stomach mucosa 6 months after IGB removal, in patients where pre-IGB biopsies were normal (13). Treating patients with IGB should be done with carefulness, especially when patients have a history of gastritis. The recommended treatment period should not be exceeded. Sergio et al., in their case series, showed that the perforation was predominantly located in the anterior wall of the stomach, similar to our case. The reason for this observation is not well known. We believe the loss of tonicity of the gastric wall after IGB placement may result in selective impaction of the balloon above the incisura, causing pressing necrosis and perforation.

CONCLUSION

IGB-related perforations are treated by laparotomy for device removal followed by the closure of perforation. In the presence of an expert endoscopist and bariatric surgeon,

this can be averted and could be managed through a less invasive combined endoscopic and laparoscopic procedure.

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TRAUMATIC FEMUR FRACTURES: FRACTURE CHARACTERISTICS, EPIDEMIOLOGICAL CHARACTERISTICS AND PATIENT OUTCOMES ACCORDING TO INJURY MECHANISM

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ABSTRACT

OBJECTIVE: Traumatic femur fracture remains an important cause of morbidity and mortality, as it can potentially result in measurable short- or long-term disability. Presentation and management of femoral fractures are most affected by the mechanism and severity of injury, along with patient demographics. Therefore, the trauma mechanism (and the fracture pattern it directly affects and the presence of associated injury) determine the emergency department trauma care, details and scope, patient management, treatment options and priorities for femoral fracture. On the other hand, determining the fracture pattern can help predict trauma severity, mechanism and associated injuries. For these reasons, we performed a retrospective audit to determine the pattern of femoral fractures and the prevalence of associated injuries by injury mechanism.

METHODS: A retrospective analysis was performed for trauma record data in a tertiary hospital over a 2-year period. Demographic information of patients, trauma mechanism/cause, fracture type (closed-open), localization (proximal-shaft-distal), side of femur fracture (right-left-both), pattern (transverse-oblique-spiral-comminuted), the type of treatment (operative-non-operative), accompanying bodily injuries, local complications associated with the fracture, and presence of neurovascular deficit were recorded. Referred patients, patients with incomplete information, patients who were brought dead or died in the emergency department, patients with pathological fractures and ipsilateral knee prosthesis were excluded from the study. Patients were classified into four groups (Traffic Related Injuries (TRI), Fall, Sports Injury, Falling Objects) according to age groups and trauma mechanism. Descriptive univariate statistics were used for data analysis. Continuous variables were presented as mean±standard deviation, and categorical variables were presented as absolute numbers and proportions (%).

RESULTS: 254 patients met the inclusion criteria to be in the final patient cohort in the femoral fracture analysis, resulting in a 3.7% prevalence of femoral fractures. It was determined that most of the fractures were caused by falling (n=133.52.4%) and TRI (n=84.33.1%). While traffic-related injuries were more common in patients aged 40-59 years (n=38), fractures due to falling and sports injuries were significantly more common in patients aged 60-79 years (n=84, n=9, respectively). 61.8% (n=157) of 254 patients with femur fractures were male. While falls were the main cause of femur fractures in women (n=72), TRI (n=63) and falls (n=61) were the most common causes in men. When all groups were evaluated, we found that closed (n=243, 95.7%), proximal (n=151, 59.5%), right (n=130, 51.2%) and transverse (n=155, 61.1%) fractures were more common, and patients were treated more frequently with surgery (n=187, 73.6%). On the other hand, when compared with other groups, it was found that TRI caused a statistically significant (p=0.05) shaft fracture, fall fractures were more common in the proximal and left femur, and falling objects fractures were treated more common conservatively. TRI and its frequent causes of closed and shaft fractures were significantly more likely to sustain an associated injury (p=0.04, p=0.001, p=0.05, respectively). Also, TRI-related fractures, open fractures, and shaft fractures were significantly more likely to cause an associated neuro-vascular deficit (p<0.001, p<0.001, p=0.01, respectively).

CONCLUSION: Fracture of the femur represents a spectrum of injury characteristics, from isolated injuries requiring a simple intramedullary nail to multiple trauma patients with associated injuries requiring a multidisciplinary treatment approach. We believe that a clinico-epidemiological study can help emergency physicians and surgeons understand the pattern, management, and complications of fractures to improve patients' outcomes.

KEYWORDS: femur fracture, epidemiology, trauma mechanism, management.

INTRODUCTION

The femur is the most frequently broken long bone in the body, whose fractures are often treated surgically (1). Traumatic femur fracture has an annual incidence of between 1.0 and 2.9 million worldwide. It continues to be an important cause of morbidity and mortality, as it can result in potentially measurable short- or long-term disabilities (2). Traumatic femoral shaft fractures (most commonly mid-shaft), which are frequently seen in high-energy injuries and especially following road traffic collisions, are more common in adult males and show a bimodal distribution in different age groups. Low-energy injuries tend to be more common in children and elderly women (3,4). For the elderly population, this effect is compounded by the prevalence of osteoporosis (5).

The fracture pattern (fracture type, localization, pattern) and the presence of accompanying bodily injury (isolated or multiple trauma) change depending on the direction of the force applied during trauma and the amount of force absorbed (6). Therefore, presentation and management of femoral fractures are most affected by the mechanism and severity of the injury, along with patient demographics (3,4,7). Therefore, the trauma mechanism (and the fracture pattern it directly affects and the presence of concomitant injury) determine the emergency department trauma care, details and scope, patient management, treatment options (fracture detection time, surgical technique, and implant type) and priorities for femoral fracture.

On the other hand, determining the fracture pattern can help predict trauma severity, mechanism and associated injuries. For example, there is evidence that femoral shaft fractures are frequently associated with skeletal injuries (46.4%), with occult injuries in a quarter of cases (8). In particular, many studies have reported the presence of associated injuries, such as hemothorax, bowel and head injuries, accompanying femoral shaft fractures, reflecting the severity and mechanism of the injury (8-10). Therefore, injuries associated with femoral shaft fracture are the main cause of morbidity in polytrauma patients (11,12). In addition, traumatic femoral fractures may be associated with serious local complications such as bleeding, neurovascular deficit, deep vein thrombosis (DVT) and wound infection (13). Consequently, it is essential to understand the mechanism of injury and the resulting traumatic femoral fracture pattern to determine the risk of associated injury.

We performed a retrospective audit at a tertiary care hospital for two years to determine the pattern of femoral fractures and the prevalence of associated injuries, according to the mechanism of injury. Thus, it is aimed to create projections for clinicians for the management of trauma care and femoral fractures, and also to define the magnitude of this problem and to plan preventive measures.

MATERIAL AND METHODS

DATA COLLECTION AND PROCESSING

A retrospective analysis was performed for trauma record data at Eskisehir City Hospital, a tertiary care hospital, over a 24-month period from April 1, 2020 to April 1, 2022. Data were obtained from the Hospital Information Management System (HIMS) and patient files using ICD-10 codes. Demographic information of patients (age, gender, comorbidities), trauma mechanism/cause, fracture type (closed-open), localization (proximal-shaft-distal), side of femur fracture (right-left-both), pattern (transverse- oblique-spiral-comminuted), treatment method (operative-non-operative), accompanying bodily injuries, local complications associated with the fracture, and presence of neurovascular deficit were recorded.

INCLUSION AND EXCLUSION CRITERIA

All trauma patients (except for minor traumas admitted to our center) who applied to our center due to trauma were identified and these constituted our study population. All patients with unilateral or bilateral femoral fracture due to trauma, regardless of age and gender, were included in the study. Patients who were transferred to another center voluntarily or for other reasons, patients with incomplete information, patients who were brought dead or died in the emergency department, patients with pathological fractures and ipsilateral knee prosthesis were excluded from the study.

DEFINITIONS

Patients were divided according to age groups (≤18 years, 19-39, 40-59, 60-79, ≥80 years). Fracture type, localization, pattern, side were determined from patient files and imaging reports and classified. Trauma mechanisms were classified into four groups (Traffic Related Injuries (TRI), Fall, Sports Injury, Falling Objects). "Falling" was defined as falling from the level and higher, and "Falling Objects" was defined as an injury due to objects falling two meters above the level. The presence of one or more of the accompanying extremity injuries (bone, joint) and/or other system injuries (head, chest, abdomen, pelvis, spine) other than the femur fracture/fractures detected in a patient were defined as "Presence of Associated injuries". The ipsilateral neuro-vascular deficit associated with femoral fracture(s) detected in one patient was defined as "Presence of neuro-vascular deficit".

STATISTICAL ANALYSIS

Data were grouped for analysis. For statistical evaluation, the data were loaded into the IBM SPSS 21.0 (IBM, Armonk, NY, USA) software package and necessary analyzes were made. Descriptive univariate statistics were used for data analysis. Continuous variables were presented as mean±standard deviation, and categorical variables were presented as absolute numbers and proportions (%). P-value < 0.05 was considered statistically significant.

RESULTS

During the 2-year study period, 8,652 trauma patients (excluding outpatient minor traumas) were admitted to our center, and femur fractures were detected in 317 of them. 34 patients who

had incomplete information or did not meet the inclusion criteria were excluded from the study, along with 29 patients who were referred to another center voluntarily or for other reasons. 254 patients met the inclusion criteria to be in the final patient cohort in the femoral fracture analysis, resulting in a 3.7% prevalence of femoral fractures. It was determined that most of the fractures were caused by falls (n=133, 52.4%) and TRI (n=84, 33.1%).

Fractures occurred most frequently in the 60-79 age range (n=114, 44.9%) and above the age of 80 (n=53, 20.8%) (Figure 1). While Traffic-related injuries were more common in patients aged 40-59 years (n =38), fractures due to Fall and Sports injuries were significantly more common in patients aged 60-79 years (n=84, n=9, respectively). Fractures due to Falling objects, on the other hand, occurred most frequently in the 19-39 age group (n=14, 56.0%).

Figure 1. Distribution of age groups according to injury mechanism in patients with femur fracture

Of 254 patients with femur fractures, 61.8% (n=157) were male. While falls were the main cause of femoral fractures in women (n=72), TRI (n=63) and Falls (n=61) were the most common causes in men. While fractures due to TRI, Sports injury, Falling objects were statistically significantly more common in men, fractures due to fall occurred more frequently in women (Figure 2).

Figure 2. Distribution of gender groups according to injury mechanism in patients with femur fracture

Table 1 presents the clinical, radiological features and management of femoral fracture based on trauma mechanisms. When all groups were evaluated, closed (n=243, 95.7%), proximal (n=151, 59.5%), right (n=130, 51.2%) and transverse (n=155, 61.1%) fractures were found to be more frequent, and patients were treated more frequently surgically (n=187, 73.6%). On the other hand, when compared with the other groups, it was found that TRI caused a statistically significant (p=0.05) shaft fracture, Fall-related fractures were more common in the proximal and left femur, and Falling objects-related fractures were treated more conservatively.

Table 1. Fracture characteristics and outcomes according to injury mechanism

	Total N (%) 254(100)	TRI N (%) 84 (33.1)	Fall N (%) 133 (52.4)	Sports injury N (%) 12 (4.7)	Falling Objects N (%) 25 (9.8)	P-value
Fracture type						
Closed	243(%95.7)	77(91.7%)	133(100%)	12(100%)	21(84.0%)	0.08
Open	11(4.3%)	7(8.3%)	0(%)	0(%)	4(16.0%)	0.11
Fracture location						
Proximal	151(59.5%)	12(14.3%)	116(87.2%)	7(58.3%)	16(64.0%)	0.04
Shaft	81(31.9%)	64(76.2%)	7(5.3%)	5(41.7%)	5(20.0%)	0.05
Distal	22(8.6%)	8(9.5%)	10(7.5%)	0(%)	4(16.0%)	0.72
Side of femur fracture						
Right	130(51.2%)	41(48.8%)	64(48.1%)	10(83.3%)	15(60.0%)	0.09
Left	117(46.1%)	38(45.2%)	69(51.9%)	2(16.7%)	8(32.0%)	0.22
Both	7(2.7%)	5(6.0%)	0(%)	0(%)	2(8.0%)	0.64
Fracture pattern						
Transverse	155(61.1%)	37(44.1%)	103(77.5%)	5(41.6%)	10(40.0%)	0.14
Oblique	59(23.2%)	31(36.9%)	19(14.3%)	2(16.7%)	7(28.0%)	0.20
Spiral	22(8.6%)	5(5.9%)	10(7.5%)	3(25.0%)	4(16.0%)	0.44
Comminuted	18(7.1%)	11(13.1%)	1(0.7%)	2(16.7%)	4(16.0%)	0.02
Treatment Type						
Non Operative	67(26.4%)	32(38.1%)	17(12.8%)	4(33.3%)	14(56.0%)	0.09
Operative	187(73.6%)	52(61.9%)	116(87.2%)	8(66.7%)	11(44.0%)	0.61

Closed fractures and shaft fractures were significantly more likely to sustain an associated injury (p=0.001, p=0.05, respectively). Looking at the fracture patterns, patients with spiral fractures had the least associated injury (n=5, 9.6%). (Table 2). Patients with fractures due to TRI exhibited a 10-fold higher probability of associated injury compared to a fall (p=0.04).

Table 2. Presence of associated injuries according to fracture characteristics and injury mechanism

	Total N (%) 254 (100)	Presence of Associated injuries N (%) 52 (20.5)	P-value
Fracture type			
Closed	243(%95.7)	41(78.9%)	0.001
Open	11(4.3%)	11(21.1%)	
Fracture location			
Proximal	151(59.5%)	5(9.6%)	0.05
Shaft	81(31.9%)	35(67.3%)	
Distal	22(8.6%)	12(23.1%)	
Fracture pattern			

	Total N (%) 254 (100)	Presence of Associated injuries N (%) 52 (20.5)	P-value
Transverse	156(61.4%)	26(50.0%)	0.27
Oblique	59(23.2%)	13(25.0%)	
Spiral	21(8.3%)	5(9.6%)	
Comminuted	18(7.1%)	8(15.4%)	
Injury mechanism			
TRI	84(33.1%)	30(57.7%)	0.04
Fall	133(52.4%)	3(5.8%)	
Sports injury	12(4.7%)	4(7.7%)	
Falling Objects	25(9.8%)	15(28.8%)	

Open fractures and shaft fractures were significantly more likely to cause an associated neuro-vascular deficit (p<0.001, p=0.01, respectively). When looking at the fracture patterns, it was found that the associated neurovascular deficit was more common in patients with spiral fractures and comminuted fractures (both n=4, 30.8%). (Table 3). While patients with fractures due to TRI had a statistically significantly more frequent (p<0.001) associated neurovascular deficit, no neurovascular deficit was found in Fall-related injuries.

Table 3. Presence of neuro-vascular deficit according to fracture characteristics and injury mechanism

	Total N (%) 254(100)	Presence of neuro-vascular deficit N (%) 13(5.1)	P-value
Fracture type			
Closed	243(%95.7)	2(15.4%)	<0.001
Open	11(4.3%)	11(84.6%)	
Fracture location			
Proximal	151(59.5%)	0(%)	0.01
Shaft	81(31.9%)	9(69.2%)	
Distal	22(8.6%)	4(30.8%)	
Fracture pattern			
Transverse	156(61.4%)	3(23.0%)	0.96
Oblique	59(23.2%)	2(15.4%)	
Spiral	21(8.3%)	4(30.8%)	
Comminuted	18(7.1%)	4(30.8%)	
Injury mechanism			
TRI	84(33.1%)	10(76.9%)	<0.001
Fall	133(52.4%)	0(%)	
Sports injury	12(4.7%)	1(7.7%)	
Falling Objects	25(9.8%)	2(15.4%)	

DISCUSSION

PREVALENCE AND EPIDEMIOLOGY

To evaluate the appropriateness of care and management of trauma patients, it is important to understand the clinical features, epidemiological features, mechanisms of injury, and femoral fracture patterns. In our study, we found the prevalence of femur fracture to be 3.7%. This result was inconsistent with previous study results reporting higher rates of femoral fractures (9.5-18.9%) (1,14-16). In our series, falling (52.4%) was the most common injury mechanism, followed by TRI. These findings were not in line with the results of previous studies reporting high impact trauma, especially road traffic accidents, which was reported as the most common cause of femur fractures (1,3,15).

Studies in the literature have reported trimodal distribution in different age groups (16-30 years, 31-59 years, 60 years and above) (3,17-19). Our study results, on the other hand, reported the predominance of advanced age in femoral fractures. 97% of the patients were aged 60 years and over. The reason for this may be the excess of elderly patients presenting due to the falling mechanism that most commonly causes fracture. When age groups were compared according to the mechanism of trauma, traffic-related injuries and falling objects fractures were more common in young and middle-aged groups, while fractures due to falling and sports injuries were significantly more common in advanced age groups. These findings were consistent with previous results in the literature (14,20,21). Young individuals may have suffered traffic-related injuries, often due to their propensity for speeding and reckless driving. In this study, it was also found that the most important cause of femur fractures in women older than 60 years is ground-level falls in the home environment. This pattern is similar to that reported in other studies of femoral fracture (22).

Our study results reported the frequency of male patients as 61.8%. Although this finding is consistent with the literature (72-89%), it was found to be less common in males (14,15,23). In our study, it was found that TRI, sports injury, falling objects fractures were statistically significantly more common in men, while fall-related fractures occurred more frequently in women. These findings were also consistent with the results in the literature (2-4,14,15,23).

MECHANISM OF INJURY

Most of the femoral fractures in our series were closed and unilateral. In contrast to tibial fractures, the closed femoral fracture pattern is frequently observed due to the rich soft tissue coverage of the femur (8,24). Beanusi and Chioma (15) reported a higher rate of closed femur fractures overall (78%) compared to open fractures (22%) that were more likely to include a diaphyseal femur fracture (58.1%) secondary to high impact trauma from road traffic and gunshot wounds. On the other hand, open femur fractures are not uncommon and its prevalence ranges from 16.5% to 23% (25,26). In this respect, although our study findings are compatible with the literature, the rate of open fractures was much lower (4.3%). In our study cohort, we found that transvers fractures predominated overall. This result was consistent with the results of studies in the literature. On the other hand, our findings were not compatible with the results of studies in the literature stating that fall-related fractures cause more oblique and spiral fractures (14,15,27). It has been reported in the literature that the prevalence of proximal femur fractures is generally higher (28). It has been reported that femoral shaft and distal fractures occur frequently (75%) in young patients without any evidence of osteoporosis, usually as a result of high-energy trauma such as a motor vehicle accident or motorcycle accident (29-32). Fractures due to Fall were reported to cause more frequently proximal fractures and be in the elderly patient group (20,33-36). This incidence of fracture site can be largely explained by age-related factors such as decreased bone strength and falls, which are the most common trauma mechanisms in elderly patients. Where trauma is caused by a fall, the force directly affects the posterolateral aspect of the greater trochanter, making the femoral neck particularly vulnerable to fractures (37). In terms of fracture localization, our study results were also consistent with the literature results.

ASSOCIATED INJURIES

The most common associated injury in our patient cohort was Traumatic Brain Injury (TBI). Chest and abdominal injuries followed. This finding was supported by a recent meta-analysis that reported high-energy trauma as the primary cause of femoral fracture with concomitant injuries to the head and thoracic regions (38). Other studies have also reported that other long bone fractures are the most common associated injury followed by TBI (16,20). The same studies have shown the benefit of using helmets and other protective equipment during contact or motor sports to have a protective effect on high-energy injuries and therefore to minimize the extent of bodily injury (16,20). With this, other site fractures in our study group accompanying victims of traffic-related collisions were more frequently tibia and fibula fractures.

Our study results showed that fractures resulting from the TRI mechanism, closed and shaft fractures were significantly more likely to sustain an associated injury. Fractures from TRIs had a higher risk of associated injury (57.7%), similar to other studies in the literature. However, it showed a much higher rate than the rates stated in the literature (8.7%, 25.5%) (2,6,8,20,21). Understanding this relationship is critical in determining patient care needs, from the moment of injury to definitive hospital treatment. Because some associated injuries are life threatening if overlooked.

There is not enough literature to compare the accompanying local complications and neurovascular deficit according to the mechanism classification. A limited number of studies in the literature have reported that fractures due to the TRI mechanism and shaft fractures most commonly cause local complications and neurovascular deficits (2,6,8,14,15,17). Fractures due to TRI and shaft fractures that we found in our study cohort were significantly more likely to cause an associated neuro-vascular deficit. These findings were consistent with the literature. Our study also examined the fracture pattern, which has not been investigated before in the literature, and found more frequent associated neurovascular deficits in patients with spiral fractures and comminuted fractures.

LIMITATIONS

This study has some limitations that must be acknowledged. First, due to the retrospective nature of this study, it could not control the quality and adequacy of the information contained in the patient files. This resulted in the exclusion of 29 (9.1%) femoral fractures. This is a natural limitation of retrospective case record studies. Second, the impact force, location of impact, and method of protection were unknown during a trauma accident, especially given that these factors can vary greatly in high-speed motorcycle accidents. Third, lack of information about the status of osteoporosis can lead to bias in the analysis. Fourth, this study did not cover a number of risk factors identified as risk factors for fracture, including drug use such as glucocorticoids or bisphosphonates, alcohol consumption, previous frailty fractures, and smoking. This may cause bias in the analysis.

CONCLUSION

In our study, it was determined that the prevalence of femur fracture was 3.7% and most of the fractures were caused by falls and TRI. Falls were the main cause of femoral fractures in women, although male patients were in the majority. When all groups were evaluated, it was found that closed, proximal, right and transverse fractures were more common and patients were treated surgically more frequently. On the other hand, when compared with other groups, TRI was found to cause a statistically significant rate of shaft fractures. The TRI mechanism, closed fractures and shaft fractures were significantly more likely to sustain an associated injury. In addition, associated neurovascular deficit was found more frequently in patients with TRI mechanism fractures, open fractures, shaft fractures, spiral fractures and comminuted fractures.

Fracture of the femur represents a spectrum of injury characteristics, from isolated injuries requiring a simple intramedullary nail to multiple trauma patients with associated injuries requiring a multidisciplinary treatment approach. We believe that a clinico-epidemiological study can help emergency physicians and surgeons understand the pattern, management, and complications of fractures to improve patients' outcomes. Our study design and findings can also assist in health care policy prioritization, resource allocation planning. Further multicenter studies are needed to reach a consensus for appropriate management based on the location and timing of injury.

DİSCLOSURE

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PREVALENCE OF NEGATIVE CHEST RADIOGRAPHY IN PATIENTS WITH DECOMPENSATED HEART FAILURE IN THE EMERGENCY DEPARTMENT

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ABSTRACT

BACKGROUND/AIM: In emergency department (ED) patients with decompensated heart failure, chest radiography is quick and inexpensive, but prior research indicates that it is frequently deceptive, leading to incorrect diagnosis and treatment. This study examines the frequency of negative chest radiography findings in patients diagnosed with the illness and the potential impact of negative findings on the diagnosis of heart failure.

METHODS: Data from patients with heart failure as their primary hospital discharge diagnosis were used. For patients who were initially treated in the ED, we compared the initial ED admitting diagnosis to the benchmark standard of a hospital discharge diagnosis of heart failure and related these to radiographic findings of heart failure. The proportion of patients with a non–heart failure ED diagnosis and the diagnostic sensitivity of radiographic findings of heart failure were calculated.

RESULTS: With the results of a chest radiograph and an ED admitting diagnosis, there were 5,876 patients. In total, 1099 patients underwent ED chest radiography without exhibiting any symptoms of congestion, yielding a negative rate of 18.7%. (95 percent confidence interval [CI] 18.4 percent to 18.9 percent). Patients with a negative chest radiograph result were more likely to have an ED non-heart failure admitting diagnostic (23.3 percent; 95 percent CI 22.6 percent to 23.9 percent) than patients with a positive chest radiograph result (13.0 percent; 95 percent CI 12.7 percent to 13.2 percent).

CONCLUSION: One in five patients admitted with acute decompensated heart failure was found to have no congestion on chest radiography. Patients without congestion on ED chest radiography were more likely to be diagnosed with a condition other than heart failure in the ED than patients with congestion. Patients with no radiological congestion indications should nevertheless be considered to have heart failure, according to clinicians.

KEYWORDS: Heart failure, chest radiography, congestion.

Table 1. Comparison of characteristics and evaluation of ED radiography of patient

		Assesment of chest radiography	
Characteristic	All patients, N=5876	Positive, N=4777	Negative, N=1099
Age, mean (SD)	72.0 (13.2)	72.3 (13.8)	71.5 (11.8)
Gender, male, (%)	2,732 (46.5)	2197 (46)	531.9 (48.4)
Coronary artery disease, n, (%)	3,355 (57.1)	2,746 (57.5)	607 (55.4)
Hypertension, n, (%)	4,389 (74.7)	3,587 (75.1)	804.4 (73.2)
Heart failure, n, (%)	4,407 (75)	3,582 (75)	813.2 (74)
Atrial fibrillation	1,768 (30.1)	1,452 (30.4)	315.4 (28.7)
Ventricular tachycardia, n, (%)	417 (7.1)	334 (7)	83.5 (7.6)
Principal admitting diagnosis			
Heart failure	5,171 (88)	4,270 (89.4)	890 (81)
Non-heart failure	705 (12)	506 (10.6)	208 (19)

URGENT EXTERNAL DRAINING OF THE MAIN PANCREATIC DUCT DURING GASTROPANCREATODUODENAL RESECTION

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INTRODUCTION: The scope of the article is to improve the outcomes of surgical treatment of patients with periampullary tumors by applying of the external drain to the main pancreatic duct.

MATERIALS & METHODS: The analysis of results of 41 c gastropancreatoduodenal resections (GPDR) was conducted during 2005-2019.

The patients under observation were divided into 2 groups. In the 1st group (control group, 22 patients) pancreatodigestive anastomosis was imposed without drainage. In 2nd group (basic group, 19 patients), the reconstructive stage included external drainage of the main pancreatic duct imposed by our proposed method. For this purpose, proximal and distal openings were made in jejunum for the purpose of pancreatojejunoanastomosis and gepaticojejunoanastomosis. Then PVC drainage pipe with diameter of 2-3 mm was introduced through the side openings in the right hepatic duct, as well as the proximal and distal openings in jejunum into the main pancreatic duct, between the stitches of the pancreas, jejunum and hepatic-choledochus using the standard methods. Drainage tube was led out to the side wall of the abdomen. The drainage tube was removed by the 8-12th day. A comparative analysis of the clinical effectiveness of our method, i.e. drainage of the pancreatic duct, was controlled by the amount of pancreatic juice in drainage, the nature and quantity of discharge to drainages installed in the abdominal cavity.

RESULTS: The analysis of results in the control group during immediate postoperative period showed that in 3 (13.6%) cases an anastomotic dehiscence was diagnosed, requiring reoperation. Two cases (9.0%) of those were lethal. 1 case (4.5%) showed drainage leak of pancreatic juice into the abdominal cavity. The conservative therapy is possible to eliminate dehiscence of the pancreatodigestive anastomosis.

In the main group external drainage of the main pancreatic duct allowed us to control the discharge amount of pancreatic juice. In the 1st group (5.3%) a transitory increase of serum amylase in the drain pipe was imposed to pancreatic-jejunoanastomosis up to 150 U/l. Strengthening of conservative therapy led to regression and complete recovery of the patient to 14 days after surgery. A patient in a satisfactory condition was discharged 18 days after surgery. In other cases, the main group of specific complications was observed.

CONCLUSION: The use of external drainage of the main pancreatic duct at the GPDR allows you to monitor the discharge of pancreatic juice and prevents possible anastomotic leak.

Disclosure of Interest: None Declared

KEYWORDS: gastropancreatoduodenal resections, external drain of duct, periampullary tumors

RUPTURED SUB-DIAPHRAGMAL LIVER HYDATID CYSTS: SURGICAL TACTICS

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INTRODUCTION: Aim of research: to study the peculiarities of echinococcosis' development and methods of surgical treatment of sub-diaphragmal hydatid cyst of liver

MATERIALS & METHODS: The results of treatment of 73 patients with liver echinococcosis situated in SVII-VIII segments during 2006-2016. We observed intimal adhesions between cyst wall and diaphragm with right side pleural exudation in 25 cases (34.7%), adhesions with inferior cava vein in 6 (8.3%), reactive pyelonephritis in the right kidney. 32 patients of the group 1 (44%) underwent echinococcectomy with applying of argon plasma coagulation (APC). The second group of rest 41 patients underwent common echinococcectomy with pericystectomy. Working plasma stream 4.5 kWt, working temperature 1000-10000° (Calvin). Pressure of argon 0.3-0.5 atmospheres, unfocused beam with 4-6 mm in diameter. We performed pericystectomy in 41 cases, meanwhile in five (12.5%) cases the opening of diaphragm occurred with following pneumothorax. In the first group we performed open echinococcectomy with APC application; in four cases due to severe adhesions with diaphragm, the cyst wall was partially lived on the diaphragm with carefully processing by APC. Wide pericystectomy in the second group in the majority cases (30 of 41 patients, 74.5%) was followed by parenchymal bleeding, required diathermocoagulation.

RESULTS: Superficial homogenic coagulation by APC provided atraumatic impact for tissues with high perforation risk, and resulted to quick tissue healing without rude scars. No complications occurred, with short post-surgery period – 6.1±1.6 days. Cystobiliar fistulas were obtained in six patients, sutured with combination of APC. In the second group we occurred longer duration of intracavital drain stay (8.1±1.5 days); in 30 cases (74.5%) it was resulted from parenchymal bleeding. In five cases, we obtained the opening of diaphragm with following pneumothorax. Postoperative period in these patients consisted 9.7±2.3 days. In four patients, we detected cystobiliar fistulas, these patients were discharged on 11-12th day with drain. No mortality occurred in both groups.

CONCLUSION: Using the APC in echinococcectomy from SVII-VIII segments of liver allows avoiding the wide pericystectomy with long bleeding, as well as avoiding of cystophrenolysis in cases with intimal adhesions. In addition, all principles of antiparasitarity stay preserved; diminishing of complications and intraoperational tissues damage lead to quick healing and decreasing of the duration of stay

DISCLOSURE OF INTEREST: None Declared

KEYWORDS: : liver echinococcosis, difficult approach, sub-diaphragmal hydatid cyst

EMERGENCY PATIENT FLOW AND COVID-19: TO DIVIDE AND AVOID THE CATASTROPHE. UZBEKISTAN EXPERIENCE.

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INTRODUCTION: Aim of research:

With the onset of the SARS-CoV-2 pandemic, there have been unprecedented changes in all areas of society. Overall, 20% of cases are severe or critical, while the overall in-hospital mortality rate currently exceeds 2% and increases with age and with some comorbidities.

The aim of the study was to determine the optimal way to provide emergency medical care during pandemics, studying its operational, technical and research structures.

Among the first changes occurred in the system of emergency medical care. On March 15, 2020, "0" patient with COVID-19 was registered in Uzbekistan. As in Uzbekistan, all countries of the Central Asian region took restrictive measures, which included the closure of state borders, the suspension of international and domestic transport links, the movement of public transport, the introduction of quarantine in settlements, and the suspension of activities. enterprises and organizations. This situation has undoubtedly affected the existing scheme for the provision of emergency medical care in the field.

Materials and methods. A telemedicine laboratory (tele-hub) has been set up at the Republican Research Centre of Emergency Medicine (RRCEM) to organize and coordinate remote consultations for patients with COVID-19.

The purpose of tele-hub creating was the implementation and ongoing coordination of remote consultations of patients with COVID-19 infection in Uzbekistan, within the framework of which video consultations were carried out by medical personnel of medical institutions on the organization and features of the treatment and diagnostic process of patients with COVID-19 in Uzbekistan; collection and analysis of the necessary operational information on severe and especially severe patients with COVID-19 in Uzbekistan from medical institutions in the prescribed manner, as well as monitoring and coordination of work in the field of remote medical training of employees of quarantine institutions on the management of patients with COVID-19 in Uzbekistan taking into account domestic and advanced foreign experience, interaction was carried out with other services and departments in the field of organizing counseling for patients with COVID-19.

In addition, conditions have been created at the training center at the RRCEM and distance master classes have been organized on the basic principles of managing intensive care patients with COVID-19 to train specialists in the field of resuscitation.

The result of the work of the telemedicine laboratory was an analysis of the development of the COVID-19 pandemic in the world and in the Republic of Uzbekistan.

Our guiding principles should be speed, scale and fairness.

ASTIM'LI HASTALARDA SLEEVE GASTREKTOMİYE KARSI İNTRAGASTRİK MİDE BALON UYGULAMASININ YASAM KALİTESİ ÜZERİNE SONUÇLARININ KIYASLANMASI
COMPARISON OF THE RESULTS OF INTRAGASTRIC GASTRIC BALLOON APPLICATION VERSUS SLEEVE GASTRECTOMY ON THE QUALITY OF LIFE IN PATIENTS WHO WERE DIAGNOSED AS ASTHMA

ABSTRACT

objective: we have aimed to assess the postoperative outcomes of asthmatic patients who underwent laparoscopic sleeve gastrectomy (LSG) versus intragastric balloon(IGB) application.

MATERİAL AND METHOD:

A total of 84 patients who underwent LSG and IGB due to morbid obesity and asthma between March 2019 and February 2021 in the surgery department were retrospectively analyzed. Demographic findings, global symptom scores, and length of the hospital stay of the patient groups were evaluated. The patients in present resarch have similar in terms of BMI, age, and gender. Statistically significant results were accepted as p<0.05.

RESULTS:

The mean age of the patients participating in the study was 42.32±6.51 (range 28–54), mean BMI was 42.3±6.7 kg/m2 (range 41–52). There were no major complications or mortality were observed in any patient. Age and gender were defined as independent risk factors by multivariant logistic regression analysis, Age, p: 0.054, (OR (95%CI): 2.017), BMI ,p: 0.067.(OR (95%CI): 1.379) , Gender was determined as p:0.110 (OR (95%CI): 0.928.

CONCLUSİON:

We have concluded that although the morbidity of sleeve gastrectomy is higher than the gastric balloon application procedure, it provides more improvement in general quality of life values and is approaching the cure.

Key words: sleeve gastrectomy, gastric balloon, ,score

ÖZET

AMAÇ:

Çalışmamızda laparoskopik sleeve gastrektomi (LSG) geçiren hastalara karşı mide balonu uygulanan astımlı hastaların postoperatif dönemdeki yaşam kalitesi skorlarının sonuçlarını kıyaslamayı amaçladık.

MATERYAL VE METOD:

Hastanemiz cerrahi kliniğinde mart 2019 ile şubat 2021 tarihleri arasında morbid obezite nedeniyle LSG operasyonu yapılan ve mide balonu uygulanan toplamda 84 hasta retrospektif olarak incelendi. Hasta gruplarının demografik bulguları, komorbiditeleri, postoperatif dönemdeki belirti skorları değerlendirildi. Çalışma grubumuzdaki hastaların vücut kitle indeksi, yaş ve cinsiyet açısından benzerlikleri mevcuttu. Çalışmamızdaki İstatistiksel olarak anlamlı sonuçlar için değer p<0.05 olarak kabul edildi.

BULGULAR:

İşlemlerin uygulandığı hasta gruplarının ortalama yaşı 42,32±6,51 (yaş aralığı 28–54), ortalama vücut kitle indeksleri 42.3±6.7 kg/m2 (aralığı 41–52) idi. işlemler ve ameliyat sonrası hiçbir hastada, majör komplikasyon veya mortalite görülmedi. Multivaryant logistik regresyon analiziyle yaş, ve cinsiyet bagımsız risk faktörleri olarak tanımlandı, Yaş, p: 0.054, (OR (95%CI): 2.017) ,VKİ ,p: 0.067.(OR (95%CI): 1.379) , Cinsiyet p:0.110 (OR (95%CI): 0.928 olarak tespit edildi.

SONUÇ:

Morbid obezitede uygulanan yöntemlerden sleeve gastrektominin mide balon uygulama prosedürüne oranla morbiditesi yüksek olmasına rağmen genel yaşam kalite değerlerinde daha çok iyileşme sağladığı ve küre yaklaşıldığı sonucuna vardık.

ANAHTAR KELİMELER: sleeve gastrektomi,mide balon, skor

INTRODUCTION:

Morbid obesity is common significant health problem in the world, but it is a complex and multifactorial disease that continues increasing rapidly (1). The fact that asthma and morbid obesity have a parallel increase all over the World, many researchs have work for potential relationships for both diseases. Although some studies demonstrate that both diseases may have similar origins, the majority of epidemiological and clinical studies in this area have focused on obesity as a causal factor in the development of asthma(2). However, the relationship between these conditions remains unclear, whether asthma influences the onset of obesity(3). While LSG (laparoscopic sleeve gastrectomy), which has become almost conventional process in bariatric surgery, plays a primary role, gastric balloon application (IGB) is currently applied in patients who have not benefited from first-line treatment(4).

The studies conducted in our country, it is seen that the prevalence of obesity in the adult population exceeds the critically high rate of 45%, and although the prevalence of obesity is higher in women, the rapid increase in men in recent years has been noted (1). In the United States, the prevalence of asthma in morbid obese populatıon is 14.6% and 7.9%, consecutıvely (4). Studies have shown that obesity has a dose-dependent effect on asthma risk, and also greater the body mass index (BMI) correlate with increased risk of asthma .(5)

In addition to this information, the LSG procedure is more effective than IGB, but it is an irreversible procedure that can cause more morbidity. In our study, we aimed to compare the efficacy of asthma patients who underwent LSG and IGB operation with the Global general symptom (DGB) and reflux quality of life (RQS) scores (6,7).

MATERIAL AND METHODS:

Of 84 patients who applied to our clinic with morbid obesity and applied LSG and IGB procedures according to their BMI results between March 2019 and February 2021 were evaluated retrospectively. All patients also had their informed consent form read before the procedure and their consent was obtained. Necessary consultations (endocrine, psychiatry, chest, dietitian) were made for our patients who applied before the procedure, and necessary information was given to the patients for the operation. The procedures of the patients were performed by a team experienced in bariatric procedures.

STUDY PROTOCOL

The patients participated in the study in accordance with the Declaration of Helsinki, and approval was obtained from the local ethics committee within this framework. First of all, the Global General Symptom (GGB) questionnaire was applied to the patients, it consisted of a scale with 7 points graded upper gastrointestinal symptoms. The patients were evaluated in terms of epigastric pain, heartburn, acid regu- lation, bloating, nausea, early satiety, postprandial bloating parameters. The Quality of Life in Reflux (RQS) questionnaire was filled, which was a 5-part questionnaire consisting of 25 questions, in which emotional stress, social and physical functions, eating and drinking problems, and sleep problems were questioned. The questionnaires were repeated 12 months after the procedure.

EXCLUSİON CRİTERİA

Psychiatric diseases and frequent exacerbations (at least 3 attacks per month) were found in the history of the patients. Demographic findings, duration of the procedure, complication rates, and hospital treatment durations of the patients who underwent the procedure were evaluated. The mean follow-up times of the patients were 1,3,6 and 12 months after the procedure.

BARİATRİC PROCEDURES

Pre-procedural information was given to the patients, both procedures were explained, and their consent was obtained. Patients were advised to fast 12 hours before the procedure. The patients were intubated in the bariatric surgery procedure and placed in the obesity surgery position. LSG procedure was applied to the patients at a distance of 4 cm from the pylorus. In the IGB procedure, the stomach was filled with 550cc of methylene blue and a gastric balloon under sedation. After the procedure, the patients were kept under observation for 45 minutes and were sent with recommendations.

RESULTS:

A total of 84 followed-up asthma patients without frequent exacerbations were included in the study. All patients agreed to fill out the questionnaire. 54 of the patients were female (64.7%) and 30 were male (35.3%), mean BMI was 42.32±6.51 (age range 28–54). The mean duration of the procedure was 55.5±8.2 minutes in LSG (range 43–84 minutes), and 18±5.6 minutes

(13-48) in IGB. Bleeding was observed in the early postoperative period in 2 patients who underwent LSG in the postoperative period, and the existing bleeding of the patients was controlled with supportive treatment. No additional complication was observed in the patients who underwent IGB. The symptoms of the patients were evaluated at 1,3,6 and 12 months. Independent risk factors of GERD were evaluated in multivariate regression analysis. Considering the effects of GERD in the postoperative period, it was observed that there was a significant improvement and regression in LSG patients compared to the RQS questionnaire. (table 1).

STATISTICS

Mann–Whitney U test was used to compare categorical data. All data in the study were analyzed with the SPSS version 25.0 data package. Data are given as mean ± standard deviation (Sd), percent. The patients in our study group were accepted as randomized because they were similar in terms of BMI, age, gender and number. Statistically significant results were accepted as $p<0.05$.

DISCUSSION:

Asthma is common worlwide disease and also affects nearly half million people all oveer the world(8). The prevalence of asthma in the world is 1.5, with 16.7% in the adult population and approximately 10% in the pediatric population.

In the literature, there are some studies showing that obesity may cause asthma by triggering hyperresponsiveness of airway, similar genetic familiarity for both diseases in the immune system of human, as well as studies involving medical and behavioral mechanisms such as asthma onset time and drugs used in the treatment. Most of the studies which have evaluated the relationship between asthma and physical activity have mentioned the role of asthma as an independent variable affecting physical activity in young people.(9).

In the reviewed researchs, it was reported that there is a positive relationship between asthma and overweight. Relative and absolute criteria have varied in the methodology of studies evaluating the relationship between asthma and weight gain. Significant associations varied according to weight status, definition of pulmonary dysfunction, or gender. In a case-control study reporting a higher probability of being overweight among asthmatics compared to controls (10). In a cross-sectional study which investigates the relationship between asthma and BMI, it was reported that there was a stronger relationship between asthma and BMI (11,12).

Among the methods applied for morbidity, the most effective method stands out today as surgery. Although bariatric surgery is a beacon of hope for these patients, it has been shown by studies that there is a positive improvement in patients and a decrease in the number of attacks. Today, especially LSG is a frequently applied method. There is a decrease in the frequency of reflux in patients after LSG. In most of the morbidly obese patients before bariatric surgery, drugs such as proton pump inhibitors are used frequently and their quality of life indexes. IGB application has been performed for morbidly obese people who are afraid for the complications of surgery, it also leads to effective weight loss(13). The European Community Respiratory Health Survey (ECRHS) found a relationship between asthma and obesity and showed that this relationship carries a higher risk in women than in men (14,15).

In multicentric studies, it has been determined that weight loss achieved non-surgical methods has a positive effect on asthma, and reduces the asthma exacerbations and (16-18).In a large retrospective study, it was shown that in LSG applied procedures, 39.3% patients have stopped to use drugs and 42% of patientsstopped to use bronchodilators (19,20). Bariatric surgery has also been shown to improve lung function and reduce exacerbations in these patients (21,22).

The positive effects of LSG in asthma are that it is a first-line procedure, rapid weight loss in the early period, regression in reflux, being able to be converted to other methods in the future, and having less morbidity and mortality. In our study, reflux rates and survey results showed a regression compared to the preoperative period after 12 months postoperatively, and a significant difference was found in LSG process compared to the IGB procedure. In the BAROS quality of life index study which is conducted by Nini et al., reported that obesity primarily impairs quality of life (23-25). In present study, more effective and successful results were obtained in LSB in postoperative follow-ups related to reflux. In the regression analysis results of the patients, preoperative BMI was evaluated as an independent risk factor of age and gender.

In the meta-analysis report of Driscoll et al., reported that the quality of life index improved after bariatric surgery. In the LSG method, which is one of the procedures applied in our study, a significant difference was observed compared to the IGB group in terms of quality index. We are of the opinion that the RQS and GGS scores provide sufficient and effective information in terms of evaluating the obese patient profile, similar with the Driscoll study (Table 2). Of course, there are some limitations in our study. First of all, they were a retrospective study, the patient group was smaller, and it was not a long-term study.

As a result, we concluded that there was a statistically significant improvement in RQS indices compared to IGB in the postoperative 12-month follow-up of the patients who underwent LSG (Table 3).

CONCLUSION:

According to the results of our study, LSG procedure is irreversible compared to IGB in the morbidly obese patient population with asthma, and it is a more effective procedure in improved reflux and reducing asthma exacerbations, although it is not suitable to be applied in every patient due to high morbidity. Prospective and comprehensive studies are needed in the future.

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Table 1: Demographic and characteristic features of the patients

	LSG(n:43)	IGB(n:41)	P value
Number of patients	43	41	
age	41.4(28-52)	43.6(32-61)	0.723
Gender,(Y/F)	32/11	22/19	0.849
BMI, kg/m2	40.7(40-55)	44.2(42-51)	0.903
Hypertension	16	15	0.629
Drugs used			
inhaler	43	41	0,692
Steroid	11	14	0.754
PPI	21	27	0.472
NSAID	32	34	0.571
addictions			0.718
Tobacco	11	8	

LSG:lap.sleeve gastrectomy, IGB:Intragastric balloon

Table 2: Scores and postoperative findings of the groups 12 months later the process

	LSG	IGB	P value
Loss of excess weight (LEW%)	35%	24%	<0.05
RQS score posttop	4.5	2.5	<0.05
GGS score postop	4.4	1.7	0.041

RQS: reflux quality of life score, GGS: global general symptom

Table3 : Regression analysis of independent predictive values of reflux symptoms

predictive factor	P VALUE	Odds ratio (95%CI)
Age	0.054	2.017 [0.872, 3.671]
BMI	0.067	1.379 [0.911, 3.472]
Gender	0.110	0.928 [0.851, 1.325]

LOW GFR PREDICT POOR PROGNOSIS IN ENDOVASCULAR TREATMENT OF ACUTE STROKE PATIENTS

Background: Chronic kidney disease (CKD) is strongly associated with the entire spectrum of cerebrovascular disease, particularly ischemic and hemorrhagic stroke. Common traditional vascular risk factors such as age, hypertension, and diabetes mellitus may be responsible for many of these associations. In this study, I planned to examine the relationship between the GFR value, which shows renal functions with simple methods, and the prognosis of stroke patients who underwent endovascular treatment.

METHODS: : A total of 243 consecutive patients who underwent endovascular treatment for acute stroke between January 2017 and January 2019 were included in the study. GFR was measured at baseline using MDRD formula, and patients were followed up for all-cause death as the primary endpoint.

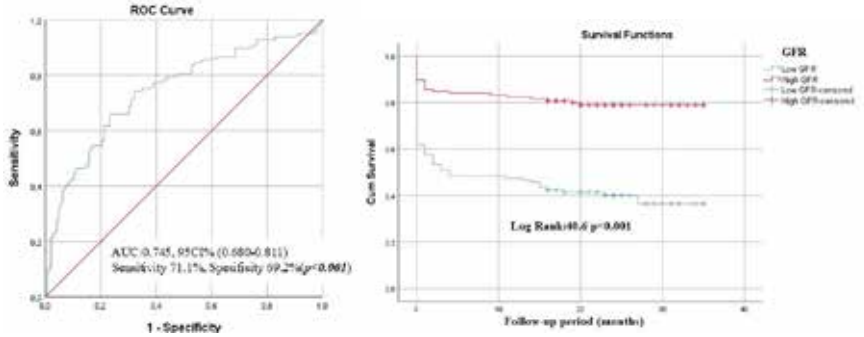
RESULTS: Laboratory parameters, demographic-clinical parameters and cerebral perfusion scores of the survival and deceased patient groups were compared after an average of 22 months of follow-up. Higher admission NIHSS score (p<0.001), poor TICI score (p=0.016) and low GFR (p<0.001) were observed in the death group. The optimum GFR cut-off value (<85.26 ml/min) to predict mortality was determined using ROC curve analysis (AUC:0.745, sensitivity 71.1%, specificity 69.2% p <0.001). According to Kaplan Meier's analysis, a significant difference was observed in the group with a low GFR in terms of all-cause mortality at follow-up compared to the group with a high GFR (log-rank test: 40.6 p<0.001).

CONCLUSION: It has been shown that there is a relationship between low GFR value and increased mortality in short and long-term follow-up in stroke patients treated by endovascular route. It was thought that treatment attempts to increase the GFR value could result in a good prognosis.

Keywords:GFR, Stroke, Endovascular Therapy, TICI

Table 1. Baseline Demographic, Laboratory and Clinical Characteristics of the Patients

Variables	Survival	Deseased	p value
Age (years)	59.3±14.1	70.3±11.9	<0.001
Male gender, n (%)	85(60.3)	45(46.4)	0.033
Follow up period (months)(IQR)	23(5)	3(2)	<0.001
CHF, n (%)	16(11)	19(19.6)	0.061
Hypertension, n (%)	87(59.6)	60(61.9)	0.723
Diabetes mellitus, n (%)	52(35.6)	34(35.1)	0.928
Previous stroke/TIA, n (%)	12.9(8.2)	9(9.3)	0.774
LVEF (%)	56.5±8.6	54±10.5	0.054
Glomerular Filtration Rate (ml/min)	93.4±21	71.2±29.3	<0.001
Hemoglobin (g/dl)	13.1±1.9	12.2±2.0	0.001
Hs-CRP (mg/l) (IQR)	2.0(1.6)	5.2(7.2)	<0.001
White blood cell(10 /L)	10190±3450	13161±4970	<0.001
Lymphocyte (□ 10^3 µL)	1682±749	1310±711	<0.001
Neutrophil count (10^9/L)	7648±3093	10896±4791	<0.001
Monocytes (□ 10^3 µL)	676±463	778±405	0.054
Serum albumin (g/dl)	3.60±0.43	3.40±0.47	0.001
Total cholesterol (mg/dl)	186.9±43.6	168.1±39.1	<0.001
Triglyceride (mg/dl)	122.7±63.9	111±56.1	0.143
High Density Lipoprotein (mg/dl)	44.1±11.7	43.3±10.3	0.601
Low Density Lipoprotein (mg/dl)	119.5±38.8	102.9±30.8	0.001
ASPECTS	7.93±1.12	7.67±1.31	0.354
Basal NIHSS	16.5±5.1	19±5.6	<0.001
Hemorrhagic Transformation, n (%)	42(28.8)	36(37.1)	0.171
TICI score, Poor,n (%)	88(60.3)	73(75.3)	0.016
Data are expressed as mean ± SD, frequencies (percentages) or median (interquartile range: IQR) as appropriate. ASPECTS: Alberta Stroke Program Early CT Score; CHF: congestive heart failure; hs-CRP: high sensitivity C-reactive protein; LVEF, left ventricular ejection fraction; NIHSS: National Institutes of Stroke Scale; TICI: Thrombolysis in Cerebral Infarction			



MASSIVE BLEEDING INTO A SIMPLE RENAL CYST WITH RENAL COLIC-LIKE SYMPTOMS

One of the most common reasons for admission to the emergency department is renal colic. When severe pain is detected in the flank region, the first reason that is usually considered is hydronephrosis due to obstruction caused by stones or similar reasons. Although it is seen more rarely; In case of bleeding into a simple or complicated kidney cyst, the renal capsule will be stretched and cause similar symptoms. It should not be forgotten that parenchymal massive hemorrhages that we see in kidney tumors or blunt trauma can also be seen in simple kidney cysts.

A 65-year-old male patient applied to the emergency department with the complaint of right flank pain. There was no history of blunt trauma in his history. In the complete urinalysis, it was erythrocyte 3/HBF and leukocyte 2/HBF. Creatinine was 1.09mg/dl, WBC 12.73 K/uL, Crp 118.5 mg/dl, HCT: 36.0%, HGB:11.5 g/dl. İn abdominal tomography; it was stated that grade 1 caliectasia in the lower pole of the right kidney and heterogeneous changes were observed in the 6*6 cm simple cyst. After the analgesic treatment, the patient was requested to be consulted with the urology. However, the patient stated that his pain had completely regressed with analgesic treatment. Patient was discharged from the emergency department at his own request. The patient was brought back to the emergency 22 hours after the first admission. Hypotension (TA: 90/70), tachycardia; 124/min, weakness, nausea and confusion were observed. Creatinine was 1.17 mg/dl, WBC 12.72 K/uL, Crp 128.9 mg/dl, HCT: 22.9 %, HGB: 7.4 g/dl. Abdominal tomography was stated that a mass compatible with a hematoma of 15*13 cm, extending from the lower pole of the right kidney to the pelvis, and high-density free fluid around the right kidney and in the pelvis were observed. Emergency hospitalization of the patient was performed by urology. As the patient's hypotension continued and his pain worsened, emergency exploration was planned and he was taken into operation. During the operation, active bleeding into the simple cyst in the lower pole of the kidney was observed. Emergency right nephrectomy was performed. During the operation, 4 units of ES and 2 units of FFP were transfused.The patient was followed up in the intensive care unit for 2 days after nephrectomy. He was discharged five days after surgery.

Pathology reported that there was a simple kidney cyst that did not show any features. Renal hemorrhage and hematoma, which we frequently see in kidney tumors or blunt trauma exposure to the flank region, can also occur spontaneously into simple kidney cysts, although rarely. In the clinical approach; it should definitely not be forgotten in the differential diagnosis of classical type renal colic, as it is much more urgent than urinary system stone disease.

Key words: Renal cyst; hematoma; bleeding; renal colic

COMPARISON OF PULMONARY PHYSIOTHERAPY OUTCOMES İN PATIENTS WITH MORBID OBESITY WHO UNDERWENT LAPAROSCOPIC SLEEVE GASTRECTOMY

ABSTRACT

Aim: The purpose of present research was to compare the efficacy of pulmonary physiotherapy (PP) performed to morbid patients who underwent two different bariatric surgery modalities on pulmonary functions, and quality of life.

Materials and Methods The participants were randomized and separated into two groups each of including 60 patients. In the first group PP and mobilization was advised, and in the second group lonely mobilization was advised and pursued by medicians. The treatment protocol was began on the postoperative first day and continued to the postoperative first week. Evaluated parameters were: pulmonary functions, 6-min walk test(6MWT) for lung capacity.

Results The average age of the participants was 43 ± 8.16 years. parameters outcomes were significantly different in patients who applied PP compared with the control group. A significant healing and also improvement detected in all the parameters of participants who were applied PP according to control group (p = 0.017*,0.012*,0.077,0.027).

Conclusion morbid obese patients who have underwent sleeve gastrectomy showed that the patients improved their respiratory functions, increased oxygen saturation, and functional capacity.

KEYWORDS: obesity,pulmonary,sleeve

INTRODUCTION

Morbid obesity is a common disease in all developed countries, and the definitive solution is primarily surgery for the only option for patients who have not benefited from medical and supportive treatment. While LSG, which has become almost conventional in bariatric surgery, has a primary role, today LSG is applied in patients who have not received more specific and first-line treatment. Although patients lose weight after bariatric surgery, the Daily activities can perform more effectively, and decreases the intraabdominal pressure on the lung cavity.

Pulmonary physiotherapy (PP) has a significant role in the prevention of postoperative complications of bariatric surgery. functional lung exercise, decrease the length of stay in hospital and also possible complications such as the atelectasis, pneumonia so pulmonary physiotherapy modalities are suggested [1].

Furthermore pulmonary physiotherapy ensure the adequate ventilation in the lungs, the limited motion and increased muscle tone, and recommendations

to contribute to good posture, and better rehabilitation program are improves the patient's quality of life. In this study, we aimed to compare the pulmonary functions in patients who have undergone laparoscopic sleeve gastrectomy (LSG) with apllied PP and not [2-4].

MATERIALS AND METHODS

The pulmonary outcomes of 122 patients who underwent LSG in tertiary bariatric clinic were evaluated retrospectively. Local Ethics Committee has been approved this retrospective research (2020 / 8–decision number 173). The necessary consultations (endocrine, psychiatry, chest, and dietician) were made for the patients who applied before the operation. The BMI values of all patients were > 40 kg / m^2. Bariatric procedures also performed by an experienced bariatric surgeon team.

STUDY PROTOCOL

TRIAL DESIGN

Pulmonary physiotherapy were performed to group of sleeve gastrectomy,Participants for 7days. The therapy process was began on the first day until the 7th day. All of the exercises were performed by an physiotherapist in the clinic until the discharge period.

The parameters were assessed preoperative and postoperatively period: oxygen saturation, respiratory function test, 6-min walk test for functional capacity. Pre- and post-test evaluations were performed by a physician in the field of the study,Physiotherapy Protocol was included postural drainage, breathing exercises , and coughing techniques. All of the pulmonary exercises were repeated twice a day totally 8 times.

Participants were mobilized as immediate as possible. The participants walked 45 min the aisle on the second day,

PARTICIPANTS

Of 122 patients who have underwent LSG.The participamts are separated into two groups each of including 61 patients. previous obesity surgery, presence of chronic respiratory disease, alcohol, smoking, and drug dependence were added as exclusion criteria.

PULMONARY FUNCTIONS

The lung capacities were assessed utilizing a spirometer (Model 2010, Medizintechnik AG, Zurich, Switzerland), according to the Thoracic Society guidelines. vital capacity , forced vital capacity, and maximal voluntary ventilation performances were applied . The highest values of forced vital capacity (FVC), (FEV1), FEV1/FVC ratio, peak exhaling flow (PEF), vital capacity (VC),were determined.

6-MİN WALK TEST

The participants were performed to walk in 6 min in the clinic corridor. Standardized suggestions were given in every 60 minute. The maximum distance which was performed at the end of the application was recorded [5].

STATISTICAL METHODS

Data was analyzed using IBM SPSS Statistics 26(SPSS, Inc., Chicago, IL, USA). Descriptive statistics were used to describe the basic characteristics. chi square tests were performed for indicating the differences among the groups. P value ≤ 0.05 was accepted as significant for all statistical levels.

RESULTS

There were included 80 female and 42 male participants. The average age was 42.3 years and body mass index(BMI) was 44.1 kg/m2, however there was no significant difference determined among the study groups. There were 60 patients separated in each group (Table 1). the pulmonary functions of the participants latter the procedure were assessed , all values of pulmonary physiotherapy group were detected as elevated, on the other hand , VC,TV, and FEV1/FVC outcomes were determined as statistically significant healing in pulmonary physiotherapy group (p < 0.05) (Table 1). 6-min walking test scores demonstrated that statistically significant increase After the physiotherapy process(p < 0.05). Furthermore ,lonely 6-min walking test was detected as significant elevation (Table 2).

DISCUSSION

Morbid obesity disease was common health problem all over the world furthermore this disease effects the lung compliance worsely than other non obese population. Bariatric Surgery is one of the most effective process for morbid obesity disease , it has been demonstrated that it has a positive improvement in pulmonary functions.

Although there are some researchs about pulmonary problems that may establish after bariatric process, there are a few researchs about pulmonary physiotherapy enforcements for healing [4,6-8].

The aim of this research is to demonstrate that performed pulmonary physiotherapy in the postoperative period resulted in increased respiratory function, saturated oxygen ratio and functional capacity, in participants after bariatric surgery.Besides that morbid obesity negatively affects the lung function, decreases contraction force of the pulmonary muscles.

Brovman et al. showed that significant variation in TV in morbid obese patients in the postoperative period. Also found significant improvement in pulmonary functions according to excess weight loss and declined pressure on thelungcapacity . Pulmonary physiotherapy is a treatment modality for particularly in morbid obese patients. The real purpose of pulmonary physiotherapy is to rehabilitate the strength of exercise [9,10].

Lung capacity volumes were decreased after the surgical process due to this process participants should force their body for walking as far as possible for preventing from the complications such as atelectasis,thromboembolie etc. when we look at other researchs Sternberg et al.,found that FVC, FEV1 outcomes decreased after the laparotomy;besides that Borges-Santos et al. found an decline in pulmonary functions after the bariatric process for weight [11,12].

Because of this , pulmonary physiotherapy postoperatively is so important . Abdominal surgical process has been demonstrated that expiratory reserve volume decrease in morbidly obese

patients when compared to non obese participants. The most common complication after the bariatric process is atelectasis and it is also determined nearly 40% of population. For this reason pulmonary physiotherapy is the most significant therapeutic approach for the prevention of possible pulmonary complications [13,14].

Pouwels et al. showed that participants who had taken Pulmonary treatment had elevated inspiratory muscle strength and maximal inspiratory pressure (MIP) on postoperative 3 and 6 th month, achieved more improvement than the control group [15].

Furthermore in a study of Forti et al. found that patients who have undergone bariatric procedure with supported by Pulmonary physiotherapy in the postoperative period have more healing than non performed group. Tomich et al. reported that obese women population with performed breathing exercise particularly encouraging with the volume-oriented device and this leads to elevating in inspiration volume and reduced possible complications latter the bariatric surgery [16].

In present study, it was showed that the participants who performed pulmonary physiotherapy demostrated with elevating in pulmonary functions latter the surgıcal process. Present method which performed to patients that save from the restrictive breathing and possible complications, 6MWT is usually utilized for evaluating the changes in the lung functional ability of patients after pulmonary rehabilitation [17].

Desy Salvadego et al. reported that respiratory muscle endurance training (RMET) with body mass reduction program in obese participants cause to lowered the O_2 cost of cycling and perceived exertion during constant heavy-intensity exercise and also this exercise program strengthen the respiratory muscles . Furthermore , the meta-analysis of Li et al. , have analysed 11 RCTs, and demonstrated an important improvement in the 6MWT post-intervention distance [22,23]. The 6MWT is widespread utilized for evaluating walking capacity[18–23]. This is a convenient and safety process to evaluate the functional capacity of morbidly obese patients who have underwent bariatric process [24-26].

Present study outcomes have showed that , participants who underwent pulmonary physiotherapy were determined as 51 % recovery in 6-min walking distance. According to these outcomes, it has been provided that the exercise volume of patients who have underwent surgery particularly bariatric surgery can be improved by pulmonary physiotherapy.

In the literature review , our study is one of rare research which evaluate the lung capacity and exercise performance by applying the pulmonary physiotherapy. Furthermore in present study , it was found that the length of stay in hospital decreased due to the elevated in pulmonary function and lung capacity of the participants who wer performed pulmonary physiotherapy.

There are also some limitations of present research. Firstly the follow up period is short and patient have not called again in first year control, Secondly, High-resolution computed tomography were not utilized to Show possible pulmonary complications.

CONCLUSION

As a conclusion of this research , pulmonary physiotherapy which is performed to morbid obese participants in the postoperative period have improved the lung functions, oxygen saturation and also functional capacity who have underwent bariatric surgery.

DİSCLOSURES

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Ethichs Committee Approval: The study was approved by the University Faculty of Medicine Clinical Research local Ethics Committee, decision number 2020 / 8 – decision number 173

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Table 1 : Demographic characteristics of patients

	PP group (n = 60) Mean ± SD	Control group (n = 62) Mean ± SD	P value	Odds ratio (95%CI)
Age (year)	41.60 ± 4.84	43.70 ± 5.23	0.862	2.036 [0.955, 4.341]
BMI (kg/m2)	45.32 ± 6.22	42.67 ± 9.12	0.918	1.895 [0.948, 3.789]
Duration of surgery (min)	65.50 ± 10.3	68.70 ± 5.47	0.236	1.436 [0.791, 1.525]
Duration of anesthesia(min)	82.10 ± 8.24	85.60 ± 6.31	0.163	2.575 [1.948, 4.382]
Length of stay in hospital(day)	7.45± 1.3	8.17± 2.4	0.482	3.381 [2.931, 4.094]

PP, Pulmonary physiotherapy; BMI, bodymass index; SD, standard deviation

Table 2 : Comparison of posttreatment respiratory function test results

	PP group (n = 60) Mean ± SD	Control group (n = 62) Mean ± SD	P value
VC (mL)	4.80 ± 1.76	2.48 ± 0.92	0.017*
TV (mL)	1.45 ± 0.28	0.57 ± 0.37	0.012*
FEV1 (mL)	2.43± 0.72	1.47 ± 0.63	0.077
FEV1/FVC (mL	87.30 ± 4.56	72.50 ± 12.53	0.027
SaO2 (%)	95.80 ± 1.73	90.40 ± 2.38	0.001*
6MWT (m)	592.50 ± 116.82	439.70 ± 92.27	0.001

*p < 0.05; PP, chest physiotherapy; VC, vital capacity;; TV, tidal volume; FEV1,forced expiratory volume in 1 s; FVC, forced vital capacity, SaO2, oxygen saturation, 6MWT, 6-min walk testSD, standard deviation

THE COMPARISON OF THE PREOPERATIVE AND POSTOPERATIVE NEUTROPHIL TO LYMPHOCYTE RATIO FOR EARLY PREDICTION OF COMPLICATIONS İN TRANSIT BIPARTITION SURGERY

INTRODUCTION

Bariatric surgery is global current treatment method for the morbid obesity all over the World.Hence predictor parameters are become important in recent years. Our aim is to assess the outcomes of Transit Bipartition(TB-SG) and also evaluate the value of the neutrophil to lymphocyte ratio (NLR) in predicting complications at an early stage.

MATERIALS AND METHODS

In present retrospective research we have evaluated the participants who have underwent TB-SG at tertıary barıatrıc clinic between the dates of may 2019 and march 2021. NLR outcomes were determined during the postoperative 1st and 3rd day.

Results There were included 21 female and 19 male participants in this research. The average age was 42.7 years and body mass index(BMI) was 46.4 kg/m2, however . The mean hospital stay was 3.4days (range2,3–6,7 days) ($p < 0.05$). In multivariate logistic regression analysis, it is demonstrated that lonely NLR has a correlation with betimes post-bariatric complications notably,and also cutoff points have similar as prior.

Conclusion we have demonstrated that NLR has positive relationship for detecting early complications in the early postoperative period in TB-SG surgery.

KEYWORDS: obesity,bariatric, transit bipartition

INTRODUCTION

Morbid obesity is widespread disease in all over the world, and the clear solution is bariatric surgery for the patients who have not utilized or profit from any non surgical treatment methods.

Excess weight earnings lead to inflammation and many diseases such as metabolic, cardiovascular, lung diseases, and also various malignancies. Elevated levels of inflammatory markers caused to inflammation in the human body, furthermore these mediators are released from adipose tissue partıcularly in morbid obese patients [1-3]. Obesity leads to systemic inflammation, and also establish the obesity-associated comorbidities in adipose tissue [4-6].

Many inflammatory markers investigate the inflammation in the body particularly Neutrophil–lymphocyte ratio (NLR) is one of them. NLR is also a prognostic determinant marker for the in inflammatory diseases, such as cancers, and cardiovascular diseases [7–9]. The advantage of NLR testing is that it is cheap and easily accessible. NLR is calculated by ratio of the neutrophil count to the lymphocyte count.

Obesity surgery not only lead to weight loss but it also decline inflammatory marker activity [5]. Transit bipartition(TB-SG) was firstly showed and performed by Santoro in 2006 and purposed to join a metabolic constituent to the restrictive efficacy of the sleeve gastrectomy procedure [6-7].

Although more researchs are suggested, TB-SG has been performed for gaining better results in metabolic components of body physiology compared to conventional sleeve gastrectomy (SG). Furthermore, TB-SG has lead to less complications according to other processess [8,9].

Our purpose was to evaluate the differences in NLR after TB-SG surgery at preoperative and postoperative 1st and 3rd days.

MATERIALS AND METHODS

We have retrospectively detected 40 patients who underwent Transit bipartition(TB-SG) in a tertiary bariatric clinic, between the dates of may 2019 and march 2021.Exclusion criteria of this research were being under the age of having any inflammatory illness and/or comorbid diseases such as diabetes mellitus, cardiovascular disease.

NLR outcomes were determined during the postoperative 1st and 3rd day. Local Ethics Committee has been approved this retrospective research (2020 / 8–decision number 173). The necessary consultations (endocrine, psychiatry, chest, and dietician) were made for the patients who applied before the operation. The BMI values of all patients were > 40 kg / m^2. Bariatric procedures also performed by an experienced bariatric surgeon team.

INTERVENTIONS

All of the surgical procedures were applied under the anesthesia laparoscopically. low molecular weight heparin and also pneumatic compression bands were performed For preventing the thromboembolism, was applied to all of the participants .In the TB-SG technique which was described [10]. First of all , laparoscopic sleeve gastrectomy was performed with the aid of laparoscopic stapler, and then, 80 cm length from the ileocecal valve was prepared for the consociate way and gastro-ileal anastomosis was performed to the antral area which was 150 cm away from the consociate way. At the end , ileo-ileal anastomosis was applied . furthermore All of the mesenteric gaps were closed by the aid of barbed sutures [11].

DATA COLLECTION

All of the outcomes of patients who underwent surgery and also data were investigated from electronic outcomes of hospital data and also analyzed. The NLR were evaluated preoperatively and on the day of postoperative 1 and 3.

POSTOPERATIVE EVALUATION

Soluble Contrast agent drinking test is applied to all participants on postoperative day of 2. If there is no detected sign of leakage, water permission begins to the patients . We have already usually performed blood tests that include complete blood count (CBC), and biochemical examination on post-operative day 1 and 3. All of the patients are called to the clinic weekly for examination during the postoperative first month. Possible postoperative complications recorded and also showed.

STUDY PROTOCOL

TRIAL DESIGN

PARTICIPANTS

Of 40 patients who have underwent TB-SG surgery. previous obesity surgery, presence of chronic respiratory disease, alcohol, smoking, and drug dependence were added as exclusion criteria.

STATISTICAL METHODS

Data was analyzed using IBM SPSS Statistics 25 (SPSS, Inc., Chicago, IL, USA). The distribution of the continuous variables was determined by the Kolmogorov–Smirnov test. Continuous variables with normal distribution were expressed as mean ± SD. The paired sample t-test was used for normally distributed variables, Pearson and Spearman's analysis was used to identify correlations between study parameters. Logistic regression analysis including demographic variables, pre-operative NLR, and PLR values was utilized for detecting the risk factors which can lead. Univariate and multivariate logistic regression was used to estimate odds ratio (OR) of baseline factors and backward selection was used to select the final model. To select a cut-off for the NLR, the area under the receiver operating characteristic (ROC) curve (the c-statistic) and its 95% confidence intervals (95%CI) were determined. Youden index were used for detecting the cut-off value of , sensitivity, specificity, positive predictive value (PPV).For all statistical results, P value ≤ 0.05 was accepted as significant for all statistical levels. All analyses were performed with SPSS 25.0 for Windows.

RESULTS

There were included 21 female and 19 male participants in this research. The average age was 42.7 years and body mass index(BMI) was 46.4 kg/m2, however . The demographic and clinical characteristics for all patients are showed in Table 1. The mean hospital stay was 3.4days (range2,3–6,7 days) ($p < 0.05$) (Table 1).WBC outcomes were significantly lower in the Preoperative period than Postoperative period.

The widespread complication was hemorrhage of the operation lodge also detected in 3 patients, all of them have observed in ICU and no needed any surgery , None of the patients needed second look. 1 patient with pulmonary embolism and 1 had portal thrombosis. pulmonary complications showed as initially with dyspnea. Elevated liver enzymes has not lead any negative position. Table 2 shows the analysis of regression of univariate. In multivariate logistic regression analysis, it is demonstrated that lonely NLR has a correlation with betimes post-bariatric complications notably,and also cutoff points have similar as prior.

we have detected the sensitivity of 68% and specificity of 93%. We have determined that positive predictive value of 62-78% for prior complications for post-bariatric applications. A value of less than 2 was related with high sensitivity and NPV of 93–100% (Table 3).

DISCUSSION

Metabolic surgery modalities are commonly performed for morbid obese population who have not adequately weight loss after the conservative treatment methods [12] . Bariatric Surgeons need to help for determining the possible complications in the early period and hence the inflammatory markers show their efficacy at this period. Estimator factors such as CRP, NLR can help the surgeons for early detection time ,to minimize mortality rate and be beneficial to discharge period.The main purpose of our research was to evaluate the relationship of NLR with post- bariatric surgery related complications.

Santoro et al was firstly demonstrated the technique of TB-SG [12]. TB-SG is plain and easily applicable surgical technique according to other malabsorptive surgical methods . this method does not have any substantial compound and also lead to weight loss easily. In this surgical method the digested food went to the ileum by passing the pass proximal ileum and also malabsorption may not be or less detected according to other malabsortive methods such as biliopancreatic diversion and Roux N y gastric bypass [13].

Carbajo et al. demonstrated that the major complications which are described in the postoperative early phase were uncontrollable such as bleeding , and gastric leakage. In present research , bleeding was showed in two patients, in first patient underwent the second look surgery and in the second stopped by hemodynamic followings. Furthermore The determined marginal ulcers after the TBSG surgery range among 1% and 7.2%. [14] .

On the other hand Kansou et al. have demonstrated postoperative stenosis rate of 16.9% in this type operations.7 In this research the follow-up time was 2 year for these group patients and there has been no stenosis detected in patients [15] .

NLR marker was utilized for estimating the possible mortality, and morbidity in participants with underwent surgery for malignancy or any inflammatory illness. Furthermore ,NLR is a novel studied marker for bariatric surgery types and modalities [16-18]. Da Silva et al found that NLR can estimate the complications in the early phase of postoperatively bariatric and metabolic procedures [19].In addition, NLR is a very convenient and inexpensive method due to its easily accessible marker and early warning role for surgeons.

The Guclu et al. demonstrated that NLR have a significant role for prognosing the possible infectious illnesses and sepsis [20-24]. Furthermore NLR play a role in detecting pneumonia and malignancies. Morbid Obese patients are showed as lower inflammatory outcomes than other type pateints ,Therefore, as we have shown in our study, the property of NLR, its applicability and efficacy in the setting of bariatric surgeries has been believed and trusted [25].

It is significant to explain that clinical finding are the best idea to detect the possible complications however if there are any lack of symptoms these forecasting biomarker may take an important role for detecting the bariatric surgery complicationss [26].

However, the NLR is a simple available non-invasive parameter, given the accumulating evidence in its role in surgical procedures, the ratio between neutrophil and lymphocyte is more precise in predicting poor clinical and surgical outcome than either neutrophil or lymphocyte count alone [27]. Implementing the use of the NLR in the pre-operative work-up of obese patients who are scheduled to undergo bariatric surgeries could be beneficial.

Furthermore Halazun et al. have focused on the efficacy of NLR on participants who have underwent hepatic transplantation due to malignancy and found significantly higher NLR levels [28].In present research ,it is detected that NLR has a relationship with complications, and also utilized as an independent valuable forecasting marker for bariatric surgey modalities.

There are also some limitations of present research. Firstly its retrospective design, and also may hinder the explication of our study outcomes . Secondly the follow up period is short and patient have not called again in first month control, thirdly the low number of complications such as grade 4 and 5 type according to Clavien–Dindo classification are , the absence, as the fourth study was carried out in a tertairy single bariatric center.

CONCLUSION

TB-SG is an effective bariatric process for morbid obesity and metabolic surgery. Complications which may have occured after this process may cause high morbidity and mortality rates. Present research clearly showed that NLR parameter has positive relationship with complications which are associated with bariatric surgery. We suggest to utilize this marker for estimating the bariatric surgery complications earlier. Further prospective researchs are also needed to approve our outcomes.

DISCLOSURES

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Ethichs Committee Approval: The study was approved by the University Faculty of Medicine Clinical Research local Ethics Committee, decision number 2020 / 8 – decision number 173

Peer-review: Externally peer-reviewed.

Conflict of Interest: None declared.

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Table 1 Demographic and clinical characteristics of study patients.

	Total (n = 40)
Age (mean)	42.7 ± 4.2years
Sex	
Female	21 (52.5%)
Male	19 (47.5%)
Mean BMI: kg/m2 (range)	46.4 (35–53)
Length of stay in hospital(mean)	3.4 day (2.3–6.7)
Mortality	0
Additional diseases (n = 28)	
DM	40
HT	12
CAD	8
COPD	14
Hepatosteatosis	31
Postoperative complications	
Pulmonary embolism	1
Hemorrhage	3
Elevated liver enzymes	2
Portal vein thrombosis	1
Pulmonary complications	2
Neutrophil to lymphocyte ratio	2.1 (1.5-2.8)

SD: Standard deviation, BMI: Body mass index, NLR: Neutrophil to lymphocyte ratio

Table 2 : Univariate analysis of parameteres associated with early post bariatric complications

parameters	Odds ratio	95%confidence interval	P value
AGE	1.007	0.964-1.026	0.92
BMI	1.054	0.824-3.421	0.26
WBC	1.073	0.984-1.126	0.27
NLR	1.984	1.467-2.737	<0.05
platelets	1.001	0.962-1.103	0.94
Platelets to lymphocyte ratio	1.017	0.997-1.106	<0.05
creatinine	1.011	0.977-1.056	0.52
Bun(mg/dl)	1.015	0.866-1.234	0.47
ALT(U/L)	1.004	0.969-1.347	0.23
AST(U/L)	1.007	0.973-1.612	0.71

ALT: alanine aminotransferase,AST: aspartate aminotransferase, BUN:blood urea nitrogen,NLR: neutrophil to lymphocyte ratios, WBC: White blood count,BMI:body mass index

Table 3 : neutrophil to lymphocyte ratios cut off points with their demonstrative statistics

NLR	Sensitivity	Spesificity	PPV
3-7.6	10-70	90-100	62-78
2-2.9	75-90	42-75	27-53
1.3-1.98	93-100	12-36	14-32

PPV:positive predictive value, NLR: neutrophil to lymphocyte ratios

COVID-19 HASTALIĞI SONRASI RHİNO-ORBİTAL MANTAR ENFEKSİYONU

ÖZET

Rino-orbital mantar (ROM) enfeksiyonu; mantarlarının neden olduğu, immünsupresif hastalarda, yüksek doz steroid tedavisi alan kişilerde ve diyabetik hastalarda ortaya çıkan fulminan seyreden akut bir enfeksiyondur. Literatürde COVID-19 ile ROM birlikteliği nadiren bildirilmektedir ve diyabetes mellitus (DM) ile yüksek doz steroid tedavisi sıklıkla majör predispozan faktör olarak belirtilmektedir. Bu olgu sunumunda COVID-19 tedavisine bağlı olarak yüksek doz steroid tedavisi alan hastada gelişen mortalite riski yüksek nadir bir ROM olgusu bildirilmiştir.

ABSTRACT

Rhino-orbital mucormycosis (ROM) is an acute infection with a fulminating course caused by fungi that occurs in immunosuppressive patients, people receiving high-dose steroid treatment, and diabetic patients. In the literature, the coexistence of COVID-19 and ROM is rarely reported, and diabetes mellitus (DM) and high-dose steroid treatment are often mentioned as the major predisposing factors. A rare case of ROM with a high mortality risk in a patient receiving high-dose steroid treatment due to COVID-19 treatment was reported in this case report.

GİRİŞ

Rino-orbital mantar (ROM) enfeksiyonu; mantarlarının neden olduğu, immünsupresif hastalarda, yüksek doz steroid tedavisi alan kişilerde ve diyabetik hastalarda ortaya çıkan fulminan seyreden akut bir enfeksiyondur (1). Bu mantarların birincil hastalık yerleri burun ile paranazal sinüsler olsa da, doğrudan veya hematojen yayılım yoluyla orbitada ve beyinde ölümcül enfeksiyonlara neden olabilir. COVID-19 hastalığı, lenfopeniye sebep olur; bu nedenle de hastalar immünsüpresif olur. Diyabet gibi ek hastalıkların varlığı, yüksek doz steroid tedavisi ve diğer immünomodülatör ilaçların kullanımı immunsupresyona neden olur; bu immunsıpresif durum da hastaların fırsatçı mantar enfeksiyonlarına yakalanma riskini arttırır (2, 3). Literatürde COVID-19 ile ROM birlikteliği nadiren bildirilmektedir ve diyabetes mellitus (DM) ile yüksek doz steroid tedavisi sıklıkla majör predispozan faktör olarak belirtilmektedir. Bu olgu sunumunda COVID-19 tedavisine bağlı olarak yüksek doz steroid tedavisi alan hastada gelişen mortalite riski yüksek nadir bir ROM olgusu bildirilmiştir.

OLGU

69 yaşında erkek hasta, şiddetli baş ağrısı sonrasında yeni başlayan görme kaybı, periorbital ödem ve sol gözde şiddetli ağrı şikayetleriyle acil servise başvurdu. 15 gündür COVID-19 hastalığı nedeniyle hastanede yatarak tedavi gördüğü öğrenildi. COVID-19 tedavisi kapsamında favipiravir, asetaminofen ve yüksek doz steroid (günlük 500 mg prednizolon) uygulandığı bildirildi. Hastanın ek hastalığı yok idi. Hastanın vital bulguları başvuru anında stabildi. Fizik muayenede sol gözde; pitozis, proptozis, orbital selülit ve tüm yönlerde oküler hareket kısıtlılığı mevcuttu. Diğer tüm sistemik muayeneleri normaldi. Acil serviste yapılan kraniyal ve orbital manyetik rezonans görüntüleme ve bilgiyarlı tomografi taramasında; sol orbitada, frontal, sfenoid ve ethmoid sinüs duvarlarının yoğunluğunda artış olduğu saptandı. Sol ethmoid sinüste apse, orbital selülit ve rhino-orbital mantar enfeksiyonu şüphesiyle hasta kulak burun boğaz (KBB) hastalıkları ve göz hastalıkları bölümüne konsülte edildi. Hasta takip ve tedavi amaçlı KBB hastalıkları bölümü adına servise yatırıldı. Hastaya KBB hekimleri tarafından cerrahi müdahale olarak ameliyathanede sinüs drenajı yapıldı ve eksizyon uygulandı. Hastadan alınan biyopsi materyalinde ise kronik inflamasyon ve reaktif iltihabi değişikler yanı sıra yüzeyel iltihabi nekrotik doku ile fibrohyalinize doku fragmanları içerisinde septasız PAS ve Grokot ile pozitif fungal hif yapıları saptandı. Patojen olarak ön tanıda Rhino-orbital aspergillus ile mukormikoz düşünülen hastaya vorikonazol tedavisi başlandı ayrıca hastane yatış sürecinde piperasilin ve tazobaktam tedavisi de uygulandı. Hasta postop 14. günde şifa ile taburcu edildi. Taburculuktan sonraki 1 ay boyunca vorikonazol tedavisine devam etti. Süreç sonucunda hasta şifa ile iyileşti.

TARTIŞMA

ROM, tanısı zor, mortalite ve morbiditesi yüksek, nadir görülen bir hastalıktır. Erken teşhis ve tedavi hayat kurtarıcıdır (4, 5). Prognozu iyileştirmede multidisipliner yaklaşım önemlidir. Hızlı tanı, doğru tedavi yaklaşımları ve sağlık sisteminin koşullarına bağlı olarak ROM prognozu etkilenmektedir.

COVID-19 sonrası gelişen ROM olgularında DM ve yüksek doz kortikosteroid tedavisi en sık görülen risk faktörleridir (6). Aynı zamanda tıbbi tedaviler, yoğun bakım ünitesinde yatış ve geniş spektrumlu antibiyotiklerle tedavi, COVID-19 hastalarını, hastaların %8'inde görülen fırsatçı mantar enfeksiyonlarına yatkın hale getirir (7, 8). ROM gelişen çoğu vakada deksametazon veya prednizolon kullanılır. Steroidlerin COVID-19'da faydalı olduğu gösterilmiş olsa da, hiperglisemi ve nötrofil disfonksiyonuna neden oldukları için dikkatli kullanılması önerilir. DM, COVID-19'dan sonra ROM'daki en önemli risk faktörü olmaya devam etmektedir (6, 9). Avrupa Mikoz Çalışma Grubu kılavuzlarına göre, tedavi başarısı cerrahi tekniklerin uygulanabilirliğine ve antifungal tedavilerin mevcudiyetine bağlıdır (4). Bu kılavuza göre, tedavide en uygun antifungal ajanın kullanılmasının yanı sıra temiz sınırlarla erken cerrahi debridman uygulanılması önerilir.

Erken tanı ve tedavi hastalığın prognozu için önemlidir (10). Fizik muayene bulgularına ek olarak radyolojik görüntüleme ve risk faktörlerinin bilinmesi erken tanı için yardımcı olabilir. Kesin tanı için biyopsi, balgamda mantar tespiti gereklidir. Paranazal sinüslerin kemik duvarlarında nodüler kalınlaşma ve görüntülemede hava-sıvı seviyesinin olmaması invaziv fırsatçı enfeksiyonun bir işareti olabilir.

SONUÇ

COVID-19 sonrası rhinoorbital mantar enfeksiyonu vakalarının sayısı artıyor. Tedavide yüksek doz steroid kullanımı ve eşlik eden diabetes mellitus varlığı ana predispozan faktörlerdir. Mortalite ve morbiditesi yüksek olan bu hastalığın prognozu kötüdür fakat erken tanı ve tedavi ile olumsuz seyreden prognoz bizim vakamızda olduğu gibi şifa ile sonuçlanabilir.

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RELATIONSHIP OF THE LUNAR CYCLE AND SEASONALITY WITH ANXIETY

INTRODUCTION: Anxiety is the cause of the high number of emergency room visits. There is a common belief that the moon influences people's health, emotions, and behavior. We aimed to examine whether the lunar cycles and seasons have an effect on the number of emergency department admissions due to anxiety.

METHODS: All patients diagnosed with anxiety disorders in the adult emergency department between November 2020 and October 2021 were identified from the hospital archive. Those who met the exclusion criteria were excluded from the study. Age, gender, date and time of admission to the emergency department of the patients were recorded. By using these dates and times, it will be determined through the internet program (www.timeanddate.com) in which cycle of the month the patient applied to the emergency department, and whether the effects of different phases of the moon and seasons on these patients will be investigated.

RESULTS: A total of 1179 patients were included in the study. The mean age of these patients was 39.1±15.2 years and 58.6% of the cases were women. It was observed that 25.4% of the cases applied to the emergency in the last quarter. We observed that those with a diagnosis of psychiatric illness applied at a higher rate in the winter season (p<0.001). It was determined that the hospitalized patients were mostly between the ages of 18-44 (p:0.003). In addition, male gender and the presence of psychiatric diagnosis were found to be high among hospitalized patients (p<0.001).

CONCLUSION: Anxiety patients mostly applied to the emergency department in the last quarter. Young age, presence of psychiatric disease, and male ratio were higher among those hospitalized.

KEYWORDS: lunar cycle, anxiety, season

Table 1. Demographic and clinical characteristics of the anxiety patients

Variables		Total (n:1179)	New moon (n:292)	First Quarter Moon (n:293)	Full moon (n:294)	Last Quarter Moon (n:300)	P-Value
Age (years)	18-44	799 (69%)	205 (71.9%)	197 (69.1%)	199 (68.4%)	198 (66.7%)	0.19
	45-65	280 (24.2%)	69 (24.2%)	62 (21.8%)	69 (23.7%)	80 (26.9%)	
	>65	79 (6.8%)	11 (3.9%)	26 (9.1%)	23 (7.9%)	19 (6.4%)	
Gender	Female	691 (58.6%)	183 (62.7%)	157 (53.6%)	175 (59.5%)	176 (58.7%)	0.162
	Male	488 (41.4%)	109 (37.3%)	136 (46.4%)	119 (40.5%)	124 41.3(%)	
Season	Winter	206 (17.5%)	55 (18.8%)	44 (15%)	54 (18.4%)	53 (17.7%)	0.357
	Spring	289 (24.5%)	73 (25%)	71 (24.2%)	73 (24.8%)	72 (24%)	
	Summer	433 (36.7%)	108 (37%)	106 (36.2%)	118 (40.1%)	101 (33.7%)	
	Autumn	251 (21.3%)	56 (19.2%)	72 (24.6%)	49 (16.7%)	74 (24.7%)	
Diagnosed	Yes	637 (54%)	154 (52.7%)	165 (56.3%)	170 (57.8%)	148 (49.3%)	0.159
	No	542 (46%)	138 (47.3%)	128 (43.7%)	124 (42.2%)	152 (50.7%)	
Outcome	Hospitalized	95 (8.1%)	30 (10.3%)	18 (6.1%)	27 (9.2%)	20 (6.7%)	0.197
	Discgarged	1084 (91.9%)	262 (89.7%)	275 (93.9%)	267(90.8%)	280 (93.3%)	

Table 2. Seasonal distribution of patients

Variables		Winter	Summer	Spring	Autumn	P-Value
Age (years)	18-44	146 (72.3%)	293 (68.9%)	189 (65.6%)	171 (70.4%)	0.532
	45-65	43 (21.3%)	108 (25.4%)	73 (25.3%)	56 (23%)	
	>65	13 (6.4%)	24 (5.6%)	26 (9%)	16 (6.6%)	
Gender	Female	107 (51.9%)	263 (60.7%)	162 (56.1%)	159 (63.3%)	0.053
	Male	99 (48.1%)	170 (39.3%)	127 (43.9%)	92 (36.7%)	
Diagnosed	Yes	133 (64.6%)	204 (47.1%)	167 (57.8%)	133 (53%)	<0.001
	No	73 (35.4%)	229 (52.9%)	122 (42.2%)	118 (47%)	
Outcome	Hospitalized	24 (11.7%)	20 (4.6%)	27 (9.3%)	24 (9.6%)	0.008
	Discharged	182 (88.3%)	413 (95.4%)	262 (90.7%)	227 (90.4%)	

Table 3. Distribution of patients by hospitalization status

Variables		Hospitalized (n:95)	Discharged (n:1084)	P Value
Age (years)	18-44	78 (82.1%)	721 (67.8%)	0.003
	45-65	17 (17.9%)	263 (24.7%)	
	>65	0 (0%)	79 (7.4%)	
Gender	Female	37 (38.9 %)	654 (60.3 %)	<0.001
	Male	58 (61.1 %)	430 (39.7 %)	
Diagnosed	Yes	80 (84.2 %)	657 (51.4 %)	<0.001
	No	15 (15.8 %)	527 (48.6 %)	

COVID-19 HASTALARINDA YAN AĞRISI VE KASIK AĞRISI SPONTAN RETROPERİTONEAL HEMATOMUN BELİRTİSİ OLABİLİR Mİ ?

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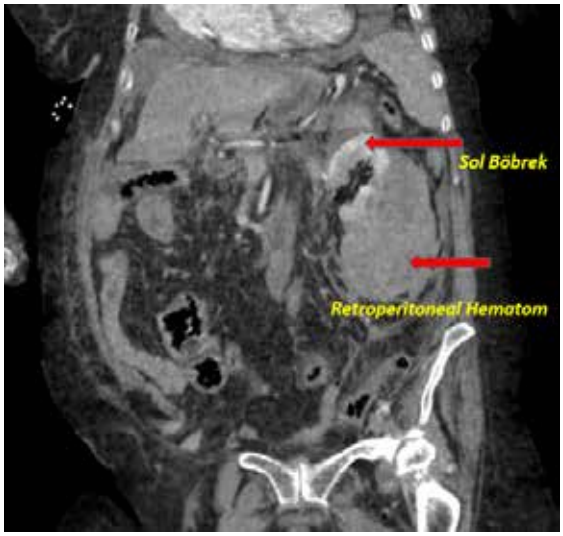
Giriş-Amaç:Spontan retroperitoneal hematom(RH),genellikle beraberinde travma veya iyatrojenik manipülasyon olmaksızın retroperitoneal boşlukta kanama olarak tanımlanan nadir bir durumdur.Diğer kanama alanlarıyla karşılaştırıldığında,RH tanısı asemptomatik veya spesifik olmayan semptomatik durumlar nedeniyle zor olabilir.Bu klinik durum genellikle gizli olup klinisyenler tarafından yeterince tanınmamakta ve önemli bir morbidite-mortalite nedenidir.COVID-19 insan vücudunu birçok farklı şekilde etkileyen bir solunum yolu hastalığıdır.Hastalık özellikle tromboembolik belirtileri önlemek için antikoagülan tedavi verilen hastalarda hem trombotik hem de hemorajik komplikasyonlar taşımaktadır.Biz bu raporda COVID-19 tanısı ile ayaktan tedavisi düzenlenerek ve hastanede yatarak takip edilen,takipleri sırasında yeni gelişen yan ağrısı ve kasık ağrısı sebebi ile tetkik edilen ve retroperitoneal hemotum olduğu belirlenen hastalarda RH'nin tedavi ve takip sonuçlarını değerlendirilip sunmayı amaçladık.

Yöntem:SBÜ Erzurum BEAH'da Ocak 2021-Ocak 2022 tarihleri arasında COVID-19 tanısıyla takip edilen,takiplerinde yeni gelişen yan ağrısı ve kasık ağrısı sebebiyle tetkik edilen ve RH olduğu belirlenen 10hastanın dosyaları retrospektif olarak incelendi.Çalışmaya travmaya bağlı RH olan hastalar,bilinen hematolojik sistem hastalığı tanısı olan hastalar dahil edilmedi.Spontan RH tanısı hastalara çektirilen intravenöz kontrastlı abdominopelvik bilgisayarlı tomografiyle(BT) doğrulanmıştı.COVID-19 tanısı faringeal ve/veya nazal sürüntü pozitifliğiyle konulmuştu.

BULGULAR:Çalışmaya dahil edilen hastaların yaş ortalaması 69.8±12.2yıl ve BMI 22.2±4.1kg/m idi.10hastanın 9'u(%90) kadın,1hasta(%10) ise erkekti.Hastaların tamamında hipertansiyon öyküsü varken,4hastanın koroner arter hastalığı,2hastada kronik böbrek yetmezliği,2hastadaysa DM öyküsü vardı.10hastanın 8'inde antikoagülan kullanım öyküsü mevcuttu.Hastaların 4'ü ayaktan takibi sırasında hastanemiz acil servisine yeni gelişen semptomlar ile başvurmuştu.6'sı COVID-19 sebebi ile yatarak takip ve tedavisi yapılan hastalardı.Hastaların 5'inde hematom tarafında akut başlangıçlı yan ağrısı ilk semptom iken,1hasta genel durum bozukluğu,2hasta karın ağrısı ve 2hastadaysa hematom tarafında hissedilen akut başlangıçlı kasık ağrısı hematomun klinik prezentasyonu olarak kaydedildi.Hastaların tanı anında ortalama Hg değeri 9.1g/dL,ortalama WBC değeri 25.500/mcL'ydi.RH'ın 7'si sol tarafta iken,3'ü sağ taraftaydı ve 8'i iliopsoas kası ile ilişkili olup ortalama boyutu 10.6cm olarak ölçüldü.10hastanın 8'inde RH,antikoagülanların kesilmesi,intravenöz sıvı resüsitasyonu,kan transfüzyonu, antibiyoterapiyle konservatif olarak yönetildi.1 hastaya anjiografi uygulandı ve vital bulguları stabil olmayan ve genişleyen hematom nedeniyle 1hastada açık operasyona karar verildi.Hastaların 3'ü hayatını kaybetti.Geriye dönük 1yıl içerisindeki dosya incelemesinde hayatta kalan 7hastaya kontrol BT çekilmiş olup,bu hastaların 5'inde hematomun rezorbe olduğu 2hastadaysa hematomun azalmış olsa da sebat ettiği izlendi.

SONUÇ:COVID-19 hem trombotik fenomen hem de kanamaya yatkınlık ile ilişkilidir.Trombotik olaylar genellikle akut enfeksiyonun ilk haftasında ortaya çıkarken,COVID-19'un 10.gününden sonra kanama mekanizmalarına eğilim artmaya başlamaktadır.Spontan RH,semptomların olmadığı ve tanı için zorluk yaratan ciddi bir durumdur.COVID-19 hastalarında RH,ani karın ağrısı, genel durum bozukluğu ve anemi ile kendini gösterse de klinik gözlem ve bulgularımıza göre yeni gelişen yan ağrısı veya kasık ağrısı da RH'un habercisi olabilir.



Şekil 1. COVID-19 tanılı hastada gelişen retroperitoneal hematom görünümü

INVESTIGATION OF CLINICAL AND LABORATORY FEATURES THAT DETERMINE MORTALITY IN MULTI-TRAUMA PATIENTS ADMITTED TO THE EMERGENCY DEPARTMENT

Multitrauma is an important cause of morbidity and mortality all over the world. In this study, the effects of some laboratory values and trauma scores on mortality in patients with multitrauma were investigated.

This study was conducted on patients who applied to the emergency department of Adıyaman Training and Research Hospital with multitrauma between 2021 and 2022, prospectively. Patient's gender, age, presentation, duration of admission to the emergency department, season of admission, mean arterial pressure, trauma mechanism, type of injury, injured area, CRP and albumin values at the time of admission and Glasgow coma scale (GCS), Revised trauma score (RTS), Abbreviated Injury Scale, Inujury severity score and Trauma and Injury Severity Score (TRISS) scores of all patients were recorded on the prepared standard forms and their relationship with mortality was examined.

While 79% of the 419 cases included in the study were male, 21% were female. While 371 of the cases resulted in survival, 48 resulted in death. While the median age value of all cases was 30 (0-87), the median age of those who died was 38 (1-87). It was seen that the majority of the cases were in the group between the ages of 18-44 with a rate of 45.6%. Similarly, it was determined that 33% of the cases that resulted in death were in the 18-44 age group. While 395 of the patients applied to the emergency service by ambulance, 24 of them applied as an outpatient. It was observed that 66% of those who applied to the emergency department applied within the first 30 minutes after the trauma, while 62.5% of the cases that resulted in death were found to apply in the first 30 minutes. In order of frequency, patients' admission mechanisms to the emergency department; non-vehicle traffic accident (37%), in-vehicle traffic accident (27%) and fall (25%), respectively. When the distribution of the cases according to the seasons was examined, it was determined that the most applications were in the summer season (60.4%). In parallel, deaths were mostly seen in summer and autumn seasons (80%). Considering the injury sites in the patients, it was seen that the most injuries were in the pelvis-extremities (76%) and head-neck (64%) regions. Head-neck (87.5%) and thorax (77.1%) injuries were the most common in the patients who died. The most common clinical finding in these patients was found to be cranial fracture (21.5%). Head-neck and thorax injuries were found to be statistically significantly higher in patients who died ($p<0.001$). In addition, cranial fracture, subarachnoid hemorrhage, intracerebral contusion, subdural hemorrhage, hemothorax, pneumothorax, lung contusion, sternum-rib fracture, intra-abdominal hemorrhage, spleen and other intra-abdominal organ injuries were found to be statistically significantly higher in deceased patients ($p <0.001$). In addition, the presence of maxillofacial fracture ($p=0.002$), liver injuries ($p=0.001$) and pelvis fracture ($p=0.002$) was also found to be statistically significantly higher in patients who died. In the study, increased CRP/albumin ratio, high AIS and ISS scores and low GCS, RTS and TRISS scores were found to be statistically significant in died patients ($p<0.001$).

Trauma is an important cause of morbidity and mortality, especially in the young population, where approximately 6 million people die annually (1). Many studies have been conducted on trauma scores and blood parameters to determine the prognosis of morbidity and mortality in trauma patients. As far as we know in the literature, the majority of patients with trauma in the studies conducted and in our study were male (1-13). Considering the seasonal distribution of patient admissions throughout the year, it is seen in the literature that there are generally more applications in the summer and autumn periods (6, 8). Wang et al. (14) and Doğan et al. (15) stated that increased CRP/albumin values in patients with traumatic brain injury were associated with poor outcome. In our study, in parallel with the studies in the literature, it was determined that the CRP/albumin ratio was higher in patients who died than in those who survived. As far as we know, a significant relationship was found between low GCS score and mortality in studies conducted in the literature and in our study (10, 16). Again, in studies conducted in the literature and in our study, a significant relationship was found between high AIS and ISS scores and mortality (10, 17).

In our study, it was found that trauma scores (GCS, RTS, AIS, ISS, TRISS), CRP/albumin ratio, presence of head-neck and thoracic region injuries were significantly different between died and surviving patients. The guidance of these results in the necessary examination and treatment stages in the management of trauma patients will reduce mortality rates. In addition, these injuries can be reduced by increasing social education and traffic inspections in these months, since the incidents are most common in summer and autumn and traffic accidents are the most responsible mechanisms in these months.

KEYWORDS: Multitrauma, CRP/albumin ratio, trauma scores, emergency department

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Tablo 1. Multitravmalı Hastaların Demografik Özellikleri

	N(419)	%
Cinsiyet		
Erkek	331	79
Kadın	88	21
Yaş (yıl)		
0-5	36	8,6
6-11	29	6,9
12-17	47	11,2
18-44	191	45,6
45-64	80	19
65 üzeri	36	8,6
Başvuru Şekli		
Ambulans	395	94,3
Ayaktan	24	5,7
Başvuru Zamanı (dakika)		
0-30	277	66,1
30-60	52	12,4
60-120	49	11,7
120 sonrası	41	9,8
Ortalama arteryel basınç		
60 mm Hg üstü	375	89,5
60 mm Hg altı	44	10,5
Travma Mekanizması		
Araç içi trafik kazası	113	27
Araç dışı trafik kazası	155	37
Darp	18	4,3
Ateşli Silah yaralanması	9	2,1
Düşme	108	25,8
Diğer	16	3,8
Etkilenen Bölgeler		
Baş-boyun	268	64
Yüz	118	28,2
Toraks	194	46,3
Batın	123	29,4
Pelvis-Ekstremite	321	76,6
Sonlanım		
Yaşam	371	88,5
Ölüm	48	11,5

Tablo 2. Yaşayan ve ölen olguların sosyodemografik veri dağılımları

	Yaşayan		Ölen		Toplam		P değeri
	N 371	% 100	N 48	% 100	N 419	% 100	
Cinsiyet							
Erkek	292	78,7	39	81,3	331	79	0,684
Kadın	79	21,3	9	18,7	88	21	

	Yaşayan		Ölen		Toplam		P değeri
	N 371	% 100	N 48	% 100	N 419	% 100	
Yaş (yıl) 0-5 6-11 12-17 18-44 45-64 65 üzeri	 31 27 40 175 73 25	 8,4 7,3 10,8 47,1 19,7 6,7	 5 2 7 16 7 11	 10,4 4,2 14,6 33,3 14,6 22,9	 36 29 47 191 80 36	 8,6 6,9 11,2 45,6 19 8,6	0,013
Başvuru Şekli Ambulans Ayaktan	 347 24	 93,5 6,5	 48 0	 100 0	 395 24	 94,3 5,7	0,094
Başvuru Zamanı 0-30 dakika 30-60 dakika 60-120 dakika 120 dakika üstü	 247 49 38 37	 66,6 13,2 10,2 10	 30 3 11 4	 62,5 6,2 22,9 8,4	 277 52 49 41	 66,1 12,4 11,7 9,8	0,082
MAP 60 mm Hg üstü 60 mm Hg altı	 358 13	 96,5 3,5	 17 31	 35,4 64,6	 375 44	 89,5 10,5	<0,001
Travma Mek. AİTK ADTK Darp ASY Düşme Diğer	 99 138 18 6 96 14	 26,7 37,2 4,9 1,7 25,8 3,7	 14 17 0 3 12 2	 29,2 35,4 0 6,2 25 4,2	 113 155 18 9 108 16	 27 37 4,3 2,1 25,8 3,8	0,247

Tablo 3. Hastaların CRP/albümin, yaş ve travma skorlarının verilerinin dağılımı

	Yaşayan (n=371)	Ölen (n=48)	Toplam (n=419)	P değeri
YAŞ	29 (0-87)	38 (1-87)	30 (0-87)	0,188
CRP/ALB	0,051 (0,039-5,032)	0,059 (0-0,919)	0,051 (0-5,032)	<0,001
GKS	15 (3-15)	3 (3-14)	15 (3-15)	<0,001
RTS	7,8408 (2,34-7,84)	2,88 (0-6,61)	7,8408 (0-7,8408)	<0,001
AIS	4 (2-17)	11 (6-19)	4 (2-19)	<0,001
ISS	10 (2-66)	50 (26-75)	10 (2-75)	<0,001
TRISS	99,37 (1,68-99,67)	3,55 (0,02-63,25)	99 (0,02-99,67)	<0,001

INVESTIGATION OF CLINICAL AND LABORATORY FEATURES THAT DETERMINE MORTALITY IN MULTI-TRAUMA PATIENTS ADMITTED TO THE EMERGENCY DEPARTMENT

Multitrauma is an important cause of morbidity and mortality all over the world. In this study, the effects of some laboratory values and trauma scores on mortality in patients with multitrauma were investigated.

This study was conducted on patients who applied to the emergency department of Adıyaman Training and Research Hospital with multitrauma between 2021 and 2022, prospectively. Patient's gender, age, presentation, duration of admission to the emergency department, season of admission, mean arterial pressure, trauma mechanism, type of injury, injured area, CRP and albumin values at the time of admission and Glasgow coma scale (GCS), Revised trauma score (RTS), Abbreviated Injury Scale, Inujury severity score and Trauma and Injury Severity Score (TRISS) scores of all patients were recorded on the prepared standard forms and their relationship with mortality was examined.

While 79% of the 419 cases included in the study were male, 21% were female. While 371 of the cases resulted in survival, 48 resulted in death. While the median age value of all cases was 30 (0-87), the median age of those who died was 38 (1-87). It was seen that the majority of the cases were in the group between the ages of 18-44 with a rate of 45.6%. Similarly, it was determined that 33% of the cases that resulted in death were in the 18-44 age group. While 395 of the patients applied to the emergency service by ambulance, 24 of them applied as an outpatient. It was observed that 66% of those who applied to the emergency department applied within the first 30 minutes after the trauma, while 62.5% of the cases that resulted in death were found to apply in the first 30 minutes. In order of frequency, patients' admission mechanisms to the emergency department; non-vehicle traffic accident (37%), in-vehicle traffic accident (27%) and fall (25%), respectively. When the distribution of the cases according to the seasons was examined, it was determined that the most applications were in the summer season (60.4%). In parallel, deaths were mostly seen in summer and autumn seasons (80%). Considering the injury sites in the patients, it was seen that the most injuries were in the pelvis-extremities (76%) and head-neck (64%) regions. Head-neck (87.5%) and thorax (77.1%) injuries were the most common in the patients who died. The most common clinical finding in these patients was found to be cranial fracture (21.5%). Head-neck and thorax injuries were found to be statistically significantly higher in patients who died ($p<0.001$). In addition, cranial fracture, subarachnoid hemorrhage, intracerebral contusion, subdural hemorrhage, hemothorax, pneumothorax, lung contusion, sternum-rib fracture, intra-abdominal hemorrhage, spleen and other intra-abdominal organ injuries were found to be statistically significantly higher in deceased patients ($p <0.001$). In addition, the presence of maxillofacial fracture ($p=0.002$), liver injuries ($p=0.001$) and pelvis fracture ($p=0.002$) was also found to be statistically significantly higher in patients who died. In the study, increased CRP/albumin ratio, high AIS and ISS scores and low GCS, RTS and TRISS scores were found to be statistically significant in died patients ($p<0.001$).

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6-11	27	7,3	2	4,2	29	6,9	
12-17	40	10,8	7	14,6	47	11,2	
18-44	175	47,1	16	33,3	191	45,6	
45-64	73	19,7	7	14,6	80	19	
65 üzeri	25	6,7	11	22,9	36	8,6	

	Yaşayan		Ölen		Toplam		P değeri
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GKS	15 (3-15)	3 (3-14)	15 (3-15)	<0,001
RTS	7,8408 (2,34-7,84)	2,88 (0-6,61)	7,8408 (0-7,8408)	<0,001
AIS	4 (2-17)	11 (6-19)	4 (2-19)	<0,001
ISS	10 (2-66)	50 (26-75)	10 (2-75)	<0,001
TRISS	99,37 (1,68-99,67)	3,55 (0,02-63,25)	99 (0,02-99,67)	<0,001

INTRODUCTION

Obesity is a widespread chronic disease with 40-50% prevalence in some societies [1,2].

Furthermore, 86% of Americans will be overweight or obese by 2030 [3]. Obesity predisposes

patients to severe diseases such as diabetes mellitus, hypertension, and cardiac disease and grossly impacts the patient's quality of life [4,5]. The main cause of obesity is an imbalance in calorie intake and consumption [6]. Many methods are offered for treating obesity by regulating this calorie imbalance, such as a special diet, regular physical activity, and metabolic and bariatric surgery (MBS) [7].

Nowadays, MBS is the most effective and durable treatment of obesity. With the development of surgical techniques, MBS's popularity has increased [8]. Sleeve gastrectomy (SG) is the most common MBS worldwide [9]. However, some patients experience insufficient weight loss (IWL) or even weight regain (WR) after SG. The experience of WR or IWL is against the philosophy of popularity of this procedure as a permanent treatment [10,11]. In this study, we investigated the effect ofdemographic characteristics, comorbidities, and medications on WR and IWL in patients who have undergone SG. Predictors of WR and IWL were identified based on six different definitions proposed previously in the literature.

METHODS AND MATERIALS

All patients between the age of 18 and 60 years who underwent SG at university hospital,, between January 2015 and April 2022, with a minimum follow-up of 36 months,entered this retrospective analytical study. Following data were extracted from the database: Age, Gender, comorbidities (diabetes,hypertension, hypothyroidism, cardiovascular disease, obstructive sleep apnea, Gastroesophageal reflux disease).

STATISTICAL ANALYSIS

Data analysis was performed with SPSS IBM SPSS Statistics 20.0 software.The mean and standard deviation (SD) were conducted to describe continuous variables and qualitative data. performed using frequencies. Kolmogorov–Smirnov, and Shapiro–Wilk tests were used to assess the normality of quantitative data.

RESULTS

Among 106 participants with a mean age of 41.45±8.45 with a range of 22 to 65years old, the

mean preoperative BMI of participants was 42.05±7.13 kg/m2, and 64 (76.9%) of them were

women. A total of 27 patients had preoperative BMI of <40 kg/m2. The most common

comorbidities were thyroid disorders (18.2%) and hypertension (10.4%).

In multivariate logistic regression analysis, only the preoperative BMI of >40 kg/m2 had a statistically significant relationship with %EWL at 12 months , increase in weight of >25% of EWL from nadir at 24 months, and %TWL at 24 months.Metformin consumption was a predictor for IWL according to all criteria

A BMI of >5 kg/m2 above nadir BMI as WR

All participants had reached their nadir BMI by the end of 12 months with a mean BMI of

25.07±6.72 kg/m2, and the mean BMI at the end of 24 months was 1.074±0.042 kg/m2 higher than the nadir BMI.

Increase in weight of >10 kg above nadir weight as WR

All participants had reached their nadir weight by the end of 12 months, with a mean weight of 73.71±10.15 kg. A total of 42 participants (12.6%) had a mean WR of >10 kg above their nadir weight.

%EWL <50% at 12 months as IWL, increase in weight of >25% of EWL

A total of 293 (88%) participants reached %EWL of >50% at 12 months, and only 40 (12%)

participants had %EWL of <50%, defined as IWL

DISCUSSION

The incidence of WR or IWL in our patients was between 0-12.3%, depending on different

definitions, which is less than what some studies reported [10]. This could result from surgical

techniques and close follow-up monitoring at our center.

There are several definitions for WR and IWL, all of which have advantages and disadvantages. Still, according to our literature review, there is a lack of consensus on one single definition for WR and IWL as a standard definition, which could be one of the reasons for the very widespectrum of WR or IWL incidence in different studies and results in the impossibility of reporting true incidence of WR and IWL in obese patients with a history of MBS [10–14].In a study by M. Ismail et al., followed-up in 95 patients who underwent SG, the only factor predictor of WR was BMI>40 kg/m2 [15,18]. Furthermore A. Csendes et al., with similar results, concluded that the higher preoperative BMI, the higher probability of IWL and WR [16].This finding is similar to our research in which a greater preoperative BMI leads to WR and IWL. In a study by R. A. Weiner et al. on 120 patients who underwent SG, the gastrectomy with a calibration tube (44Fr tubes) resulted in lesser WR than SG patients without any calibration tube [17]. Our study could not evaluate this factor because we used the same calibration tube (32Fr tube) for all our patients.

Another finding of our study was the significant preventive effect of metformin on WR (regardless of the definitions for WR or IWL).

This could be justified by the described mechanism of action of this drug, such as lowering of

blood glucose, a decrease in appetite, changes in leptin and insulin sensitivity, and regulation of fat oxidation and storage in the liver, skeletal muscle, and adipose tissue [19,20].

Multiple factors could predict WR and IWL after SG; some have been identified before this study.

We tried to find an association between demographic and non-demographic variables and WR or IWL. We suggest a longer patient follow-up will help provide more specific and sensitive

definitions for WR and IWL. Finding the ratio of patients who received revisional surgery or

successful non-surgical treatments such as psychological and nutritional counseling and analyzing treatment outcomes in terms of comorbidity resolution, social functioning, and mental health improvements can help determine predictors of WR and IWL and also the relationship between these two and treatment failure.

LIMITATIONS

The variables we investigated were very limited. Because of a broad spectrum of factors impacting WR and IWL, any reliable study investigating the causes of WR or IWL should check out all known variables with a longer follow-up period. Furthermore, WR and IWL definitions should be further validated.

CONCLUSION

Preoperative BMI, obstructive sleep apnea, consumption of metformin, and a high

grade of fatty liver disease were the variables associated with WR or IWL after SG. In addition,standard definitions for WR and IWL are needed so that the incidence of these two and their predictors can be accurately investigated.

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CAN FLANK PAIN AND INGUINAL PAIN BE A SIGN OF SPONTANEOUS RETROPERITONEAL HEMATOMA IN PATIENTS WITH COVID-19?

INTRODUCTION-PURPOSE: Spontaneous retroperitoneal hematoma(RH) is a rare condition defined as bleeding in the retroperitoneal space,usually without concomitant trauma or iatrogenic manipulation.Compared to other bleeding sites,the diagnosis of RH may be difficult due to asymptomatic or nonspecific symptomatic conditions.It is not sufficiently recognized by clinicians and is an important cause of morbidity-mortality.COVID-19 is a respiratory disease that affects the human body in many different ways.The disease carries both thrombotic and hemorrhagic complications,especially in patients who are given anticoagulant therapy to prevent thromboembolic symptoms.The aim of this study is to evaluate and present the treatment and follow-up results of RH in patients who were diagnosed with outpatient treatment and hospitalized,who were examined for newly developed flank and inguinal pain during their follow-up,and who were determined to have retroperitoneal hematoma.

METHOD: The files of 10patients who were followed up in HSU Erzurum City Hospital with the diagnosis of COVID-19 between January2021 and January2022,were examined for newly developed flank and inguinal pain and were determined to have RH were retrospectively analyzed.Patients with RH due to trauma were not included in the study.Patients with a diagnosis of hematological system disease were not included.The diagnosis of spontaneous RH was confirmed by intravenous contrast-enhanced abdominopelvic computed tomography (CT).The diagnosis of COVID-19 was made with pharyngeal and/or nasal swab positivity.

RESULTS: Demographic and laboratory data are summarized in table-1, clinical data are summarized in table 2. 4of the patients applied to the emergency department of our hospital with newly developed symptoms during outpatient follow-up.6of them were inpatients who were followed up and treated for COVID-19.8 of10 patients RH was managed conservatively with discontinuation of anticoagulants,intravenous fluid resuscitation,blood transfusion,and antibiotherapy.Angiography was applied to 1patient and open operation was decided in 1patient due to enlarging hematoma with unstable vital signs.In the retrospective 1year file review.Control CT was performed in 7patients who survived,and in 5of these patients the hematoma was resorbed,and in 2patients, it was observed that the hematoma persisted even though it decreased.

CONCLUSION:COVID-19 is associated with both thrombotic phenomena and bleeding susceptibility.While thrombotic events usually occur in the first week of acute infection,the tendency to bleeding mechanisms begins to increase after the 10th day of COVID-19.Spontaneous RH is an asymptomatic and difficult to diagnose.It is a serious condition.Although RH manifests itself with sudden abdominal pain,general condition disorder and anemia in COVID-19 patients,new developing flank or groin pain may also be a precursor of RH according to our clinical observations and findings.

COVİD-19 PANDEMİ DÖNEMİNDE ÇOCUK ACİL SERVİSİNDE TEDAVİ RET VEREN HASTALARIN İNCELENMESİ

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GİRİŞ: Acil servislerdeki hasta yoğunluğu her geçen gün artmaktadır. Acil servise yapılan uygunsuz başvurular hem yoğunluğu artırmakta hem de gerçekten acil sağlık hizmetine ihtiyacı olanların hizmetten yararlanmasına engel olabilmektedir. Sağlık sisteminde kaliteyi artırmak ve yoğunluğu azaltmak için acil serviste tedaviyi reddeden hastaları incelemek son derece önemlidir. Bu çalışmada hasta memnuniyetini artırmak, kaynakları verimli kullanmak, eksikleri gidermek ve var olan problemleri çözmek için Covid-19 pandemi döneminde çocuk acil servisine başvuran ebeveynlerin çocuklarının tedavisini reddetme nedenlerinin belirlenmesi amaçlanmıştır.

MATERYAL VE METOD: Çalışma Sağlık Bilimleri Üniversitesi Kartal Dr. Lütfi Kırdar Şehir Hastane'si Çocuk Acil Kliniğinde yapıldı. Çocuk acil servisine 01 Kasım 2021 ve 31 Aralık 2021 tarihleri arasında başvuran ve ebeveynlerinin tedaviyi reddettiği hastalar geriye dönük olarak incelendi. "Tıbbi tedaviyi ret formu" imzalayan hastaların yaşı, cinsiyeti, tanıları, triaj kodları, ortalama hastanede kalış süreleri, tedaviyi reddetme nedenleri, tedavi ret sonrası hastaneye tekrar başvuruları elektronik veriler kullanılarak ve telefon ile görüşülerek incelendi. Çalışmaya 0-18 yaş arası ve bilgilerine tam ulaşılanlar dahil edildi. Bilgilerine tam olarak ulaşılamayan hastalar çalışma dışında bırakıldı.

BULGULAR: İki aylık dönemde çocuk acil servisine başvuran 51.111 hastanın 154'ünün (%0,3) ebeveyni tedaviyi reddetmiştir. Hastaların 76'si (%49) kız ve 78'u (%51) erkek hastadır. Hastaların yaş dağılımları; 8 hasta yenidoğan, 8 hasta 1-3 ay arası, 57 hasta 3-36 ay arası, 31 hasta 3-6 yaş, 50 hasta ise 6-18 yaş arasındaydı. Çalışmaya katılan hastaların tamamının triaj kodu sarıydı. Hastaların hastanede kalış süresi ortalama 4 saatti.

Tedavi reddi yapılan hastaların tanıları sıklık sırasıyla; 48 hasta alt solunum yolları infeksiyonu, 20 hasta zehirlenme, 19 hasta Covid pozitif, 13 hasta nöbet şeklindedir. Ebeveynlerin tedaviyi reddetme nedenleri; 68'i (%44) hastanın kendini iyi hissetmesi, 36'sı (%23) tedaviye evde devam etmek istemesi, 18'i(%11) yatış yapılmasını istememesidir. Tedaviyi reddeden hastaların 14'ü (%9) kontrol muayene, 66'sı (%42) başka bir sağlık sorunları nedeniyle hastanemize tekrar başvurmuştur. 16 (%10) hasta aynı şikayetler ile 72 saat içinde tekrar çocuk acil servisine başvururken bu hastalardan 5'inin hastaneye yatışı yapılmıştır. İkinci başvuruda hastaneye yatışı yapılan beş hastanın; bir tanesi Covid-19 sonucunu evde beklemek için, bir tanesi yatış hazırlığını yapmak için tedavi ret verip hastaneden ayrılmış, sonrasında yatış için tekrar başvurmuştur. Üç tanesi ise durumu kötüleşmesi nedeniyle yatış yapılmıştır.

ŞEKİL 1: Hastaların tanı dağılımı

ŞEKİL 2: Ebeveynlerin tedaviyi ret etme nedenleri

TARTIŞMA: Hasta ebeveynlerinin çocuk acil servisinde tıbbı tedaviyi reddetmek için çeşitli nedenleri olabilir. Bu çalışmanın amacı çocuklarının tedavisini reddetme nedenlerinin belirlenmesidir. Çalışmamız süresince çocuk acil servisine başvuran hastaların 154'i (%0,3) tedaviyi reddetmiştir. Ülkemizden daha önce yapılan çalışmalarda benzer literatür bulguları elde edilmiştir. Bu araştırmada tedaviyi ret vermenin en önemli iki nedeni hastanın muayene sonrası kendini iyi hissetmesi ve tedaviye evde devam etmek istemesidir. Muayene sonrası kendini iyi hisseden hastaların çoğunun tanısı zehirlenmedir. Çocuklarda görülen zehirlenmelerin en sık nedeni ilaçlardır. İlaç intoksikasyonları erişkinlerde çoğunlukla intihar amaçlı iken, çocuklarda ise kaza nedeniyle olmaktadır. Ülkemizdeki 114 zehir danışma merkezinin de hastaların büyük bölümünde gözlem süresinin çok uzun süre tutması tedavi ret konusunda etken olarak değerlendirilebilir. Tedaviye evde devam etmek isteyenlerin tanısı ağırlıklı olarak alt solunum yolu infeksiyonudur. Bu hastaların birçoğu tekrarlayan alt solunum yolu infeksiyonu olup tecrübeli ve evde nebülizatörleri olan hastalardır. Covid-19 pandemi döneminde hastanelere başvuru sayısını azalmıştır. Bu azalmada; kişilerin toplumsal izolasyonu böylelikle diğer infeksiyon etmenlerinin azalması, kronik hastalıkların takiplerinin ertelenmesi ve Covid-19 bulaş kaygısının etkili olduğu bildirilmiştir. Çalışmamızda hastaların 18'i (%11) hastaneye yatış yapılmasını istememesi nedeniyle tedavi ret vermiştir. Çalışmanın yapıldığı dönemde Covid-19 pandemisi mevcut olup, ebeveynlerin bir kısmı yatış istememesinin nedenini bulaşma korkusu olarak belirtmişlerdir. Hastaneye yatış konusunda da pandemi süreci ebeveynleri etkilemiştir.

SONUÇ: Covid-19 pandemisi hastaların tedaviyi reddini bulaş korkusu nedeniyle artırmaktadır. Ancak asıl sebep acil servislerin uygunsuz kullanımı nedeniyle hekimin hasta yakınlarına yeterli zaman ayırarak tetkik ve tedavinin anlayabilecekleri dilde anlatamaması ve hastaların tedavi ret sonrası hastanelere tekrar başvurma hakkı olmasıdır. Çalışma koşulları iyileştirilmeli, sağlık çalışanlarının memnuniyetini arttırılmalı, hasta ve hasta yakınları bilinçlendirilmeli, acil servis yoğunluğu azaltılmalıdır. Tüm bunların sağlanmasıyla covid-19 pandemi dönemi bile olsa tedavi ret önlenebilir.

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METHYL ALCOHOL INTOXICATION: A CASE REPORT

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KEY WORDS

Methanol , toxicity , acidosis

ABSTRACT

Methyl alcohol, commonly known as wood alcohol, is used in a variety of industrial fields. It is also a constitute of poorly adulterated alcoholic beverages, anti-freeze and glass cleaning liquids. Methanol toxicity is a clinical condition that causes vision loss, central nervous system depression, high anion gap metabolic acidosis with increased risk of death. Herein, we describe a 29-year-old patient admitted to hospital with symptoms of dispne, chest pain, nausea-vomiting, diarrheai mydriasis and convulsions. Methanol toxicity should be kept in mind while dealing with patients with high anion gap metabolic acidosis. Bicarbonate supplementation, ethanol or fomepizol administration and hemodialysis are applied to treat metabolic acidosis.

INTRODUCTION

Methanol toxicity is a very prevalant condition in the developing world, especially in countries with lower socioeconomic classes. Methanol itself, is not especially toxic, but it is metabolized to formaldehyde and formic acid, which can cause severe metabolic and neurologic problems. It can cause irreversible neurologic sequelaes and even fatal if diagnosed late or treated inappropriately. The most common form of toxicity is ingestion. Dermal and inhalational toxicity forms are reported rarely. Methanol toxicity can present with mild symptoms like drowsiness and headache, before development of significant sequelae that include vision changes, blindness, coma, convulsions and respiratory arrest. Initial symptoms generally ocur 12-24 hours after ingestion. The interval between ingestion and the appearance of symptoms is related with the volume of methanol ingested. In this report , we present a patient with the symptoms and signs of dispnea, chest pain, nausea-vomiting, convulsions, pins and needles and blurry vision diagnosed with methanol toxicity. The symptoms were mild, but the diagnosis was not delayed.

CASE REPORT

A twenty-nine-year-old male was brought to our Emergency Department with complaints of shortness of breath, chest pain, nausea-vomiting, convulsion, pins and needles in his whole body. He has no history of major medical illness. After he had eaten chicken in the morning, he started vomiting four times, ''4-5 defa sulu dışkılama?''. He admited to the clinic with dspnea, stabbing chest pain which is getting worse with breathing and pins and needles in his whole body. His symptoms started before an hour of his application. He also described complaint of blurry vision for the last hour. He had a car accident a week ago. He was suffering from low back pain because of the accident. He is 15 pack-year smoker and he uses alcohol regularly. His physical examination showed that he was conscious and cooperative. His blood pressure was 188/115 with tachycardia(116 bpm). His body temperature was normal. According to his neurologic examination, his pupils were bilaterally mydriatic. His other systemic examination findings were normal. The laboratory data was as follows; hemoglobin 17.9 g/dl (13.6-17.2); White blood cell 19.9x 103 /µL (4.3-10.3) MCV 98.2 fL (80.7-95.5) Neutrophil 17.8 103 /µL (2.8-11) Lymphocyte 1 103 /µL (1.2-3.6), p50c 7.14 mmHg (7.35-7.45), Pco2 18.9 mmHg (35-45), Chco3 9.4 (18-23), cNa 131 (135-146) cK 5.5 (3.4-4.5) cCl 111 (98-106) LDH 340 U/L (135-250) total protein 8.58 g/dl (6-8) uric acid 10.8 mg/dl (2.5-7.5). In his urinanalysis, his glucose level was measured 3+. All other laboratory investigations were within normal limits, including renal and liver function tests. His laboratory datas confirmed that he has high-anion-gap metabolic acidosis. We learnt that he consumed alcohol three days ago. Our pre-diagnosis was methanol intoxication and we conduct our treatments based on this diagnosis.

We requested consultation form eye diseases department?. Consultation result was his pupil

We hospitalized the patient and started infusing %5 dex + %0.45NaCl with NaHCO3. We also infused 10cc/kg ethanol in thirty minutes. Although all of these treatments his blood gase values was getting worse. That is why we hospitalized him to our dialysis clinic. Clinical improvement was observed at the second hour of the dialysis and blood gase values improved.

DISCUSSION

In this case report, we presented a middle- aged patient who was diagnosed with methanol toxicity presented with dispnea, chest pain, nausea-vomiting, convulsions, pins and needles and blurry vision. It is crucial to diagnose this common condition and give the proper treatment because it could be fatal if diagnose is delayed.

Methanol toxicity occurs when using poorly adultered alcohol or to end it all. Young children exploring their environment, alcoholics, and suicidal individuals are at risk. Methanol is metabolized by the ADH (alcohol dehydrogenase) enzyme. Methanol is not toxic, but its metabolites such as formaldehyde and formic acid are considered toxic.

Methanol toxicity can cause severe neurologic problems and high anion gap metabolic acidosis. Most common finding is visual problems due to optic nerve damage. Compared to classical methanol toxicity, it is not one of the first symptoms in our case. Patients usually present with various non-spesific symptoms 12-24 hour after toxication. Other prevalant symptoms include abominal pain, headache, nausea, vomiting which are presented in our patient. CNS symptoms can range from headache and weakness to coma and even death. Diagnosis is grounded on the presence of metabolic acidosis with high anion gap and high serum methanol levels.

The treatment of methanol toxicity comprises the applying of an antidote (ethanol or fomepizole to prevent the oxidation of methanol, folic acid to facilitate formic acid catabolism, acidosis modification, and hemodialysis to accelerate the removal of methanol. Sodium bicarbonate is suggested to treat metabolic acidosis. (pH < 7.3)

CONCLUSION

It is really important to diagnose methanol toxicity and give the appropraite treatment in time. Clinical symptoms of this problem are wide-range. Common findings in methanol intoxicity are abominal pain, headache, nausea, vomiting and visual problems. Antidotes and hemodialysis can be used for appropirate treatment.

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ELEKTRİK ÇARPMASI SONRASI BİLATERAL İHMAL EDİLMİŞ OMUZ ÇIKIĞI OLGUSUNUN TEDAVİSİ

AMAÇ: Elektrik çarpması sonrası acil serviste, hastaların ortopedik sorunları ihmal edilebilmektedir. Bu çalışmamızda, 6 hafta önce elektrik çarpması sonrası acil serviste müdahale edilen ve geçmeyen bilateral omuz ağrısı ile polikliniğe başvuran hastamızda tespit ettiğimiz bilateral ihmal edilmiş omuz çıkığının tedavisinin yöntem ve sonuçlarını sunmayı amaçladık.

YÖNTEM: 27 yaşında erkek hasta, iki taraflı omuz eklem hareket açıklığında kısıtlılık ile polikliniğimize başvurdu. Hasta altı hafta önce evinde elektrik çarpması (220 V alternatif ev akımı) aldığını ve bu kazadan sonra omuz yakınmalarının başladığını bildirdi. Hasta elektrik çarpması nedeniyle ilk olarak acil serviste tedavi görmüş ve sonraki altı hafta boyunca başka bir tedavi aramamış. Hastaya acil serviste yapılan akut değerlendirmede omuzlarını inceleyen herhangi bir radyografik inceleme yapılmamış. Fizik muayenesinde omuzlarında bilateral sulkus belirtisi vardı. Omuzlarını 80 derece civarında abdüksiyon yapabilirken, iç ve dış rotasyonu ağrılı ve ciddi kısıtlı idi. Herhangi bir açık yarası yoktu. Nörovasküler muayenesi bilateral normal sınırlardaydı.

Hastanın omuz grafilerinde; her iki tarafta tüberkülum majus kırığının eşlik ettiği bilateral anterior omuz çıkığı saptandı. Başlangıçta sedasyon altında kapalı redüksiyon yapmaya karar verildi ancak omuz eklemleri başarılı bir şekilde redükte edilemedi. Dolayısıyla bilateral açık redüksiyon planlandı.

Hasta şezlong pozisyonunda ameliyat edildi. Sağ omuz eklemi deltopektoral yaklaşımla girilip, subskapularis kası ve tendonu longitudinal olarak ayrıldı ve kapsülotomi yapıldı. Humerus başı glenoide redükte edildi ve tüberkülum majus kırığı 4,5 mm'lik bir vida ile tespit edildi. Ayrıca subskapularis tendon yırtığı görüldü ve 4.5 sütür ankoru ile onarıldı. Labral patolojiye rastlanmadı. Aynı işlem sol omuz eklemi için de yapıldı. Sol omuzda eşlik eden rotator manşet ve labral patoloji yoktu. Sol humerus başının glenoide redüksiyonunu takiben tüberkülum majus kırığı 4,5 mm'lik iki adet kanüllü vida ile tespit edildi. İntraoperatif komplikasyon gelişmedi. Her iki omuz iki hafta boyunca omuz askılarında tutuldu. Faz 1 omuz egzersizlerine ikinci haftada başlandı. Dördüncü haftada pasif omuz hareket açıklığı egzersizlerine başlandı ve altıncı haftada hastanın aktif hareketler yapmasına izin verildi. Hasta üçüncü ayda işine döndü. Yıllık takibinde omuzlarında ağrı veya kısıtlama yok.

BULGULAR

SONUÇ

Elektrik çarpması sonrası hasta stabil olduktan sonra ortopedik muayene akılda tutulmalıdır. 6. Haftaya kadar ihmal edilmiş bilateral omuz anterior çıkığı tedavisinde açık redüksiyon sonucu başarılı olarak bulunmuştur. Nadir görülen bu durumun tedavisinde açık redüksiyonun etkili bir tedavi yöntemi olduğunu düşünüyoruz.

A CASE OF HYPERAMMONEMIC ENCEPHALOPATHY CAUSED BY VALPROIC ACID INTOXICATION

INTRODUCTION: Valproic acid (VA) is a mood stabilizer and broad-spectrum antiepileptic that is commonly used in the treatment of bipolar mood disorder and epilepsy and in migraine prophylaxis. Intake of high doses may lead to central nervous system (CNS) disorders ranging from lethargy to coma, acute pancreatitis, respiratory failure, hepatotoxicity, renal failure, and bone marrow depletion.

CASE REPORT: In this case, we attempted to analyze a case of hyperammonemia due to VA intoxication.

CONCLUSION: It is necessary to keep in mind that VA intoxication, which is a rare intoxication in emergency departments (ED), may lead to hyperammonemia if there are signs of severe intoxication along with impaired consciousness.

KEYWORDS: Valproic acid, Poisoning, Hyperammonemia.

INTRODUCTION

Valproic acid (VA) is a mood stabilizer and broad-spectrum antiepileptic (1). The therapeutic serum concentration of VA is between 50-100 µg/mL (1). Increased seizure frequency, confusion due to cerebral edema, lethargy, coma, pancytopenia due to bone marrow suppression, methemoglobinemia, pancreatitis, hepatotoxicity, electrolyte disturbances (hyperosmolarity, hypernatremia, hypocalcemia), hypothermia, hypoglycemia, rhabdomyolysis, high anion gap metabolic acidosis, hypotension, respiratory failure, acute renal failure, tachycardia, hypofibrinogenemia and hyperammonemia may occur when the serum concentration is above 100 µg/mL (1, 2).

Hyperammonemia can be observed not only in the intake of massive doses, but also due to malnutrition, urea cycle disorders or drug interactions during VA treatment (3). In this case, we attempted to analyze a case of hyperammonemic encephalopathy due to valproic acid intoxication, which may lead to impaired consciousness, though rarely, after eliminating the central pathologies of the patient who had been unconscious for 5 days.

CASE REPORT

A 19-year-old female patient was admitted to the emergency department (ED) by ambulance due to impaired consciousness for 5 days. According to the medical history provided by the patient's relative, it was found out that the patient was diagnosed with bipolar mood disorder and regularly used enteric-coated valproic acid 500 mg tablets. The patient had no history of addiction to any other drug, stimulants, drugs, alcohol or cigarettes. When the patient presented to the emergency department, her blood pressure was 120/80 mmHg, pulse rate was 132 beats/minutes, respiratory rate was 20 breaths/minutes, body temperature was 37.6 C, Glasgow coma scale (GCS) score was 12 (E3M4V5), and fingertip blood glucose was 130 mg/dl on physical examination. Sinus tachycardia was detected on her electrocardiography (ECG). Other system examinations of the patient were normal. In the laboratory tests of the patient, there were no abnormal values in complete blood count and biochemistry panel. In arterial blood gas, Ph was 7.45 (7.35-7.45), pO2 was 108 mmHg (80-100), pCO2 was 28.7 mmHg (35-45), HCO3 was 22.9 mEq/L (22 -26), and lactate level was 1.7 mmol/L (0-2.2 mmol/L).No acute pathology was detected on computerized brain tomography (CBT) and diffusion magnetic resonance (MRI) imaging taken due to impaired consciousness. Since the patient used VA, blood analysis was performed for blood-VA level with suspicion of intoxication. Valproic acid level was found to be 157 µg/mL (normal reference range: 50-100 ug/mL). Blood ammonia level was examined to describe impaired consciousness in the patient, whose valproic acid level was found to be high. In the blood analysis, the blood ammonia level was 145 ug/dL (normal reference range: 40-100 ug/dL). Supportive treatment was initiated for the patient. Oral food intake was ceased. Internal medicine and psychiatry were consulted. The patient was admitted to the internal medicine intensive care unit with the clinical picture of impaired consciousnessdue to hyperammonemia resulting from valproic acid intoxication.

DISCUSSION

Valproic acid is a simple branched-chain carboxylic acid that is used as an antiepileptic in the treatment of epilepsy, as a mood stabilizer, in the treatment of psychiatric diseases and in migraine prophylaxis (4). Nearly 100% of it is absorbed from the gastrointestinal tract. While peak concentrations are reached in 6 hours, this period may be extended up to 24 hours in slow-release tablets. The therapeutic serum concentration is between 50-100 µg/Ml (3). The signs of intoxication occur above these values (1,2,5). 90% of it is bound to protein at therapeutic concentrations. However, the percentage of binding decreases as the serum concentration increases. Due to its wide range of use and partially narrow therapeutic treatment range, multiple intakes for suicidal purposes and accidental intake of high doses increase the frequency of admission to the emergency department with intoxication. The symptoms affecting various organ systems may be observed in valproic acid intoxication. Tachycardia, hypotension, hypothermia, hyperosmolarity, hypocalcemia, hypoglycemia, hypernatremia, rhabdomyolysis, respiratory failure, high anion gap metabolic acidosis, methemoglobinemia, acute renal failure, hypofibrinogenemia and hyperammonemia are some of the metabolic effects (1,2,4,6). At admission, our patient had a complaint of impaired consciousness, and the patient's blood-valproic acid level and blood-ammonia level were found to be high.

CONCLUSION

In case of unexplained impaired consciousness in patients using VA as a treatment for bipolar disorder, the VA level should be examined and it should not be forgotten that hyperammonemia due to increased VA will lead to impaired consciousness.

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A RARE CASE OF URTICARIA AND ANGIOEDEMA IN THE EMERGENCY DEPARTMENT: A CASE SERIES OF PHYSICAL FACTORS-INDUCED URTICARIA

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INTRODUCTION

Urticaria is a very common disease in the society, and 20%-30% of individuals have at least one attack of urticaria and/or angioedema in a part of their lives. The name of the disease, known since ancient times, is thought to derive from the nettle (Urtica ureus), which causes redness and itching when touched.While urticaria and angioedema are seen together in 50% of the cases, there is only urticaria in 40% and only angioedema in 10% (1,2).

Urticaria lesions typically involve the upper layers of the dermis.They are lesions that are raised from the skin, fade with pressure, may be whitish, pink or red in color, have clear borders, and usually have an erythematous ring around it.The disappearance of the lesions within 1-24 hours without leaving a trace is also one of the important clues in the diagnosis(3,4).

Urticaria is divided into acute (<6 weeks), chronic (>6 weeks) and episodic. The causes of acute urticaria-angioedema are shown in Table 1 (5).

Table 1 Acute Urticaria - Angioedema Causes

Infections (eg Parvo virus B19, EBV)
Nutritional allergies (IgE-mediated)
Drug allergies (IgE-mediated)
Non-immune mediated drug side effects (eg, opiates, NSAIDs, contrast media)
Triggerable episodes of urticaria (eg, dermographism or cholinergic urticaria)
Papular urticaria due to insect bites (eg, bedbugs, fleas, scabies)
Food poisoning (eg, scombroidosis)
Contact urticaria (e.g. contact with plants, animal secretions)
Early contact dermatitis (eg, poison ivy, nickel)

Source: Zuberbier T et al 2014

Angioedema can affect the skin, upper respiratory tract and gastrointestinal mucosa; It is a deep-seated, localized temporary edema. Although angioedema pictures are caused by different etiologies, temporary edema developing as a result of the release of some vasoactive mediators and the increase in the permeability of the post capillary venules in the subcutaneous and submucosal tissue is a common feature. While swelling, pain and burning sensation are prominent in angioedema, itching and redness are almost non-existent(4,6).

Cases of urticaria, angioedema and anaphylaxis are very common in the Emergency Department (ED). Although studies on etiology are not carried out in ED and the symptomatic treatment of acute conditions and the development of anaphylaxis are followed, careful anamnesis and correct guidance at the first examination will facilitate etiological studies. For this reason, we wanted to present two cases of urticaria triggered by physical factors, which are the etiological causes of urticaria and angioedema, which are rarely encountered in ED.

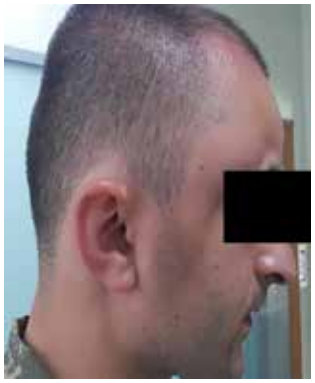
CASE 1

A 24-year-old male patient, who had no known disease and was not diagnosed with urticaria, presented to ED with swelling on his head and redness on his face. It was learned that the patient's complaint was mostly cosmetic swelling and mild itching. It was learned that he was military personnel in his anamnesis, and that he had swelling in the forehead and temples after working for a long time in the open field under the heat and the sun. It was learned that he had a helmet on his head during the study. In the examination, it was determined that there was non-pitting edema in the described areas, there were no urticarial lesions around it, and 1st degree sunburns on the face, especially around the nose. Vital values were Fever: 36.7 Blood Pressure Arterial: 127/75 Respiratory Rate: 16 SPO2: 96. Systemic examination was normal and there were no signs of anaphylaxis. Antihistamine and corticosteroid treatment was administered for the patient's complaints. In the blood analysis of the patient, it was determined that the Biochemical Parameters were normal, and the Hemogram values were White Blood Cell: 11.15, Lymphocyte: 4.62, Monocyte 0.97, Basophil: 0.07, Neutrophil: 5.06, Eosinophile: 0.43. It was observed that the angioedema on the face of the patient, who said that the itching was completely relieved, still continued. The patient, who did not develop complications after 6-8 hours of follow-up, was discharged with the recommendation of outpatient control. It was observed that the patient applied to the dermatology outpatient clinic 1 day later and applied to the dermatology outpatient clinic again 4 days later, and the patient was given symptomatic treatment.

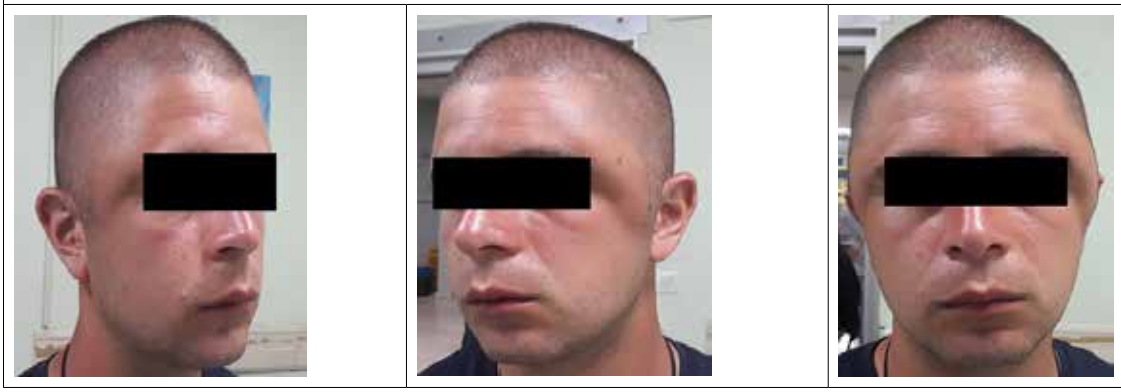
CASE 2

A 27-year-old male patient, who had no known disease and was not diagnosed with urticaria, presented with the complaint of swelling in the head region. It was understood that the patient was also military personnel and they worked together with the other patient in the same area on the same day. Upon the recommendation of his friend, he came the next day in the morning, and it was learned that he had no complaints other than swelling/cosmetic appearance. It was learned that he worked in the open field in hot and under the sun with helmet. As in the first case, there was angioedema without urticarial lesion around the forehead and temple areas. In his examination, Fever: 36.7 Blood Pressure Arterial: 122/68 Respiratory Rate: 15 SPo2: 96. Systemic examination was normal and there were no signs of anaphylaxis. Antihistamine and corticosteroid treatment was given. No regression was observed in the facial angioedema. After 6-8 hours of follow-up, he was discharged with the recommendation of a polyclinic control. It was observed that the patient applied to the internal medicine outpatient clinic 1 day later and was referred to the allergy and immunology department, and the patient did not apply.

Case 1 Images



Case 2 Images



DISCUSSION

In a study, it was found that 50% of urticaria cases admitted to ED were spontaneous, 40% were following upper respiratory tract infection, 9% were related to drugs and 1% were related to food (5). Inducible urticaria is classified according to the dominant stimulus that triggers swelling, angioedema or anaphylaxis (7). It is understood that both of our cases did not have a diagnosis of urticaria before, so they did not apply to the hospital before.

In our cases, there is long-term exposure to more than one physical factor. Considering that the lesion areas and shapes are compatible with the helmet in both cases, there is also pressure exposure. In solar urticaria, typically, edema develops in the area exposed to sunlight before itching and then surrounded by an erythematous area. Lesions usually subside and disappear within 1-3 hours after cessation of exposure (8). It is typical for pressure-related urticaria lesions to appear 3-12 hours after compression, and therefore most urticaria is different from angioedema. Some patients may complain of itchy or nonpruritic swelling (angioedema) or pain without urticaria. Symptoms occur in areas with tight clothing (7). Considering that the lesion formed in our case was more compatible with angioedema than with a typical urticaria lesion, and that there were follow-up visits to the outpatient clinic 5 days later due to similar complaints, it was thought that the pressure factor was an important factor in the lesion. Cutaneous angiodema alone is a typical finding in Vibration Urticaria (1), but no such anamnesis could be obtained in cases. In addition, considering that vibration urticaria heals in a shorter time, this possibility is ruled out. In the literature, diagnostic tests and detailed analyzes are not recommended in acute spontaneous urticaria, and detailed provocation tests are recommended for physical factors (9).

There are 3 basic principles in the treatment of urticaria. Avoidance of the factors that increase and trigger the disease, prevention of mediator release from mast cells and treatment of tissues targeted by mast cell mediators. The treatment for acute urticaria in ED is summarized in Table 2 (2).

TABLE 2 ACUTE URTİCARİA - ANGİOEDEMA TREATMENT

H1 antihistamine (PO) (3 weeks)
Severe Cases: Prednisolone 20-50 mg/day is added for 3-5 days
Very Severe Cases and Angioedema: Adrenaline (IM) should be administered first Corticosteroid (IV) H1 antihistamine (IV, IM if blood pressure is low)
Should be evaluated for anaphylaxis

Source: Bernstein JA et al, 2014

As a result, some tests should be performed for the diagnosis of urticaria events induced by physical factors. Although these are difficult to do in ED, it is important to bring to mind the etiologies for the diagnosis of urticaria and to guide the patient correctly. Since one of the most important parts of the treatment is to get away from the inducing factors, it is important to identify the causative agent. In addition, as seen in our cases, in cases where many physical factors are present, it may be difficult to make a differential diagnosis, and in-depth anamnesis and, if necessary, workplace examinations, evaluation of the environment in which urticaria occurs, as well as further blood tests and invasive examinations such as skin biopsy may be required.

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EVALUATION OF ENDOSCOPIC RETROGRADE CHOLANGIOPANCREATOGRAPHY IN PATIENTS WITH PANCREATICOJEJUNAL STENOSIS

BACKGROUND AND AIM: Pancreaticojejunal stenosis (PS) is a late complication after pancreaticoduodenectomy (PD) that is difficult to treat. Endoscopic retrograde pancreatography (ERCP) has been increasingly used to treat PS, but the optimal endoscopic strategies for such cases remain unknown. This study was designed to evaluate the feasibility, effectiveness, of nteroscopy-assisted (E-assisted) therapeutic ERCP in patients with PS.

METHOD: We retrospectively reviewed the clinical data of 5 PS cases undergoing E-assisted therapeutic ERCP from May 2014 to august 2021. Technical and clinical success, adverse events, risk factors for failure were assessed.

RESULTS: Eight of 5 patients were successfully treated, resulting in an overall treatment success rate of 50%. No serious complications after ERCP occurred. Risk factors for the failure of pancreaticojejunal anastomotic site identification include the digestive tract reconstruction sequence, pancreaticojejunostomy method, placement of a pancreatic duct support tube, preoperative pancreatic duct diameter and postoperative pancreatic fistula. During the follow-up period (median, 57.2 months;IQR, 6.8-187.7), the recurrence rate was 32%. The total duration of stent placement in 3 patients with ERCP treatment was 42.3 months (IQR, 6.8-153.7). The variation in BMI was +2.46 in the non recurrence group compared to -1.09 in the recurrence group and -2.12 in the ERCP treatment failure group.

CONCLUSION: E-assisted ERCP treatment for PS after PD showed favourable safety, effectiveness and durable long-term outcomes. ERCP intervention should be carried out early once PS occurs. BMI is an important index to be monitored during the follow-up of PS patients. A thicker stent and a longer duration of stent placement are recommended to reduce the recurrence of anastomotic stenosis.

KEYWORDS: pancreaticoduodenectomy (PD), endoscopic retrograde pancreatography (ERCP), enteroscopy (E), BMI

Novel surgical techniques and the improvement in comprehensive

treatment, the safety of PD and treatment effectiveness of malignant tumours have been significantly improved. Many patients have achieved long-term postoperative survival [1,2]. Late complications after pancreaticoduodenectomy are common, including bile duct stones, stenosis , recurrent pancreatitis[3], which seriously affect the quality of life of patients.

With the development of endoscopic technology in recent years, endoscopic retrograde cholangiopancreatography (ERCP) has been increasingly used to treat such patients.ERCP has the advantages of being minimally invasive and repeatable and has been shown to be superior to traditional surgical operations [4-8]. Thus, we performed a retrospective study to analyse patients who had PS and were treated by

ERCP using enteroscopy (E) at our centre during the past 7 years.

METHODS

PATIENT SELECTION

Patients with PS who underwent ERCP from May 2014 to august 2021

at our hospital were included in this research. We retrospectively analysed the clinical data of those patients. The following characteristics of patients were evaluated: age, sex, primary disease for which the surgery was performed, surgical procedure and reconstruction method employed, causes of PS, and symptoms of PS.

Patients were signatured informed consent for this study .

ERCP PROCEDURE

For the ERCP procedure, the anaesthesiology, digestive endoscopy and surgerydepartments worked cooperatively to enhance the diagnostic and treatment success.

The patient was placed in the supine position, and a ventilator was used to assist endotracheal intubation anaesthesia. After the scope was positioned under the lower margin of the liver, the

pancreaticojejunal anastomotic site was located, and cannulation was performed. where the scope direction and location were both concordant. For patients with many intestinal wall folds, a sphincterotome or catheter tip was used to gently lift the folds. After successful cannulation of the pancreatic duct, pancreatography was conducted.

RESULTS

PATİENT DEMOGRAPHİCS AND CLİNİCAL CHARACTERİSTİCS

A total of 5 patients underwent ERCP, comprising 2 men and 3women. The average age of the patients was 57 (range, 38~72) years. Surgical procedures included PD with Whipple reconstruction,and pylorus-preserving pancreaticoduodenectomy with Whipple reconstruction .All patients had varying degrees of abdominal pain and weight loss, and abdominal CT showed abnormal manifestations, such as pancreatic duct thickening, peripancreatic exudation or pancreatic duct stones. this study, among the patients in whom enteroscopic entry was successful, there were 4 cases of successful anastomotic site identification and 1 cases of failure. The interval between the first occurrence of abdominal pain after PD operation in the successful group was significantly longer than that in the failed group, while the time from symptom onset to the first ERCP intervention was shorter than that in the failed group, with statistically significant differences

DISCUSSION

According to research, the success rate of endoscopic treatment for bile duct-related diseases after pancreaticoduodenectomy is relatively high, approximately [9-12]. However, the success rate of endoscopic treatment for pancreatic diseases is only 8-38% [13-15], which is mainly because the pancreaticojejunal anastomotic site is difficult to identify and pancreatic duct cannulation is challenging. The first ERCP intervention was beneficial for confirming

the patients' digestive tract structure and for dilating the pancreaticojejunal anastomotic site.

One article reported that the overall morbidity rate after PJ revision was 26%20. In contrast, ERCP has the advantages of minimal invasiveness and high safety. Pancreaticojejunal anastomotic site identification is one of the biggest challenges of this procedure. In this study, the anastomotic site could not be identified by enteroscopy in one patient, but pancreatic duct stent implementation was performed successfully by EUS-PD, and satisfactory treatment results were achieved. On the one hand, the success rate of this method is closely related to the dilation diameter of the pancreatic duct, and it requires a high level of technical skill. On the other hand, this method has been reported to have a complication rate of 5% -35% [16,17], including serious complications such as gastrointestinal perforation and abdominal bleeding. Due to the limited number of cases reported in the relevant literature, the effectiveness and safety of this method need to be further studied.

In this study, we reveal, for the first time, that the change in BMI is closely related to the efficacy of ERCP and the recurrence of pancreatitis. We hope that with the inclusion of more cases in later phases, a scoring system can be established to evaluate the effectiveness of ERP treatment and to predict whether pancreatitis relapse will occur. Based on patient follow-up, we summarize several preliminary findings and hope to motivate further research to determine optimal ERCP treatment strategies for such patients in the future: 1) The patients who underwent only pancreaticojejunal anastomotic site dilatation without stent implantation relapsed

early after operation. 2) The need for pancreaticojejunal anastomotic site dilatation and catheter or balloon dilatation are not directly related to the recurrence of pancreatitis, which is also consistent with some other research results [18]. 3) All patients did not experience pancreatitis recurrence during stent indwelling.

This study has several limitations. First, this study is a single-centre retrospective study. Second, with a small number of cases included, some statistical analyses were difficult to conduct, and the follow-up time of some patients was relatively short. Finally, there was no control group in this study.

CONCLUSION

In conclusion, this study preliminarily verified the safety and effectiveness of enteroscopy ERCP treatment for PS after PD, proposed operative techniques and identified risk factors for pancreaticojejunal anastomotic site identification failure for the first time. ERCP intervention should be carried out early if chronic pancreatitis caused by PS occurs. We also found that BMI is an important index to be monitored during the follow-up of such patients. The use of thicker pancreatic duct stents over a long period of time is recommended to reduce the recurrence odds of anastomotic stenosis.

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ACİL SERVİSTE STABİL DAR VE GENİŞ QRS KOMPLEKSLİ TAŞİKARDİ YÖNETİMİNDE ÇEŞİTLİ VALSALVA MANEVRALARININ ETKİNLİĞİNİN KARŞILAŞTIRILMASI

GİRİŞ

Dar ve geniş QRS kompleksli taşikrdilerin acil servise sık başvuru aritimi nedenlerindendir. Avrupa kardiyoloji camiasının supraventriküler taşikardinin (SVT) yönetimi kılvuzuna göre (ESC 2019) stabil dar ve geniş QRS'li taşikrdilere ilk yapılması önerilen işlemin vagal manevra olduğunu vurgulamıştır [1]. Keza The European Resuscitation Council (ERC) 2021 kılavuzunda da benzer bir öneride bulunmuştur [2]. Vagal stimülasyonu sağlamak için birçok vagal manevra çeşidi mevcuttur ancak acil serviste kullanım kolaylığı ve efektifliği hala tartışmalıdır. Pratikte en sık kullanılan vagal manevranın karotis sinüs masajı(KSM) olmasına rağmen geçici iskemik atak, stroke öyküsü, tek taraflı karotid arter stenozu ve karotid arter üfürümü olan hastalarda önerilmemektedir [3]. Stabil dar ve geniş QRS kompleksli taşikardi hastalarında vagal manevranın seçimi, klinik senaryoya ve hastanın manevraları başarılı bir şekilde gerçekleştirme yeteneğine bağlı olsa da hangi manevranın öncelikli olarak tercih edileceğine dair net bir karara varılamamıştır. Günlük pratiğimizde uygulanan vagal manevraların etkinliği birkaç çalışmada sıklıkla ikili olarak karşılaştırılmış olmasına rağmen acil servisteki kullanım kolaylığı, efektifliği ve manevraların etkisinin kalıcı olup olmadığına dair yeterli çalışma bulunamamıştır [4].

Bu çalışmada acil serviste stabil dar ve geniş QRS kompleksli taşikardi yönetiminde 4 farklı vagal manevra ele alınıp kullanım kolaylığı ve efektifliği açısından klinik karşılatırmaları yapılacaktır.

MATERYAL VE METOD

Bu araştırma altı ay boyunca yılda yaklaşık 190000 hasta kabul eden Denizli Servergazi devlet hastanesinin acil servislerinde gerçekleştirildi. Bu çalışmaya stabil dar/geniş QRS kompleksli taşikardi ile başvurup 17 yaşından büyük olan hastalar dahil edildi. Çalışmaya katılmayı kabul eden hastalar randomize ve eşit bir şekilde 4 gruba dağıtıldı. Ilk gruba karotis sinüs masajı (KSM), ikinci gruba REVERT yöntemi (hasta oturur vaziyetteyken 10 cc'lik enjektör içine 10 saniye boyunca tek nefesle üfledikten sonra sırtüstü yatırılarak ayakları 90 derece yukarıya kaldırılır), üçüncü gruba modifiye REVERT(REVERT yönteminden farklı olarak 60 cc'lik enjektör kullanılır) ve dördüncü gruba uvula uyarımını sağlamak için abeslang yöntemi uygulandı. Modifiye REVERT'te 60 cc'lik enjektörün kullanılmasının nedeni hastalar tarafından daha kolay tutuluyor ve üflerken intratorasik basıncı daha fazla artırıyor olmasıdır. Bu 4 uygulama sırasında hastalar güvenlik çemberine alınacak ve hertürlü acil durum için hazırlıklar yapıldı.

DAHİL OLMA KRİTERLERİ:

Stabil dar/geniş QRS kompleksli taşikardi semptomları olup (çarpıntı, nefes darlığı, terleme, anjina..vs) acil serviste çekilen EKG'sinde dar/ geniş QRS'li taşikardisi saptanan hastalar

Nabzı ≥ 150/dk olan hastalar.

DIŞLAMA KRİTERLERİ:

Gebe olan hastalar

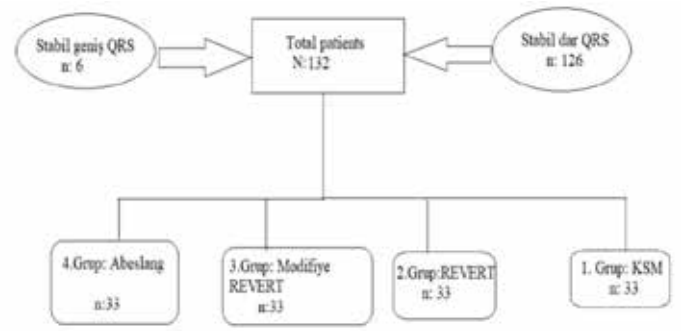
Geçici iskemik atak (GİA) veya inme öyküsü olan hastalar

Tek taraflı karotis arter darlığı olan hastalar

Karotis arter üfürüm olan hastalar

BULGULAR

Çalışma süresi boyunca dahil edilen 132 hastanın 126'sı dar, 6'sı ise stabil geniş QRS taşikardisi vardı. Geniş QRS taşikardisi olan hastaları gruplara randomize olarak gruplara dağıtıldı (1. Ve 4. Gruplara 1'er, 2. ve 3. Gruplara 2'er hasta olacak şekilde). Ilk grupta krotis masajı ile 1(%3), 2. grupta REVERT yöntemiyle 3(%9.1), 3. grupta modifiye REVERT yöntemiyle 9(%27.3) ve 4. grupta Abeslang yöntemiyle 6(%18.2) hastanın taşikardi hızı kırılmıştır (Şekil 1). Stabil geniş QRS'li taşikardilerin hiçbiri valsalva yöntemleriyle kırılamadı.



Şekil 1: Çalışmaya dahil edilen hastaların dağılımı

TARTIŞMA

Bu çalışmada stabil dar/geniş QRS'li taşikardilerin normal ritme döndürülmesinde en iyi vagal manevra yöntemi modifiye REVERT olarak saptanmış olup ardından abeslang yöntemi, REVERT yöntemi ve en az etkili olarak karotis masajı olduğu görülmüştür(Tablo 1). Öte yandan Hiçbir geniş QRS'li taşikardi vagal manevra ile normal ritime dönmemiştir. Vagal sitmülasyonu sağlamak için birçok vagal manevra mevcuttur. Bu çalışmalar birkaç çalışmada sıklıkla ikili olarak karşılaştırılmış olmasına rağmen acil serviste ekinliği ve efektifliği bakımından en uygun vagal manevraya varılamamştır [5-10]. Bu çaışma, Modifiye REVER yönteminin acil servisteki stabil dar ve geniş QRS'li taşikardilerinin yönetiminde oldukça yaralı bir vagal manevra olduğunu ve KSM'in etkinliği az olduğunu göstermiştir.

Tablo 1: Stabil taşikardilerin yönetiminde uygulanan çeşitli valsalva manevralarının etkinliği

GRUPLAR	HIZI KIRILAN	HIZI KIRILMYAN	TOPLAM
1. Grup sayı	1	32	33
%	3,0	97,0	100
Adjuted residuel	-2,1	2,1	
2. Grup sayı	3	30	33
%	9,1	90,9	100
Adjuted residuel	-1,0	1,0	
3. Grup sayı	9	24	33
%	27,3	72,7	100
Adjuted residuel	2,4	-2,4	

GRUPLAR	HIZI KIRILAN	HIZI KIRILMYAN	TOPLAM
4. Grup sayı	6	27	33
%	18,2	81,8	100
Adjuted residuel	.7	-.7	
Toplm sayı	19	113	132
%	14,4	85,6	100

SONUÇ

Bu çalışma, acil servise stabil dar/geniş QRS taşikardi şikayetiyle başvuran hastalara vagal manevranın uygulanacağı düşünüldüğünde öncelikle modifiye REVERT ve abeslang yönteminin tercih edilmesini önerir, özellikle yaşlı ve TİA/SVO gibi öyküsü olan hastaların gerek komplikasyonu fazla olması gerekse etkiniğinin az olmasından dolayı karotis masajını önermemektedir. Öte yandan stabil geniş QRS taşikardi yönetiminde vagal manevranın etkin olmadığını gösteren bu çalışma bu konu ile ilgili daha büyük örneklemli çalışmaların yapılmasını önermektedir.

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YOK ARTIK! KÜNT TRAVMAYA BAĞLI DİVERTİKÜL PERFORASYONU; OLGU SUNUMU

GİRİŞ

Kolon duvarından dışa doğru keseleşmelere divertikül denir. Divertiküllerin çok sayıda olması da diverikülozis olarak adlandırılmaktadır. Divertikülozisin yaşla arttığı ve erkeklerde daha sık olduğu görülmüştür (1). Seksan yaş üzerindeki kişilerin %50-70'inde divetikülozis saptanmıştır (2). Diverikülozisin en önemli komplikasyonlarından biri perforasyondur (3). Ancak perforasyonun trvamay bağlı oluşması oldukça nadir olup litertürde az sayılı vaka raporlanmıştır (4).

OLGU

62 yaşında erkek şoför, araç içi tarfik kazası sonrası acil servise getirildi. Genel durumu iyi, vital bulguları stabil (Tansiyon: 145/85 mmHg, oda havasındaki saturasyonu %98, ateş: 36.4 C0, nabız: 89/dk, Ağrı: karında yaygın hasasiyet şeklinde). Özgeçmişinde hipertansiyon, demir eksikliği anemisi ve divertikülozisi olan hastanın ACE inhibitörü ve asetilsalisilik asit kullanmaktaydı. Kendi arabasını yaklaşık 100-110 km/saat hızla giderken önüne atlayan köpeğe çarpmamak için manevra yapmaya çalışırken beton duvra çarpmış. Arabanın kaput kısımında yaklaşık %45 deformite oluşmuş. Hastanın genel durumu iyi, bilinci açık, oryante ve koopre idi. Kafa travması olmayan hastanın göğüsünde emniyet kemer izi ve batın kısmında yaygın bir cilt abrazyon ve ekimoz alanları mevcuttu. Batın muayenesinde defans veya rebaund saptanmamakla birlikte yaygın bir batın hasasiyeti mevcuttu. Sağ ve sol tansiyonda anlamlı bir fark saptanmadı, üst ve alt ektremitelerin nabızları hissedilmekteydi. Nörolojik muayene ve tüm vucüt dermatomlarının duyu ve ağrı muayensi olağandı. Primer bakıda C, B, A, D kontrol edildikten sonra hasta güvenlik çemberine alınıp eFAST yapıldı. eFAST'te analmlı bir patoloji saptanmayan hastadan kan grubu, hemogram, KCFT, BFT, elektrolitler, INR ve etanol tetkikleri istendi ve EKG çekildi. Orali kapatılan hastanın iv kristaloid verildi. Kontrol muayenesinde akut gelişen bir durum olmamakla birlikte karın ağrısı devam etti. Hastadan alınan tetkiklerin sonuçlarına göre HGB: 13.7 mg/dl, WPC: 9,2x103 mg/dl, CRP: 4,3 mg/L, BFT, KCFT, elektrolitler, etanol ve INR normal sınırlar içerisindeydi. Çekilen batın tomografisinde; inen kolon ve sigmoid kolonda multiple milimitrik divertiküler dolum fazlalıkları saptandı. Ayrıca mezenter yağ planlarında serbest hava dansiteleri, kirlenme ve serbest sıvı dikkati çekmiş olup divertikülozis ve divertikül perforasyonu lehine yorumlandı (Şekil 1). Hasta künt travmaya bağlı dervertikül perforasyonu ön tanısıyla acil ameliyate alındı.

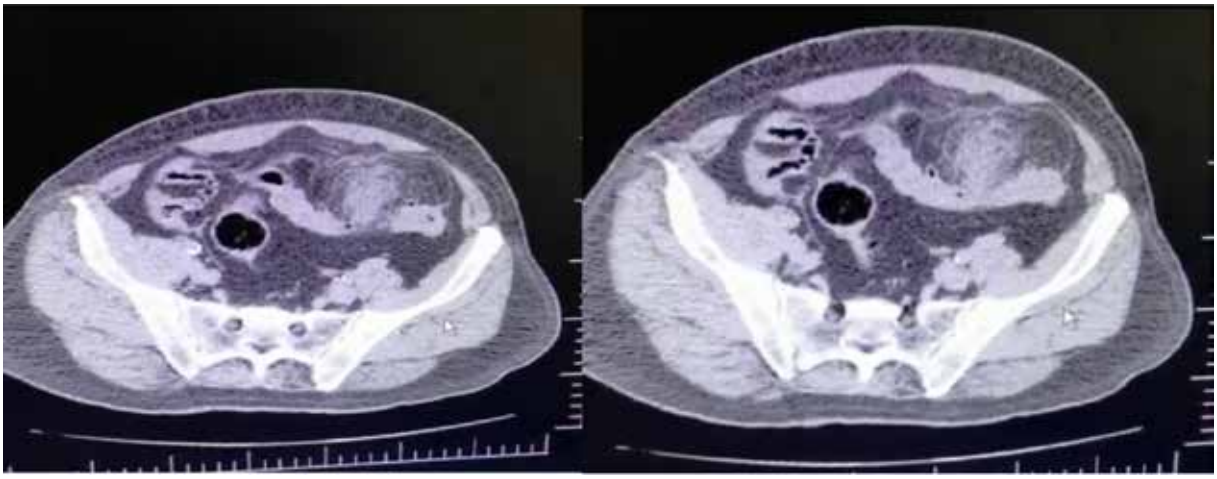
TARTIŞMA

Diverikülozisin en önemli komplikasyonlarından biri perforasyon olmasına rağmen diverikülozisin perforasyonun travamaya bağlı oluşması oldukça nadir olup literatürde az sayılı vaka raporlanmıştır. Kasım 2022 tarihine kadar yapılan literatür taramasına göre tarvmaya bağlı divertikül perforasyonu gelişen toplam 7 vaka raporlanmıştır (5-11). Bu vakaların hepsinde erkek cinsiyeti hakim olduğu ve yaş ortalaması 60.2 civarında olduğu görülmüştür. Tarvmaların hepsinde yüksek enerjili travma gerçekleşmiş olup en sık rastlanan mekanizmanın tarfik kazası (4 vaka) olduğu ardından da yüksekten düşme (2 vaka) ve Amerikan futbolu maçında oluşan bir travam (1 vaka) sırasıyla takip etmiştir. İnce barsak divertikülleri kolon divertikülerine göre daha az saptanmasına rağmen travmaya bağlı gelişen divertikül perforasyonu vakalarının çoğu (5 vaka) meckle divertikülü perforasyonu olduğu görülmüştür. Taranan vakalarının yarısından fazlasında (4 vaka) semptomlar 4 saat sonra gelişmeye başlamış olup vakaların 2'sinin karın ağrısından ziyade sırt ağrısından şikayet ettiği raporlanmıştır.

Bizim vakamızda da hastanın cinsiyeti, yaşı ve travma mekanizması literatürde raporlanan tüm vakalarla uyum sağlayıp semptom ve semptom başlama saati bakımından rapolanan vakaların çoğuyla uyumluk göstermiştir.

SONUÇ

Künt travmaya bağlı divertikül perforasyonu çok nadir bir durumdur. Divertikülozis öyküsü olup yüksek enerjili travma geçiren ve nedeni açıklanamayan yaygın karın ağrısı olan vakalarda divertikül perforasyonu ekarte edilmelidir. Başta meckle divertikül öyküsü olan hastalar olmak üzere bütün divertikülözis öyküsü olan yüksek enerji travma sonucunda acil servise başvuran yaşlı ve/veya sırt ağrısı olan erkeklere dikkat edilmelidir. Bu hastaları taburcu edilmeden önce de en az 4 saat takip edilmesi uygun gibi görülmektedir.



Şekil 1: Multiple milimitrik divertiküler dolum fazlalıkları, mezenter yağ planlarında serbest hava dansiteleri, kirlenme ve serbest sıvı görülmektedir.

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Isolated perforation of a duodenal diverticulum following blunt abdominal trauma (Metcalfe et al 2010).

REKTAL MUAYENE SIRASINDA GELİŞEN ANI KALP DURMASI SONRASI HIPOKSIK BEYIN HASARI; OLGU SUNUMU

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GİRİŞ

Rektal muyene karın ağrısı ile başvuran hastaların muayenesinde önemlidir. Acil servislerde ve yoğun bakımlarda rektal muayene ve fekal tıkaç boşaltımı yaygın olarak uygulanır. Anorektal acillerde, gastrointestinal kanamalarda, kronik kabızlık ve prostat değerlendirimi gibi pek çok klinik sunumda gerekli görülen bir fizik muayene unsurudur. Uygulama hasta için rahatsız edici bulunuyorsa da olumsuz sonuçları bakımından oldukça az zararlı kabul edildiğinden sıklıkla başvurulur. Bilinen olumsuz sonuçları arasında anal fistül gelişimi, kolon perforasyonu ve kanama en sık görülenlerdir.

Her iki cinsiyette benzer oranlarda olmakla birlikte; yaşlılarda, engellilerde, kanama bozukluğu olanlarda, fiziksel aktivitesi azalmış yatağa bağımlı hastalarda rektal muayeneyi gerektiren klinik sunumlar artar. Bu artış her türlü tıbbi müdahaleye ilişkin olumsuz sonuçlarıda beraberinde getirebilir. Ani nabızsızlık acil olarak müdahale gerektiren bir klinik durumdur. Rektal muayene sırasında ani kalp durması gelişen vakamızı sunuyoruz.

OLGU

Hasta yakınları yaşanan tıbbi sürecin bilimsel amaçla kullanılabileceği hususunda bilgilendirildi. Yazılı onamları alındı.

66 yaşında erkek hasta bilinen parkinson ve hipertansiyon tanıları ile aspirasyon pnömonisi sebebiyle enfeksiyon hastalıkları servisinde yatarak tedavi alıyor iken karın ağrısı, kabızlık, batında şişlik ve hasssiyet gelişmesi üzerine genel cerrahiye danışıldı. Hastaya ileus ön tanısı ile rektal muayenesinin yapılmasına karar verildi. Hastanın o günkü işlem öncesi takiplerinde Beyaz küre:12770, Hemoglobin:10,9, Trombosit sayısı:268000, Glukoz:116, Kreatin:0,86, AST:16, ALT:17, Sodyum:142, Potasyum:3,76, Kalsiyum:8,11, Magnezyum:1,19, Prokalsitonin:0,39 olarak incelendi. Rektal muayene sırasında muayenenin henüz başında solunum durdu ve nabız alınamadı. Hasta acil olarak moniterize edildi ve mavi kod ekibine durum bildirildi. Hasta moniterizasyonunda nabızsız elektriksel aktivite ve bradikardi gözlendi. Hastaya acil olarak kardiyopulmoner resusitasyon uygulandı. Hasta entübe edildi ve 3. Basamak yoğun bakım ünitesine devir edildi. Çekilen elektrokardiyosunda(EKG) belirgin bir patolojiye rastlanılmadı. Hasta mekanik ventilatöre bağlandı. Bilinç kapalı, sözel yanıt yok, göz açma yok,ağrılı uyaran yanıtı alt eksteremitelerde mevcut olmakla birlikte üst ekstremitede alınamadı. Glaskow koma skoru(GKS) değerlendirmesinde 6 olarak değelendirildi. Hastanın kalp ritimleri inotrop destek tedavisi ile normal olarak geri döndü. Müdahale hemen sonrası Arter kan gazı(AKG) değerlendirmesinde PH:7,18, PO2:91,8, PCO2:75,4, HCO3:27,6, Baz Açığı: 2,4, Laktat:7,30, Glukoz:230, alınan kan örneklerinde Glu:200, Kreatin:1,24, AST:41, ALT:29, CRP:100, Sodyum:144, Potasyum:3,85, Albumin:27,7, Beyaz Küre 14.500, Hemoglobin:10,9, Trombosit sayısı:302000, Ddimer:1163, olarak geldi. Hasta medikal tedavisi düzenlendi ve moniterizasyon takibinde olağan seyir gözlendiğinde bilgisayarlı tomografiye yönlendirildi. Kolonik anslarda genişleme, gaz-gaita retansiyonu, Jejunal ve ileal anslarda ileus ile uyumlu dilatasyon izlendi. En geniş olduğu yerde ileal ans yaklaşık 4 cm ölçülmüştür. Çekum transvers çapı 10 cm, Rektum transfer çapı 9 cm olarak ölçülmüştür(Resim1). Hasta ileus için medikal tedavi ve izleme alındı. Hastanın bilinci takip süresince hiç açılmadı, ağrılı uyarana dönem dönem göz açması gerçekleşti fakat anlamlı bakış elde edilemedi. Yatışının 92. Günü olan sunumun hazırlandığı bu güne değin inotrop destekleri kapatılamadı. Yineleyen akciğer enfeksiyonları ile mücadele etti. Enteral olarak beslenen hastanın ileus bulguları tamamen düzeldi. 3. Basamak yoğun bakım ünitesinde takip ve tedavisine devam edilmekte.

TARTIŞMA

Yapılan literatür araştırması ile rektal muayene ve fekal tıkaç çıkarımı sırasında bradikardi ve nabızsız elektriksel aktivite sonrası kardiyak arrest sonrası ölüm gelişen tek vaka bildirimine rastlanılmıştır(1)we report a rare case of a patient suffering a cardiac arrest and ultimately death likely due to rectal manipulation. A 66-year-old male presented to the Emergency Department (ED. Sampson ve arkadaşları rektal manipulasyon ile bradikardi ve ölüm vakasını sundular. Yaşadıkları tıbbi öyküyü rektal müdahalenin vagal stimülasyon yolu ile parasempatik aktivite artışına yol açtığına dayandırdılar. Bradikardiye sekonder kardiyak arrest geliştiğini savundular. Sundukları vakada hiponatremi ve hipokalemi varlığının artan vagal stimülasyona katkı sağladığını düşündüklerini belirttiler. Onların sundukları hastanın lityum kullanımının lityum ilişkili sinüs düğümde bir baskılanmaya yol açmasının da mümkün olabileceğini belirttiler(1)we report a rare case of a patient suffering a cardiac arrest and ultimately death likely due to rectal manipulation. A 66-year-old male presented to the Emergency Department (ED,(2)lithium remains widely used as a mood stabilizer for the treatment of bipolar disease. The cardiac side-effects of lithium have been well documented, and may induce non-specific T-wave flattening, prolonged QT interval, sinus node dysfunction and also ventricular tachycardia and ventricular fibrillation. We report the case of a 61-year-old male patient diagnosed with bipolar disorder who developed life-threatening cardiac manifestations secondary to severe lithium poisoning. Although hemodialysis was performed and the arrhythmias were adequately treated, the patient died on the sixth day after hospital admission due hemorrhagic complications after tracheostomy.",",container-title":"Indian Journal of Critical Care Medicine : Peer-reviewed, Official Publication of Indian Society of Critical Care Medicine","DOI":"10.4103/0972-5229.99134","ISSN":"0972-5229","issue":"2","journalAbbreviation":"Indian J Crit Care Med","note":"PMID: 22988367\nPMCID: PMC3439772","page":"109-111","source":"PubMed Central","title":"Severe arrhythmia after lithium intoxication in a patient with bipolar disorder admitted to the intensive care unit","volume":"16","author":[{"family":"Menegueti","given":"Mayra Gonçalves"},{"family":"Basile-Filho","given":"Anibal"},{"family":"Martins-Filho","given":"Olindo Assis"},{"family":"Auxiliadora-Martins","given":"Maria"}],"issued":{"date-parts":[["2012"]]}}},"schema":"https://github.com/citation-style-language/schema/raw/master/csl-citation.json"} . Bizim vakamızın muayene öncesinde herhangibir yaşamı tehtid edebilecek elektrolit bozukluğu yoktu. Bildirilen bir diğer vaka da ise 29 yaşında Atrial Fibrilasyonu(AF) olan bir hastada, rektal müdahale sonrasında anında sinüs ritmine dönüş bildirildi. Vagal uyaran yolu ile AF'nun sinüs ritmine dönüştürmede denenebilecek bir yol olarak, rektal müdahale önerildi(3).

Rektal muayene sırasında ventriküler taşikardi gelişimi ile ilgili de vaka takdimleri vardır. Munter ve arkadaşları 74 yaşında erkek hastanın rektal muayene sırasında ventriküler fibrilasyon geliştiğini bildirdikleri vakada, EKG'DE herhangibir değişiklik olmaksızın kardiyak enzimlerin artış gösterdiği transmural bir enfaktüs sunulmuştur(4)indicating a nontransmural myocardial infarction. Although controlled studies have not shown any ill effects of rectal examination in patients with acute myocardial infarction, there have been multiple case reports of bradycardia, ectopy, and ventricular arrhythmias resulting from rectal examination. The postulated etiology of the ectopy is twofold; increased vagal tone from rectal parasympathetic innervation or increased sympathetic tone from anxiety-stimulated catecholamine release. Rectal examination is definitely indicated in a subset of patients including those with gastrointestinal or genitourinary complaints, unexplained hypotension or anemia, trauma, and neurological deficits, and those who will receive anticoagulation or thrombolytic therapy. In the remaining patients, the decision must be made on a case-by-case basis. Awareness of and precautions for possible ill effects of the examination are prudent.",",container-title":"The American Journal of Emergency Medicine","DOI":"10.1016/0735-6757(89. Aynı bildiride kardiyak ritm değişikliklerinde; parasempatik uyaran ile vagal tonus artışı ve anksiyete ile ilişkili katekolamin artışının mekanizmada rol aldığı savunuldu(4)indicating a nontransmural myocardial infarction. Although controlled studies have not shown any ill effects of rectal examination in patients with acute myocardial infarction, there have been multiple case reports of bradycardia, ectopy, and ventricular arrhythmias resulting from rectal examination. The postulated etiology of the ectopy is twofold; increased vagal tone from rectal parasympathetic innervation or increased sympathetic tone from anxiety-stimulated catecholamine release. Rectal examination is definitely indicated in a subset of patients including those with gastrointestinal or genitourinary complaints, unexplained hypotension or anemia, trauma, and neurological deficits, and those who will receive anticoagulation or thrombolytic therapy. In the remaining patients, the decision must be made on a case-by-case basis. Awareness of and precautions for possible ill effects of the examination are prudent.",",container-title":"The American Journal of Emergency Medicine","DOI":"10.1016/0735-6757(89.

Akut myokart enfaktüsünde rektal müdahalenin etkilerinin araştırıldığı çalışmada hastalar akut myokart enfaktüsü sırasında rektal müdahale yapılanlar, akut myokart enfaktüsü sırasında rektal müdahale yapılmayanlar ve akut myokart enfaktüsü olmaksızın rektal müdahale yapılanlar olarak 3 grupta 480 hastanın incelendiği çalışmada kalıcı aritmi ve vital bulgu değişikliğinin gözlenmediği bildirilmiştir. Rektal muayene stabil akut myokart enfaktüslü hastalarda güvenli bulunmuştur(5).

SONUÇ

Rektal muayene fizik muayenenin tamamlanması için eşsiz bir uygulamadır. Alternatifi bazı klinik durumlarda neredeyse yoktur. Özellikle immobil hastalarda gelişen kronik kabızlıkta ve fekal tıkaçın mekanik tahliyesinde yoğun bakımlarda sağlık çalışanlarınca sıklıkla uygulanmaktadır. Anemi, kanama bozuklukları, antikoagulan ilaç kullanımı, nörolojik defisitler, travma rektal müdahalenin yapılmaması gereken klinik durumlardır. Rektal muayene hasta özelinde kara verilmesi gereken bir uygulamadır. Otonom sinir sistemi ilişkili kardiyak etkilerinin varlığı dikkate alınmalıdır. Her rektal müdahalenin mümkün olduğunca hastaya detaylı bilgi verilerek, sedatize ve moniterize hastalarda uygulanımını öneriyoruz.

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ACİL SERVİSE BAŞVURAN CİDDİ PNÖMONİLİ HASTALARDA RED BLOOD CELL DİSTRİBUTİON WİDTH (RDW) ALBÜMİN ORANININ (RAR) PROGNOZ İLE İLİŞKİSİ

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GİRİŞ: Toplum kökenli pnömoni (TKP), yoğun bakım ünitesine (YBÜ) yatışların en sık nedeni ve mortalitesi oldukça yüksek bir akciğer enfeksiyonudur. Bu nedenle TKP yönetiminde kötü prognozlu yüksek riskli hastaların erken tespiti kritik önem taşımaktadır (1). Günümüzdeki çalışmalarda başvuru sırasındaki Kırmızı Kan Hücresi Dağılım Genişliği (RDW) ve albumin'in TKP'li hastalarda kötü prognostik belirteçler olduğu gösterilmiştir (1,2). Bu nedenle çalışmamızda acil servise başvuran ciddi pnömonili hastalarda RDW'nin albumine oranının (RAR) prognoz ile ilişkisi araştırılmıştır.

GEREÇ VE YÖNTEM: Acil serviste ciddi TKP tanısı alıp YBÜ'ye yatırılan sırasıyla toplam 123 hasta retrospektif olarak incelendi. 18 yaş üstü kadın, erkek ve güncel rehberlere göre ciddi TKP tanısı onaylanan hastalar çalışmaya dahil edildi (3,4). Hastane kökenli veya aspirasyon pnömonisi, aktif tüberküloz, kanser, hematolojik hastalık, immunsupresyon tedavi alanlar ve PCR pozitif olanlar çalışma dışı bırakıldı. RAR düzeyleri, acil servise başvuru sırasında rutin tam kan analizinden elde edilen RDW(%)'nin albumine bölünmesiyle hesaplandı. Albumin, RDW ve RAR düzeyleri ölen, yaşayan, mekanik ventilator (MV) ihtiyacı olan ve olmayan, vazopressör destek alan ve almayan, hastane yatış süresi ≤10 gün ve >10 gün olan dört hasta grubu arasında kıyaslandı. İlaveten bu üç laboratuar parametresinin mortalite tahminindeki etkisini belirlemek için ROC analizi yapıldı ve sensitivite ile spesifitesi hesaplandı. Çalışmanın tümünde tip-I hata oranı %5 olarak baz alındı ve p<0,05 değeri anlamlı olarak kabul edildi. Çalışmada istatistiksel analizler SPSS 21.0 (IBM Inc, Chicago, IL, USA) programı kullanılarak yapıldı.

BULGULAR: Yaşayan ve ölen hastaların yaş, cinsiyet, albumin, RDW ve RAR düzeylerinin karşılaştırılması Tablo 1 de gösterildi. Buna göre ölen hastalarda yaş, RDW ve RAR düzeyleri yaşayanlara kıyasla anlamlı olarak daha yüksek iken, albumin daha düşüktü (hepsi için p<0,001). Cinsiyet açısından her iki grup arasında anlamlı fark bulunmadı (p=0,85). MV ve vazopressör desteği alan hastalarda RDW ve RAR düzeyleri, MV ve vazopressör desteği almayanlarla kıyaslandığında anlamlı olarak yüksek iken, albumin düzeyleri ise düşük bulundu (hepsi için p<0,001) (Tablo 2). Fakat RDW, albümin ve RAR ile hastane yatış süresi açısından anlamlı fark bulunamadı (p=0,45, 0,34, 0,42) (Tablo 2). Mortalite tahmininde RAR cut–off değeri 0,538 iken, % 97,8 sensitivite ve % 97,4 spesifite ile RDW ve albümine göre en yüksek tahmin gücüne ulaştı (AUC: 0,994, p<0,001) (Tablo3).

TARTIŞMA: Günümüzdeki çalışmalarda başvuru sırasındaki RDW ve albumin'in TKP'li hastalarda kötü prognostik belirteçler olduğu gösterilmiştir (1,2). Özellikle yaşlı hastalarda pnömoni ile albümin düzeyi arasında yakın bir ilişki vardır. Bu hastalarda albümin düzeyinin 3,5 mg/dL'nin altında olması pnömoni oluşumu ve kötü prognoz için bir risk faktörüdür (2). Ren Q ve arkadaşları çalışmasında RDW değerinin ölen hasta grubunda önemli ölçüde daha yüksek olduğunu bu yüzden yüksek RDW değerinin TKP'li hastalarda kısa vadeli olumsuz sonuçlarla ilişkili olduğunu ifade etmişlerdir (1). Bizim çalışmamızda da ölen, MV ve vazopressör destek alan hastalarda RDW düzeyleri, yaşayanlara ve destek almayanlara kıyasla anlamlı olarak daha yüksek iken, albumin daha düşük bulundu (hepsi için p<0,001). Bu yüzden bu hastalarda başvuru sırasındaki RDW ve albümin düzeyleri hastalık şiddetini ve kötü sonuçları öngörebilecek belirteçler olarak kullanılabilir.

Yüksek RDW ve azalmış albümin düzeylerini temsil eden yüksek bir RAR, şiddetli inflamasyonu öngörebilir (5). Ciddi pnömonisi olan kritik hastalarda RAR'ın mortalitenin bağımsız göstergesi olduğu gösterilmiştir (6). Bizim çalışmamızda da RAR düzeylerinin ölen, MV ve vazopressör destek alan hastalarda yaşayan ve destek almayanlara kıyasla daha yüksek olduğu bulundu (hepsi için p<0,001). Ayrıca mortalite tahmininde ROC analizine göre RAR düzeyleri, RDW ve albümine kıyasla daha yüksek sensitivite ve spesifite gösterdi (% 97.8 sensitivite, % 97.4 spesifite ve AUC: 0.994, p<0,001). Bu yüzden RAR düzeyleri RDW ve albümine kıyasla daha güçlü bir prognostik gösterge olabilir.

SONUÇ: Acil servis başvuru sırasında hesaplanan RAR düzeyleri ciddi pnömonili hastalarda prognoz ve mortalite ile ilişkili bir belirteçtir.

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DIAGNOSTIC VALUE OF ULTRASONOGRAPHIC SEPTATION IN THE DIFFERENTIATION OF TESTICULAR HEMTOCELE AND HYDROCELE

İNTRODUCTİON

Although testicular trauma is rare, it can lead to serious pathological conditions. It is very important to recognize these pathologies early and make the necessary interventions. Therefore, when a suspicious pathological condition is detected in the anamnesis and physical examination, USG/Doppler should be performed. The most common cause of non-traumatic scrotal swelling is hydrocele, affecting 1 in 10 children and 1 in 100 adults (1). Hydrocele, which is common and benign compared to other testicular pathologies, may be difficult to distinguish from hematocele, which develops due to testicular trauma and can cause serious consequences.

OBJECTIVE

Many feedbacks are received from physicians other than emergency medicine physicians who do not have advanced Doppler/Ultrasound training, that they cannot distinguish between hydrocele and hematocele ultrasonography. This study aims to differentiate hematocele from hydrocele based on a simple finding (septation) that can be easily recognized by every physician.

MATERIAL AND METHOD

Patients over 18 applied to Idlib Mobile Advanced Surgery Hospital due to testicular pain, swelling and/or ecchymosis between 10.05.2022 and 2.07.2022 were included into this study.

INCLUSİON CRİTERİA

Patients over 18

Patients admitted with testicular pain, swelling and/or ecchymosis

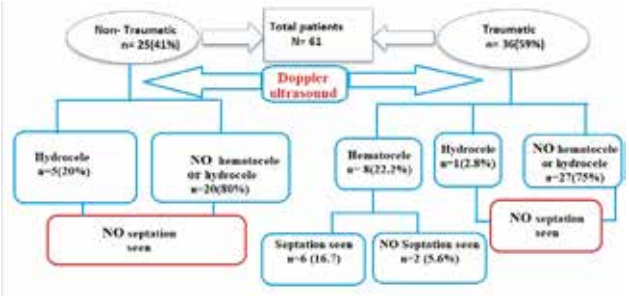
EXCLUSİON CRİTERİA

Patients with history of previous scrotal operation

Patients eith history of scrotal diseases.

DATA COLLECTİON

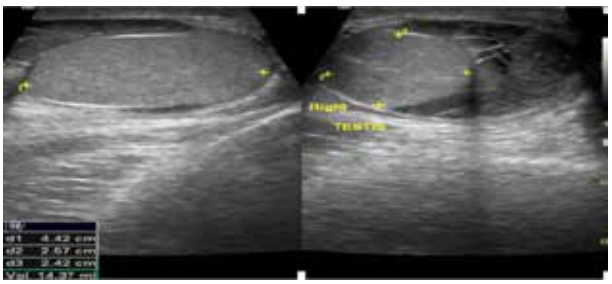
All patients over the age of 18 who applied to the Idlib Mobile Advanced Surgery Hospital due to testicular pain, swelling and/or ecchymosis between 10.05.2022 and 2.07.2022 and who agreed to participate in the study without a history of previous scrotal operation were included in the study. A total of 61 patients were included in the study. Of these patients, 36 (59%) were traumatic and 25 (41%) were non-traumatic (no testicular trauma in the last 6 months) [Figure 1]. All of the patients who applied were in good general condition, their vital signs were stable, and they were not life-threatening. All patients included in the study underwent scrotal Ultrasonography (US)/DOPPLER by an emergency medicine specialist with advanced Doppler/US training.



Figur 1: Çalışmaya dahil edilen hastaların dağılımı ve sonuçları

RESULTS

USG/Doppler was performed on the patients included in the study. An anechoic fluid collection of more than 4 ml surrounding the anterolateral parts of the testis and in some cases extending into the inguinal canal was seen in 5 (20%) of 25 non-traumatic patients (hydrocele). Fluid with an echogenicity of more than 4 ml and containing septation was observed in 6 (16.7%) of 36 patients with trauma, and in 2 patients without septation (hematocele) [Figur 2]. An anechoic fluid collection of around 6 ml was observed in 1 (2.8%) of the 36 trauma patients (hydrocele?).



Figur 2: Hematocele; This patient, who had a history of blunt trauma 8 days ago, has a moderate-grade septal hydrocele with echo in the right testicle. There is a high probability of hematocele.(US image).

DISCUSSION

Hydrocele is an abnormal collection of fluid between the visceral and parietal layers of the tunica vaginalis and/or along the spermatic cord. In the normal scrotum, 1–2 mL of serous fluid may be observed in the potential tunica vaginalis cavity and should not be mistaken for hydrocele. It may be congenital or acquired (primary/idiopathic and secondary). Hydrocele is the most common cause of painless scrotal swelling in children. Virtually all hydroceles are congenital in neonates and infants and associated with a patent processus vaginalis, which allows peritoneal fluid to enter the scrotal sac (1). In older children and adolescents, hydroceles are usually acquired and are the result of an inflammatory process, testicular torsion, trauma, or a tumor. At sonography, congenital hydrocele appears as an anechoic fluid collection surrounding the anterolateral aspects of the testis and sometimes extending to the inguinal canal or as a fluid collection with low-level swirling echoes, which are related to protein aggregation or deposition of cholesterol crystals (1, 2). Most congenital hydroceles (80%) resolve spontaneously before the age of 2 years. However, surgical treatment is usually applied in spermatic cord and abdominoscrotal hydroceles.

On the other hand, hematocel, In most of the patients, the injury will be solitary but may be associated with involvement of the penis or urethra. The right side is involved more often than the left side. As the left testis is more dependent, the mobility of the testicle, cremasteric muscle contraction and the tough capsule (tunica albuginea) usually protect it from injury. However a direct blow that drives the testicle against the symphysis pubis may result in contusion or rupture. Rupture is usually accompanied by hematocele formation and scrotal wall ecchymosis. The hematocele may be minimal to moderate because the extruded testicular tissue and bleeding are limited by tunica vaginalis. If on the other hand, tunica vasculosa is involved, the hematocele may be large and compress the testicular parenchyma, eventually leading to parenchymal atrophy if untreated. It may be acute or chronic.

Acute hematocele: In the hyper acute stage, the hematocele if containing unclotted liquid blood appears as an anechoic fluid collection bounded by the tunical sac. With high gain settings, low-level echoes may be seen. With clotting of blood in the tunical sac, hyperechoic areas are noted within the tunical sac, representing the blood clot. With further progression of time, clot lysis occurs and hyperechoic areas progressively reduce in size and number (3).

Chronic hematocele: The US features are anechoic fluid collection with multiple septations in the tunical sac. An increase in the size of the hematocele in comparison to the acute stage is seen in some patients. Reduction in testicular size and compressed testes may also be noted.

Over time, its appearance becomes more complex, with septa, fluid-fluid levels, and echogenic debris indicative of clots. If a hematocele becomes chronic, it may appear as a heterogeneous encapsulated lesion that may calcify and create a mass effect over the contour of the testis. Doppler US/CEUS can help in the differentiation of chronic hematoceles that can mimic a solid mass. Most hematoceles resolve with conservative therapy, although chronic complex hematoceles may require surgical management (4).

CONCLUSION

USG is the most important tool to differentiate testis hematocele and hydrocele in the emergency department. Unlike hydrocele, hemtocele has an increased echogenicity and septations are frequently seen.

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OLGU SUNUMU: ACİL SERVİSTE MİKSÖDEM KOMASI

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ÖZET

Hipotiroidi, tiroid hormonlarının yetmezliği sonucu ortaya çıkan klinik bir tablodur. Miksödem koması; hipotiroidili hastalarda nadir görülse de ciddi bir komplikasyonudur, primer hipotiroidizim hikayesi olan yaşlı kadınlarda daha sık olarak görülebilmektedir. Endokrin acillerindendir ve mortalitesi %80'lere varabilmektedir. Mental durumda değişiklikler, letarji, kognitif fonksiyonlarda azalma, psikoz, hipotermi, hipotansiyon, bradikardi, hiponatremi ve hipoventilasyon miksödem komasında görülebilecek klinik tablolardır. Bu olgumuzda; miksödem komasının, hipotiroidi tanısı olmayan hastalarda dahi ayırıcı tanılar arasında akılda tutulması gerektiğini hatırlatmayı amaçladık.

ANAHTAR KELİMELER: konuşma bozukluğu, miksödem, travma

GİRİŞ

Hipotiroidi, tiroid hormonlarının yetmezliği sonucu ortaya çıkan klinik bir tablodur(1). Miksödem koması; hipotiroidili hastalarda nadir görülse de ciddi bir komplikasyonudur, primer hipotiroidizim hikayesi olan yaşlı kadınlarda daha sık olarak görülebilmektedir. Endokrin acillerindendir ve mortalitesi %80'lere varabilmektedir. Mental durumda değişiklikler(letarji, kognitif fonksiyonlarda azalma, psikoz),hipotermi, hipotansiyon, bradikardi, hiponatremi ve hipoventilasyon miksödem komasında görülebilecek klinik tablolardır. (2) Miksödem koması endokrin hastalıklarının acillerinden birisi olup mortalite %80'lere kadar varabilmektedir. (3,4) Yanıklar, CO2 retansiyonu, GİS kanamaları, hipoglisemi, hipotermi, enfeksiyonlar (pnömoni, infuluenza, idrar yolu enfeksiyonu, sepsis), ilaçlar (amiadoron, anestezik ajanlar, barbitüretlar, beta blokörler, diüretikler, lityum, narkotikler, fenitoin, rifampin, fenotiazinler), inme, operasyonlar, travma, miyokard enfarktüsü, uzamış iyot kullanımı gibi bilinen birçok tetikleyici nedeni bulunmaktadır. (5,6) Hastalar öncesinde uzun süre hipotiroidi kliniği ile seyredebilmektedir. Halsizlik, yorgunluk, uyku hali, kabızlık, soğuğa tahammülsüzlük, deri kuruluğu, ses kalınlaşması, hareketlerde yavaşlama, kilo alımı, kramplar, karpal tünel sendromu, menoraji sık görülen semptomlar arasında yer almaktadır. Hipotiroidili yaşlı hastalarda farklı prezentasyonlara rastlanabilmektedir. Bu bulgular yanlışlıkla Parkinson hastalığı, depresyon, Alzheimer hastalığı olarak yorumlanarak yaşlanmaya bağlanabilir. (1) Tiroid hormon seviyesi çok düşük olan semptomatik hastalar, miksödem tanısı alan hastalar veya komaya doğru seyreden hastalar acilen tedavi altına alınmalıdır (7). Yaşlı ve kardiyak komplikasyonu olan hastalar büyük risk altındadır,bu hastalarda yoğun bakım ve mekanik ventilasyon gerekebilir. Tedavide öncelikle tiroid hormonu verilmeli; hipotermi, hipotansiyon, hiponatremi, hipoglisemi ve hiperkalsemi gibi metabolik bozukluklar düzeltilmeli; presipite eden faktör varsa tedavi edilmelidir. Hipoterminin düzelmesi için ısıtıcı battaniyeler ile yapılan pasif ısıtma tercih edilmelidir. Aktif ısıtma vazodilatasyon ve hipotansiyonu kötüleştirme riski taşır (1).

OLGU

57 yaşında kadın hasta; nefes darlığı nedeniyle kardiyoloji polikliniğine başvurmuş. Yapılan EKO'sunda LV EF %60, hfif MY, hafif TY, PAB normal sınırlarda saptanan hasta, poliklinik hekiminin bilinci uykuya meyilli bulması nedeniyle acil servisimize yönlendirilmiş. Ayrıntılı anamnezinde; 4 yıldır progresif ilerleyip, son 2 aydır devamlı bir şekilde uykuya meyilli olduğu ve çevresine olan ilgisinin azaldığı, son 1 aydır da konuşmasının bozulduğu fakat bu nedenlerle herhangi bir hastaneye başvurmadığı, 2 gün önce yataktan düşen hastanın dış merkez acil servisinde değerlendirildiği, kraniyal tomografisinin çekildiği, nazal fraktür saptandığı öğrenildi. Özgeçmişinde bilinen herhangi bir hastalığı olmadığı gibi kronik ilaç kullanımı da yoktu.

Hastanın başvuru vitalleri TA:191/92 mmHg Sat:82,Ateş:36.4, Nbz:82/dk ve parmak ucu kan şekeri: 192mg/dl idi.

Fizik muayenede oryante koopere ancak uykuya meyilli ve konuşması yavaş ve dizartrikti. Solunum sistemi muayenesinde bilateral krepitan raller ve ronküs saptandı , cildi kuru ve gode bırakmayan pretibial ödemi mevcuttu. EKG normal sinüs ritminde ve düşük voltaja sahipti. Alınan kan gazında pH:7.36 pO_2:51.2 mmHg pCO_2:75.1 mmHg, sat O_2: 83, HCO_3:42.6 mmol/L'ydi. Hastaya oksijen, salbutamol+ipratropium bromür ve budesonid nebul ile furosemid infüzyonu başlandı. Beyin BT ve difüzyon MR görüntülerinde patoloji saptanmayan hastanın Toraks BT'sinde sağda 5.5 solda 2.5cm'e ulaşan plevral effüzyon ve kalınlığı 1 cm'e ulaşmayan perikardiyal efüzyon saptandı. Tanısal torasentez yapıldı. Torasentez mayi incelendiğinde transüda vasıflı olduğu tespit edildi. Laboratuvar değerleri WBC:7,3 HGB:14.7 PLT:253.000 Glukoz:227 mg/dl, kreatinin:1, sodyum:133, klor:98, AST: 34, ALT:43, kalsiyum: 8.9, potasyum: 3.3 olarak sonuçlandı. Kardiyoloji ve göğüs hastalıkları ile konsulte edildi. İlk değerlendirme ve sonuçlarla klinik tablosu açıklanamayan, verilen tedavi ile anlamlı bir düzelme saptanmayan hasta için tiroid fonksiyon testleri istendi. TSH:32,12 serbest T_4:0.15 ve serbest T_3:2.22 olarak sonuçlandı. Yeni tanı hipotiroidi ve miksödem koması tanıları ile steroid tedavisi başlanan hasta, yoğun bakım ünitesine yatırıldı.

TARTIŞMA

Miksödem komasında genellikle görülen üç klinik özellik; değişmiş mental durum, bozulmuş termoregülasyon ve presipite eden bir faktörün varlığıdır. Miksödem komasının erken tanınması hayat kurtarıcı olacağından, hipotermi ve bilinç değişikliği olan her hasta potansiyel miksödem koması gibi kabul edilmelidir Azalmış glukoneogenez ve azalmış insülin klirensi sebebiyle miksödem komasındaki hastada hipoglisemiye eğilim vardır. Hipoglisemi ve dilüsyonel hiponatremi de miksödem koması gelişimine katkıda bulunur (10). Laboratuvar parametrelerinde transaminazlar, kreatinin fosfokinaz, laktat dehidrogenaz artmıştır. EKG'de sinus bradikardisi, düşük voltaj, uzamış QT intervali, T dalgasında düzleşme veya negatifleşme görülebilir. (11) Hipoventilasyon, hipoksi ve hiperkapniye yol açarak patogenezde önemli rol oynamaktadır. Miksödem komasının başlangıç tedavisi; birlikte olabilen daha önce tanı konulmamış adrenal yetersizlik olasılığı nedeniyle glukokortikoid ve yüksek doz tiroid hormon tedavisinden oluşur. Miksödem tedavisinde tedaviye başlamadan önce kortizol, TSH ve tiroid hormonu tespiti için kan örneklerinin alınıp kortizol eksikliği düşünülüyorsa, kan kortizol sonuçlarını beklemeksizin 6-8 saatte bir 50-100 mg hidrokortizon veya eşdeğeri yapılmalıdır. Gelişebilecek solunumsal komplikasyonlar nedeniyle mekanik ventilasyon gerekebileceğinden kritik hastalarda tedavi yoğun bakımda sürdürülmelidir. (11) Ek olarak, altta yatan tetikleyici bir faktör sıklıkla mevcuttur ve tedavi edilmelidir.

Bu olgu nedeniyle nadir görülen ancak hayatı tehdit edici bir komplikasyon olan miksödem komasının acil serviste tanınması ve ayırıcı tanılarda akılda tutularak şuur bulanıklığı ile gelen hastada tiroid fonksiyon testlerinin istenerek erken tanı ve tedavi planlamasını amaçladık.

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POSTCOVİD ENSEFALOPATİ OLGUSU

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ÖZET

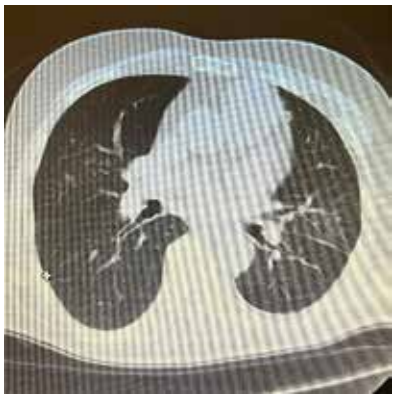
Covid-19 enfeksiyonu pek çok sistemi tutabilmekte ve çeşitli komplikasyonlara yol açabilmektedir. Bu komplikasyonlardan biri de nörolojik sistem tutulumudur. Bu olgu sunumunda SARS-COV-2 enfeksiyonu sonrası gelişmiş olan ensefalopatiyi sunmayı amaçladık.

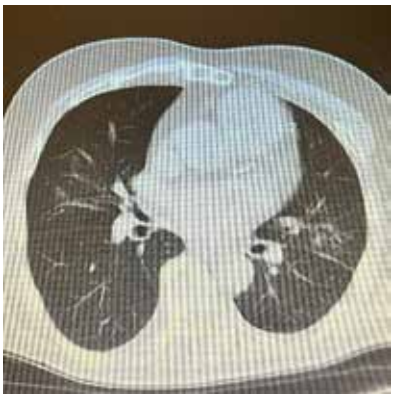
GİRİŞ

Dünya genelinde yayılıp pandemiye yol açan COVİD-19 enfeksiyonu çeşitli klinik tablolarla karşımıza gelmektedir. Yapılan araştırmalarda nörolojik belirti ve bulguların oranı %36 olarak saptanmıştır(1). SARS-COV-2 enfeksiyonunun nörolojik komplikasyonları santral ve periferik olmak üzere 2 kısımda incelebilir. Baş ağrısı en sık santral komplikasyon iken anosmi ve kemosensöriyel disfonksiyon en sık periferik komplikasyonlardır.(2,3) Diğer santral komplikasyonlar içerisinde ensefalopati, ensefalit, inme ve demiyelinizan hastalıklar bulunmaktadır. Ensefalopati bu komplikasyonlar içerisinde nadir görülen postcovid bir hadisedir.

OLGU

76 yaş erkek hasta, bilinen AF, HT, DM, BPH tanılı. Geliş vital parametreleri olağan. Tarafımıza bilinç değişikliği ile başvurdu. Yaklaşık 10 gün önce halsizlik burun akıntısı gibi gribal belirtileri olan hastanın 3 gün önce 37.6 derece ateş, üşüme, titreme ve gecesinde uyuyamama, sabah başlayan amnezi atağı - her zaman kullandığı ilaçları hatırlamama- hareketlerde yavaşlama ve bası hareketleri döngüsel şekilde tekrarlama- yataktan inme ve tekrar çıkma- şikayeti mevcut. Ayrıca hasta entelektüel kapasitesi yüksek bir bireyken, hasta yakınları bu durumda son 3 gündür ciddi bir düşüşün olduğunu ifade etmekte. Nefes darlığı, öksürük, balgam şikayeti yok. Özgeçmişinde koroner by-pass , GİS kanama ve boyun fıtığı operasyonu mevcut. Hastanın muayenesinde zaman oryantasyonunda ve kooperasyonda kısıtlılık mevcut olup dikkatte azalma göze çarpmakta. Komutlara uyuyor fakat hareketlerde yavaşlama mevcut. Lateralizan bulgu ve patolojik refleks yok. Kalan sistem muayeneleri olağan. Laboratuar değerlerinde herhangi bir enfeksiyöz parametre yüksekliği saptanmamıştır. Hastanın 2 gün önce alınan kranial görüntülemelerinde herhangi bir akut patoloji bulunmamakta. Ayrıca 2 gün önce ve bugün alınan COVİD PCR testi negatif gelmiştir. Fakat 2 gün önce çekilen toraks bt'si CO-RADS 3 olarak değerlendirilmiş olup covid pnömonisi ile uyumlu olabilecek tutulum alanı mevcut. Hastanın mevcut durumunda aktif bir enfeksiyon odağı olmadığı için olası postcovid bir komplikasyondan şüphelenildi. Planlanan EEG de tüm hemisferlerde teta yavaş diken dalga görünümü mevcut olup ensefalopati ön tanısı ile hastanın takip ve tedavisi yapılmak üzere nöroloji servisine yatırıldı.





TARTIŞMA

SARS-COV-2'nin SSS'ne geçişinin çeşitli yollarla olabileceği gösterilmiştir. Birçok organda bulunan anjiotensin dönüştürücü enzim-2 (ACE-2) reseptörleri SSS'nde de bulunmaktadır. Bu reseptör SARS-COV-2 için önemli bir hedeftir ve tutulan organa bağlı gelişen çeşitli komplikasyonların önemli bir nedenidir. Ayrıca ACE-2 reseptörleri endotelde de bulunduğu için tutulumu sonucu kapiller geçirgenlik artışı ve dolayısıyla kan beyin bariyerinde bozulma olur. Bu da SSS'ne invazyonu kolaylaştırıcı bir faktördür (4). Diğer bir geçit yolu direkt nöronal invazyondur. Olfaktor sinir tutulumu sonrası virusun aksonal transportu ile nöron boyunca yayılarak SSS invazyonu yaptığı ortaya konmuş (5). Bunların dışında COVİD enfeksiyonunun neden olduğu metabolik patolojiler ve kardiyopulmoner hadiseler sonucu açığa çıkan otoimmun mekanizmalar, sitokin fırtınaları da diğer bir SSS tutulumu yapan nedenlerden biridir. Yoğun inflamatuar yanıt ve sitokin fırtınası metabolik ve hipoksik değişiklikler oluşturup çoklu organ yetmezliğine kadar giden bir klinik oluşturabilir (6,7). Bu hadiseler sonucu bilinç değişikliği ve ensefalopati oluştuğu düşünülmektedir.

SONUÇ

COVİD-19 enfeksiyonunu minimal semptomla ya da asemptomatik geçiren bireylerde de ilerleyen gün ve haftalarda klinikte bozulma olabilir. Bu gibi durumlarda hasta postcovid komplikasyonlar açısından da değerlendirilmelidir. Özellikle yaşlı ve komorbid hastalığı olan bireylerde bilinç değişikliği, ensefalopati gibi SSS tutulumlarına yatkınlık vardır.

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OLGU SUNUMU: STEMI DEĞİL KOUNİS SENDROMU

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ÖZET

Kounis sendromu alerji, hipersensitivite, anafilaksi veya anafilaktoid durumlar ile birlikte akut koroner sendromun eş zamanlı şekilde meydana gelmesi olarak tanımlanmaktadır. Patofizyolojide ana enflamatuar hücreler olan mast hücrelerinin degranulasyonuyla başta histamin olmak üzere çeşitli mediatörlerin salınımı rol almaktadır. Klinik semptomlar ve bulgular alerjik reaksiyonların eşlik ettiği kardiyak semptomlar ile birliktedir. Bu sendromun vazospastik anjinal form, önceden mevcut olan koroner ateromatöz hastalık ve stent ile ilişkili tromboz gibi üç farklı varyantı tanımlanmış olup, tanı koymada öykü, klinik ve laboratuar bulgularının birlikteliği önemlidir.

Bu olgumuzda EKG'de STEMI bulguları mevcut olan hastada anamnezin detaylı alınarak bu tabloya yol açabilecek alerjen madde maruziyetinin sorgulanması ve kounis sendromunun tanınmasını amaçladık.

ANAHTAR KELİMELER: alerji, kounis sendromu, STEMI

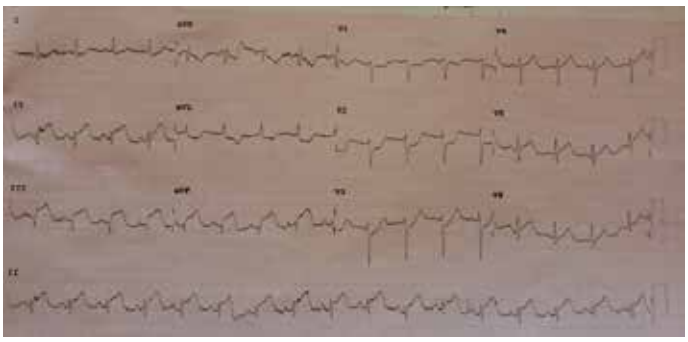
GİRİŞ

Kounis sendromu ; alerji, hipersensitivite, anafilaksi veya anafilaktoid durumlar ile birlikte, makrofaj ve T lenfositler gibi enflamatuar hücrelerin de katıldığı, mast hücreleri ve trombosit aktivasyonu sonucu oluşan koroner spazm, akut miyokard enfarktüsü ve stent trombozunu kapsayan akut koroner sendromun eş zamanlı olarak meydana gelmesi olarak tanımlanmaktadır (1). İlk defa 1991 yılında Dr. Nicholas Kounis tarafından "alerjik anjina" olarak tanımlanmıştır (2). Spesifik mekanizmaları bilinmemekle birlikte, bu sendroma anafilaksi sırasında mast hücreleri tarafından salınan inflamatuar mediyatörler aracılık eder (3). Sendromun insidansı %0,002–%3,4 olarak tahmin edilmektedir (4). ABD'de kounis sendromu ilgili hastane sonuçlarının değerlendirildiği bir çalışmada hastane ölümlerinin %7' sinden sorumlu olduğu raporlanmıştır (5). Hastaların başvuru semptomları olarak akut göğüs ağrısı, göğüste sıkışma, yutma güçlüğü, dispne, senkop, baş ağrısı, halsizlik, mide bulantısı, kusma, ciltte kaşıntı görülürken, klinik bulgulardan soğuk ekstremiteler, hipotansiyon, solukluk, taşikardi, ciltte kızarıklık, bradikardi, kardiyorespiratuar arrest, ani ölüm görülebilir (6).

Bu olgumuzda bilinen kardiyak öyküsü olmayan hastamızda kontrast madde uygulamasına bağlı Tip 1 Kounis sendromunu sunmayı ve acilde bu tanının da düşünülmesini amaçladık.

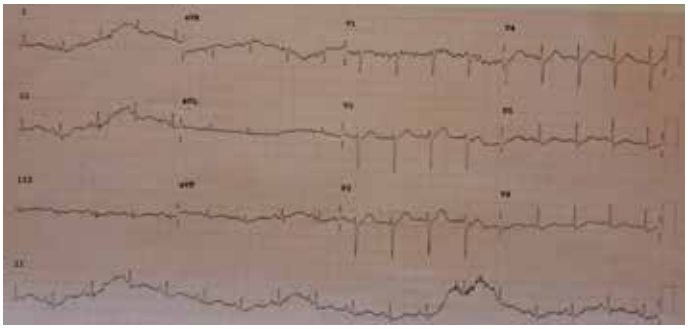
OLGU

69 yaşında erkek hasta, intravenöz (IV) opaklı batın bilgisayarlı tomografisi (BT) çekimi sonrası ani bilinç kaybı gelişmesi nedeniyle verilen mavi kodla acil ekibi tarafından radyoloji ünitesinde değerlendirildi. Prostat Ca nedeniyle takip edilen hastanın, karaciğer metastazı düşünülerek kontrastlı batın BT'si alındığı, 90cc ioheksol içeren kontrast madde ile çekim tamamlandıktan hemen sonra ani bilinci kaybı geliştiği öğrenildi. İlk muayenede bilinç kapalı, TA: 53/33 mmHg, Nb: 114 atım/dk, SpO2: 94, Ateş: 36.4 C ve parmak ucu kan şekeri 126 şeklinde ölçüldü. Acil servise getirilen hastanın vücudunda yaygın kızarıklıklar gelişti. Bilinen herhangi bir kardiyak öyküsü olmayan hastanın çekilen ilk EKG'sinde inferior derivasyonlarda ST yükselmesi ile birlikte anterior ve lateral derivasyonlarında ST çökmesi görüldü. (Resim 1)



Resim 1.

İntramuskuler (IM) 0.5 mg 1/1000 adrenalin uygulaması sonrasında hastanın kan basıncı 108/64 mmHg seviyesine yükseldi, bilinci açıldı. Hastaya 300 mg asetilsalisilik asit ve 300 mg klopidogrel oral olarak, feniraminmaleat 45,5 mg İV olarak uygulandı. Hastanın muayenesinde; akciğerlerinde ek ses yoktu, uvula ve yumuşak damakta ödem izlenmedi ve diğer sistem muayenelerinde patoloji saptanmadı. Takibinde vücuttaki kızarıklığı tamamen gerileyen hastanın kontrol EKG'sinde tamamen normale döndüğü görüldü (Resim 2)



Resim 2.

Hastanın alınan kan tetkiklerinde Troponin-I : 13.3 (cut off 0,0-19,8) olarak sonuçlandı. Kardiyoloji görüşü istenen hastanın yapılan EKO'sunda duvar hareket kusuru saptanmadı ve koroner yoğun bakım ünitesine yatışı yapıldı. Takiplerinde 6.saatte Troponin-I değeri 112.7, 12.saatte 32, 24.saatte ise 9 olarak sonuçlandı. Hasta iki gün kardiyoloji servis takibi sonrasında asetilsalisik asit 100mg ve klopidogrel 75 mg reçete edilerek taburcu edildi.

TARTIŞMA

Kounis sendromunun üç farklı varyantı tanımlanmıştır (Tablo 1). Tip I varyantı, aterosklerotik koroner arter hastalık öyküsü olmayan, enflamatuar mediyatörlerin akut salınımına sekonder olarak koroner arter spazmı gelişen hastaları kapsamaktadır. Bu hastalarda kardiyak biyobelirteçler artmış veya normal düzeyde olabilir ancak en sık ST segment yükselmesi olmak üzere elektrokardiyografik anormallikler sergiler (7). Tip II varyantı, mevcut ateromatöz hastalık öyküsü olan hastaları içerir (8). Tip III varyantı, ciddi bir alerjik reaksiyonun ardından stent trombozu veya stent restenozu ile başvuran, öncesinde perkütan koroner müdahalesi olan hastaları kapsamaktadır(9).

Bu sendromun tedavisinde; tip I varyantı olan hastalarda, tek başına alerjik durumun tedavisi semptomları ortadan kaldırabilir. Hidrokortizon gibi intravenöz kortikosteroidlerin 1–2 mg/kg/gün dozunda ve H1 antihistaminik olan difenhidraminin 1-2 mg/kg dozunda ve H2 antihistaminiklerden ranitidinin 1 mg/ kg dozunda uygulanması yeterlidir (6). Kalsiyum kanal blokerleri ve nitratların uygulanması, aşırı duyarlılığa bağlı vazospazmı ortadan kaldırabilir. Bununla birlikte nitrogliserin, hipotansiyon ve taşikardiye neden olup mevcut anafilaktik reaksiyonu daha da

komplike hale getirebilir (6). Tip II varyantı olan hastalarda tedavi protokolü kortikosteroid ve antihistaminik ile birlikte akut koroner sendrom tedavi protokolünü de içermelidir. Anafilakside ilk tercih edilecek ve hayat kurtarıcı bir ilaç olan epinefrin, Kounis sendromunda iskemiyi şiddetlendirebilir ve koroner vazospazmı kötüleştirebilir. Ağır vakalarda sülfit içermeyen epinefrinin intramüsküler olarak uygulanması tercih edilir (önerilen dozlar 0.2–0.5 mg [1:1000] IM) (6). Daha öncesinde koroner kalp hastalığı olan ve beta bloker kullanmakta olan hastalarda epinefrin etkisiz veya yeteri kadar etkili olmayabilir. Bu durumda glukagon tercih edilebilir (1-5 mg/ IV /5 dk, sonrasında 5–15 µg/dk infüzyon). Hastalarda akut göğüs ağrısını hafifletmek için verilen morfin, kodein ve meperidin gibi opiatlar, şiddetli mast hücre degranülasyonuna neden olup, alerjik reaksiyonu şiddetlendirebileceği için dikkatle uygulanmalıdır. Ağrı palyasyonunda kardiyak debiyi etkilemeyen, hafif mast hücre aktivasyonu gösteren fentanil ve türevleri tercih edilebilir (6)

Tablo 1 : Kounis Sendromu Varyantları ve Özellikleri

		Tip 1	Tip 2	Tip 3
Atopi öyküsü		+/-	+/-	+/-
Koroner arter hastalığı		Yok	Ateroskleroz	Koroner stent
Laboratuvar	Triptaz	N /↑	N /↑	N / ↑
	Histamin ve histamin metabolitleri	N /↑	N /↑	N / ↑
	Kardiyak enzimler	N / ↑	↑	↑
	EKG değişikliği	+	+	+
Tanı	Anjiografi	N	Aterosklerotik darlık	Stent trombozu
	Patoloji	-	-	Trombüs aspiratında eozinofil ve mast hücreleri varlığı

Kounis sendromu nadir görülen bir durum değildir ancak literatürde ve klinik pratikte oldukça az sayıda bildirilmiştir. Bunun sebebi doğru tanımlanamayan veya teşhis edilemeyen olgular olabilir. Kounis sendromu etiyolojisi geniş bir yelpazeye yayılan, her cins, yaş, ırk ve coğrafik bölgeden insanı etkileyebilecek klinik bir tablodur. Allerjik reaksiyonlar veya benzeri anaflaktik reaksiyonların en sık etkilediği yerlerden olan kalp ve koroner arterlerin etkilenmesi durumunda yapılacak doğru teşhis, uygun tedavi için hayati önem taşır. Bu bağlamda fizik muayene öncesi alınacak tam ve doğru bir öykü, en az teşhis ve tedavi kadar ciddiye alınmalıdır.

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ACİL SERVİSTE REKTAL TÜP UYGULANABİLİR Mİ?

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ANAHTAR KELİMELER: Rektal tüp, karın ağrısı, batın distansiyonu

GİRİŞ

Abdominal distansiyon bağırsaklarda aşırı miktarda gaz birikmesine bağlı bağırsak duvarının gerilmesi sonucu oluşur. Normal olarak bireyin vücudunda 150 cc kadar gaz vardır (mide, kalın bağırsakta). Bu gaz ağız ve anal yolla çıkarılır. Hasta spontan olarak gazı çıkaramadığı durumlarda karında dolgunluk, gerginlik, ağrı, kramp ve solunum güçlüğü görülür. Bu hastalara rektal tüp uygulanması gerekir. Rektal tüp uygulaması bağırsaklarda aşırı derecede gazın olması durumunda, bu gazın çıkarılması için yapılan uygulamadır. Hastalar hareketsiz kalmasından dolayı bağırsakların peristaltizminde azalmaya bağlı olarak karında şişkinlik ve gaz-gaita çıkaramama şikâyeti ile başvururlar. Ayakta direk batın grafisi ile basit bir şekilde bağırsaklarda biriken aşırı gaz görülebilir. Nazogastrik sonda ve/veya rektal tüp takılarak basitçe tedavi edilebilirler. Tedavi edilmediği takdirde bağırsakların yaygın distansiyonu nedeniyle bağırsakları besleyen kanlanmayı bozarak iskemiye neden olabilir.

OLGU

İ.U. 55 yaş erkek hasta karında şişlik şikayeti ile acil servise başvurdu. Şikayetinin dün gece başladığı ve en son gaz gayta çıkışının 24 saat önce olduğu öğrenildi. Hastanın karın ağrısı şikayeti yoktu.

Fizik muayenede karında inspeksiyonda yaygın distansiyon görünümü mevcuttu. Pertküsyonda tüm kadranlarda timpan sesi vardı. Palpasyonda defans ve rebaund yoktu.

Özgeçmişinde 1 yıl önce mesane CA nedeniyle opere olmuş. Kanser tanısından sonra geçirdiği SVO nedeniyle hasta yatalak kalmış.

hastadan kan değerlerinde patoloji saptanmadı. çekilen ayakta direk batın grafisinde genişlemiş bağırsak anslarıyla birlikte yaygın hava sıvı seviyeleri görüldü (şekil-1). bunun üzerine hastaya kontrastlı tüm batın tomografisi çekildi. bt raporunda rektosigmoid bileşkenin proksimalinde kalan kolonik anslarda, özellikle sigmoid ansta ap çapı 8 cm'ye varan yaygın dilatasyon izlenmektedir. sigmoid kolon trasi tortuyoze görünümdedir. çıkan kolon ve çekum dilate görünümde olup lümen içinde yaygın fekaloid materyaller mevcuttur. görünümde mekanik ileus oluşturabilecek belirgin bir intra/ekstralüminal patoloji izlenmemektedir. tomografi incelemesi yoğun gaz incelemesi nedeniyle suboptimal olarak değerlendirildi (şekil-2).

hastaya rektal tüp uygulandı. tüp sonrası kontrol grafide hava sıvı seviyelerinin büyük bir kısmının gerilediği görüldü (şekil-3).

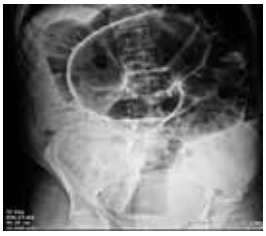
hasta genel cerrahi tarafından değerlendirildi tüp sonrası kontrol abdomen bt ile tekrar değerlendirilmesi istendi.

hastaya kontrol bt çekildiğinde hava miktarında azalma görüldü. ek cerrahi patolojiye rastlanmadı. hastda genel cerrahi akut patoloji düşünmedi. hasta önerilerle taburcu edildi.

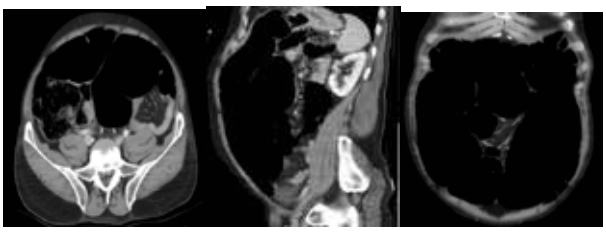
SONUÇ

Rektal tüp uygulaması her ne kadar palyatif tedavide daha sık kullanılsa da nadiren acil servise başvuran hastalarda uygulanması gerekmektedir. Acil servis uygulama açısından önemli olan noktalar ise şu şekilde sıralanabilir:

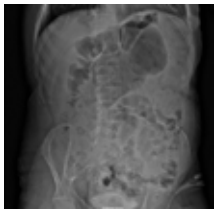
1. akut batın ile gelen hastaların tanı ve tedavilerini geciktirmemeli, akut batın ekarte edilmeli.
2. rektal tüpten fayda görecek hastalar doğru seçilmeli.
3. Rektal tüp uygulama açısında deneyimli olmalı.



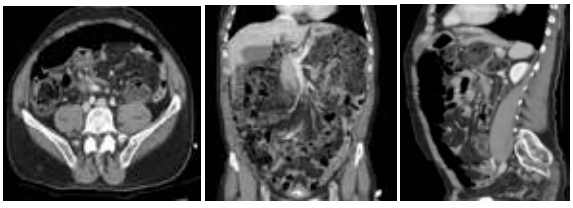
Şekil-1: Rektal tüp uygulama öncesi ayakta batın grafisi.



ŞEKİL-2: Rektal tüp uygulama öncesi batın BT



Şekil-3: Rektal tüp uygulama sonrası ayakta batın grafisi.



Şekil-4: Rektal tüp uygulama sonrası batın BT

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ACİL SERVİSE BAŞVURAN EPİLEPTİK VAKADA ÇİFT TARAFLI ANTERIOR OMUZ ÇIKIĞI: OLGU SUNUMU
BİLATERAL ANTERİOR SHOULDER DİSLOCATİON İN AN EPİLEPTİC CASE PRESENTİNG TO THE EMERGENCY DEPARTMENT:CASE REPORT

Omay SORGUN
M.Ali Koray ÇAMURDAN

Özet Omuz eklemi çıkıkları çoğunlukla tek taraflı ve öne doğrudur, nadir de olsa iki taraflı omuz çıkığına rastlanmaktadır. Eş zamanlı iki taraflı öne omuz çıkığı ise oldukça nadir görülmektedir.. Omuz ekleminde, posterior olanlarına genellikle nörolojik nedenlerin, anterior olanlarına ise travmatik nedenlerin sebep olduğu belirtilmektedir. Hastamızda bilateral anterior omuz çıkığlna neden olan grand-mal nöbet, nadir bir neden olarak görülmüştür. Ayrıca acil servise başvuran epilepsi hastalarında hekimler genel olarak epilepsinin neden ve tedavisine yoğunlaştıkları için bu tip vakaların atlanabileceği düşüncesi ile olgunun paylaşılmasına karar verilmiştir.

ANAHTAR KELİMELER: Bilateral anterior omuz çıkığı , epilepsi, Grand-mal nöbet

SUMMARY: Shoulder joint dislocations are mostly unilateral and anterior, although rare, bilateral shoulder dislocations are encountered. Simultaneous bilateral anterior shoulder dislocation is very rare. In the shoulder joint, it is stated that the posterior ones are usually caused by neurological causes, and the anterior ones are caused by traumatic causes. Grand-mal seizure causing bilateral anterior shoulder dislocation in our patient was seen as a rare cause. In addition, it was decided to share the case with the thought that cases may be missed in epilepsy patients who applied to the emergency department, since physicians generally concentrate on the cause and treatment of epilepsy.

KEYWORDS: Shoulder dislocation, bilateral anterior dislocation of the shoulder, epilepsy, grand-mal seizure

GİRİŞ

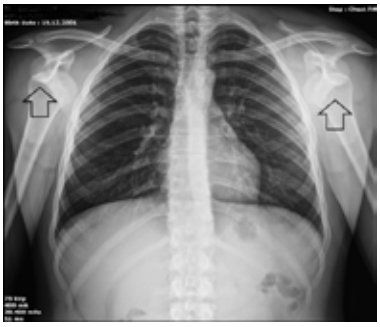
Omuz ekleminin tüm yönlerdeki iki taraflı eşzamanlı çıkıkları oldukça nadir yaralanmalardır.(1-8) Olguların çoğu arkaya omuz çıkığı şeklindedir ve bildirilen olgular genellikle grand mal tipi epilepsi nöbetlerinde görülen yaygın kasılmalar sonrası (4,5,7,8) veya güçlü elektrik çarpmalarından/elektrik şoklarından sonra (9) ortaya çıkar. Diğer taraftan, iki taraflı öne omuz çıkıkları epilepsi nöbeti geçiren hastalarda,(10,11) ilaç bağımlısı kişilerde görülen yaygın kasılmaların eşlik ettiği nöbetlerde,(3) diabetik nokturnal hipoglisemide,(12) eklem gevşekliği olup istemli olarak omuz eklemini çıkartanlarda(13) veya travma sonrası(2) oluşabileceği bildirilmiştir. Sportif aktiviteler esnasında da iki taraflı öne omuz çıkığı gelişebileceği bildirilmiştir.(1,10,14,15) Bunların dışında, tanısı konmamış iki taraflı öne omuz çıkığı (16)ile önce bir tarafın travma sonrası, sonra diğer tarafın travma olmaksızın çıktığı (6) olgular da tanımlanmıştır. Elektrik çarpması sonrası iki omuzun farklı yönlere çıktığı kırıklı-çıkık olgusu da bildirilmiştir.(17) Bu makalede, epilepsi nöbeti geçiren bir hastamızda oluşan iki taraflı eşzamanlı öne omuz çıkığı olgumuz sunulmuştur.

OLGU

Yirmi yaşındaki erkek hasta , epilepsi tanısı ile takipli, ailesi tarafından yeni bir atak geçirdiği beyanı ile acil servise başvuruyor.Yakınları, hastanın hastaneye getirilmeden önce şiddetli bir kasılma nöbeti geçirdiğini tanımladılar. Hastanın öyküsünden, 5 yıldır epilepsi nedeniyle tedavi gördüğü ve düzenli olmamak üzere günde 2 kez 500 mg sodyum valproat(depakin chrono BT 500) aldığı öğrenildi.

Acil servise başvurusunda hasta post iktal hastadan, epileptik atağı tetikleyen bir durumu tespit amacı ile; tüm rutin kanlar, idrar tahlili,beyin tomografisi ve akciğer grafisi istendi.

20 mg /kg dan fenitoin yüklemesine başlandı.



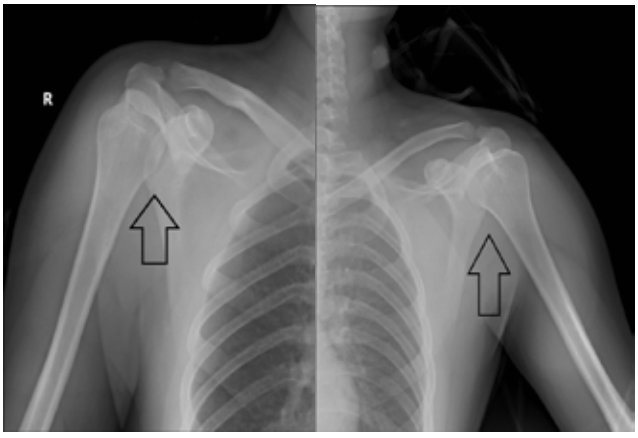
Çekilen akciğer grafisinde bilateral omuz çıkığı tespit edilmesi üzerine ortopedi hekimi ile konsülte edildi.

Şekil 1:20 yaş erkek hasta. Çekilen akciğer grafisinde çift tarflı anterıor omuz çıkığı

Ortopedi hekimi ile birlikte her iki omuz Kochler yöntemiyle redükte edildi, kontrol grafileri istendi.

Kontrol grafilerinde redüksiyonun başarılı olması sebebi ile hasta ortopedi hekimi tarafından kontrole çağrıldı.

Nöroloji polikliniğine de kontrol ve ilaç düzenlenmesi açısından yakınlarına bilgi verilerek taburcu edildi.



Şekil 2-3 Redüksiyon sonrası görüntüler

TARTIŞMA

Acil servisler ülke genelinde yoğunluğu en fazla olan hastane birimleridir.Hızlı şekilde anamnez , muayene, karar verme , sonlandırma işlemleri esastır.

Bu vakada olduğu gibi post iktal bilinci açık olmayan hastalardan anamnez almak ise oldukça zordur. Olayı görenlerden alınan anamnez bilgileri sağlıklı olmadığı gibi biz hekimleri yanlış yönlendirebileceğini asla unutmamalıyız.

Hastamızda omuz ile ilgili bir şikayet beyan edilmemesine karşın rutinde alınan bir takım tetkikler sonucunda vaka yakalanmıştır. Bu tarz vakalarda antiepileptik yükleme sonrası en az 6 saat gözlem ve yeni bir epileptik atak olmadan hastanın bilinci açık şekilde taburculuk öncesi fizik muayene son derece önemlidir.Ancak antiepileptik ajan yükleme sonrası, sedatize olan hastanın kontrol muayenesi bir o kadar da zordur.

TEŞEKKÜR

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INTERLEUKIN-7 AS A BIOMARKER OF COVID-19 SEVERITY

OBJECTIVE:

Coronavirus disease 2019 (COVID-2019), caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), has become a worldwide epidemic and claimed millions of lives. Rapid diagnosis of patients and implementation of optimal therapy in order to avoid disease progression to a severe condition is a key element of medical management. Hence, we undertook this meta-analysis to study serum interleukin-7 (IL-7) levels in COVID-19 patients in relation to disease severity.

METHODS:

This systematic review and meta-analysis was performed according to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISM) statement. A systematic search using the following strategy was carried out by the two reviewers (M.P. and L.S) in PubMed, Embase, Web of Science, Scopus and Cochrane databases until August 10th 2022: („COVID-19" or "SARS-CoV-2" or "novel coronavirus") AND ("interleukin 7" or "IL-7") were searched for studies reporting IL-7 levels among severe vs. non-severe COVID-19 patients.

The Newcastle–Ottawa Quality Assessment Scale (NOS) was used for quality assessment of the included studies. All analyses were performed using SPSS version 26 (SPSS Inc, Chicago, IL, USA). The analysis was performed using a random-effects model to calculate pooled mean differences (MDs) with 95% confidence intervals (CIs) to measure the effect size. Heterogeneity was assessed with I^2 test. Two-sided P values < 0.05 were regarded to indicate nominal statistical significance.

RESULTS:

Six studies included 536 COVID-19 patients were included [1-6]. Quality assessment by NOS showed 9 studies of fair quality. Pooled analysis showed that IL-7 levels in severe vs. non-severe varied and amounted to 61.2±64.9 pg/mL vs. 26.3±35.0 pg/mL (MD = 1.83; 95%CI: -1.81 to 5.47; p=0.32).

CONCLUSIONS:

Hence, interleukin 7 showed higher values in the severe group compared to non-severe COVID-19 patients, however the difference was not statistically significant. Due to the above results, this makes IL-7 probably a good candidate for a prognostic marker of the severe condition of COVID-19 patients and allows for a more accurate assessment of the possible progression of the disease and the implementation of the necessary therapies that may inhibit its progression much earlier.

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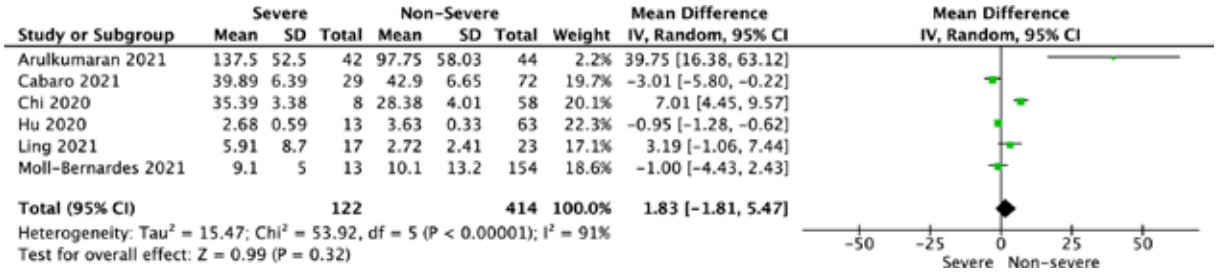

Figure 1. Forest plot of interleukin 7 levels among severe vs. non-severe COVID-19 patients groups. The center of each square represents the mean differences for individual trials, and the corresponding horizontal line stands for a 95% confidence interval. The diamonds represent pooled results.

NADİR BİR OLGU: ERİŞKİN MENTAL RETARDE HASTADA AMELİYATLA MİDEDEN BİRDEN ÇOK YUTULAN YABANCI CİSİM ÇIKARILMASI

GİRİŞ: Yabancı cisim yutulması genellikle çocuklarda kazaen bilinç dışı görülebilirken, erişkinlerde ise mental retarde, intihar amaçlı ya da psikiyatrik rahatsızlığı olan kişilerde meydana gelir. Tanı ve tedavisinde sıklıkla direkt grafiler kullanılır. Yabancı cisimlerin %90'a yakını gayta ile kendiliğinden atılır, %10-20'si endoskopik olarak, %1'i ise cerrahi yolla çıkarılır. Bu çalışmada mental retarde olup, kendiliğinden düşmeyen, endoskopik yöntemle de çıkarılamayan ilk defa karşılaştığımız midede 3 yabancı cisim için cerrahi uyguladığımız olguyu sunmayı amaçladık.

OLGU SUNUMU: İki gündür devam eden epigastrik bölgede karın ağrısı ve bulantı şikayetleri olan 30 yaşında erkek hasta acil servise getirildi. Bilinen ek hastalığı olmayan mental retarde hastanın yapılan fizik muayenede epigastrik bölgede palpasyonla hassasiyeti mevcuttu. Laboratuvar tetkiklerinde patoloji yoktu. Direkt grafide dik yerleşimli metal cisim görüntüsü, çekilen acil batın bilgisyarlı tomografide duodenumda metalik dansite görüntüsü olduğu ancak obstrüksiyon lehine bulgu olmadığı gözlendi. Gastroskopisinde mide ve duodenumdan çok sayıda küçük parçalar halinde madeni ve plastik maddeler görülmüş olup, büyük kısmı çıkarılmıştır. Duodenumda birbirine yapışık halde 2 adet yemek kaşığı görülmüş, mideye kadar forseple çekilmiş ancak kardiyadan geçemediği için çıkarılamamış, kaşıkların forsepse dolanması sonucu forseps geri çekilememiş ve bir ucu midede diğer ucu ağız dışında bırakılmış idi. Acil operasyona alınan hastada mide korpusa yapılan 5 cm'lik kesi ile mideden 1 adet plastik bardak ve forsepse dolanmış halde 2 adet yemek kaşığı çıkarıldı, forseps ağız yoluyla dışarı alındı. Mide primer kapatıldı. Ameliyat sonrası 7. gün hasta şifa ile taburcu edildi.

TARTIŞMA VE SONUÇ: Yutulan yabancı cisimlerin özelliği, şekli, büyüklüğü, vücuda alınma zamanı tanı ve tedavi protokolünü şekillendirmede önemlidir. Özefagustan başlayarak pilor, ileo-çekal valv ve splenik fleksura gibi darlıklar bulunmaktadır. 2 cm'den küçük, düzgün şekilli, madeni para, iğne, vida gibi yabancı cisimler 3-5 gün içinde kendiliğinden düşer, 2 cm'den geniş ve 6 cm'den uzun yabancı cisimler ile 5-6 günde mideden distale inmeyen yabancı cisimlerde endoskopik ya da cerrahi yöntemler kullanılmaktadır. Bizim olgumuzda obstrüksiyon ve fistül riski nedeniyle 15 cm uzunluğunda 2 adet metal kaşık ve 5 cm çaplı plastik madde mideden cerrahi yöntemle çıkarılmıştır.

Midedeki yabancı cisimler; cismin özelliği, şekli, büyüklüğü ve midede kalma süresine bağlı olarak tanı ve tedavisi yapılabilen vaka türleridir. Opak cisimlerde direkt karın grafisi tanıda kullanılmakla birlikte tedavi sıklıkla kendiliğinden düşmesi ya da endoskopik yolla mümkündür. Ancak spontan ya da endoskopik yöntemle çıkması mümkün olmayan ve komplikasyon gelişmiş yabancı cisimlerde cerrahi yöntem kaçınılmazdır.

ANAHTAR KELİMELER: Mide, Yabancı cisim, Ameliyat

EFFECT OF INTRAVENOUS VITAMIN C SUPPLEMENTATION FOR PREVENTING COVID-19 DISEASE AGGRAVATION

Monika Olczak-Pruc, Lukasz Szarpak, Togay Evrin, Michal Pruc, Francesco Chirico, Michal Matuszewski, Raúl Juárez-Vela, Alla Navolokina, Frank W. Peacock

KEYWORDS: vitamin c, Ascorbic Acid, SARS-CoV-2, COVID-19, severity

OBJECTIVE

The potentially fatal disease, coronavirus disease 2019 (COVID- 19), has caused a worldwide pandemic since December 2019. Proinflammatory cytokines and acute blood indicators including CRP, ferritin, D-dimer, and others rise as a result of this infection. A cytokine storm that follows the first viral cytopathic effects might result in severe negative health consequences including acute respiratory distress syndrome (ARDS). To date, a variety of anti-inflammatory therapies, including steroids, vitamins, minerals, and immunomodulating drugs, have been attempted to fight COVID-19. Ascorbic acid also known as vitamin C, is commonly recognized for its capacity to reduce inflammation and scavenge free radicals.

Vitamin-C can support the epithelial barrier against pathogens and help with innate and adaptive immunity. Vitamin-C deficiency can increase the risk of infections. According to the reports, serum levels of vitamin-C are significantly lower in patients with septic shock compared with the patients with non-septic shock, and the incidence of organ damage is inversely related to the level of vitamin-C. Given the positive effect of intravenous vitamin C for viral - induced acute respiratory distress syndrome and its role for enhancing the function of immune system, we aimed to investigate the correlation of the intravenous vitamin-C supplementation with reduce in-hospital mortality among COVID-19 patients.

METHODS

This meta-analysis was reported in accordance with the Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) guidelines. Electronic databases were interrogated (Scopus, Embase, MEDLINE and the Cochrane Library) using the terms „Vitamin C" OR "L-Ascorbic acid" OR "Ascorbic Acid" AND "COVID-19" OR "Corona Virus Disease 2019" OR "novel coronavirus" OR "SARS-CoV-2". The search was conducted from January 2020 to September 1st 2022. We include only randomized crossover trials. Review manager (Revman version 5.4, The Cochrane Collaboration, The Nordic Cochrane Centre, Copenhagen, Denmark) was used. The risk ratio (RR) and 95% confidence interval (CI) was calculated using the Mantel-Haenszel mode.

RESULTS

Nine studies were meet of inclusion criteria's of this meta-analysis. The 9 studies added up to 654 patients (313 treated with vitamin-C and 341 treated without vitamin-C). Mean age of patients treated with and without COVID-19 was 52.86±16.74 vs. 54.9±16.72 years, respectively.

Pooled analysis of in-hospital mortality among COVID-19 patients treated with and without vitamin C supplementation varied and amounted to 24.0% vs. 35.8% respectively (RR = 0.73; 95%CI: 0.61 to 0.88; p<0.001; Figure 1). The individual study and overall bias summaries are reported in Figure 2.

CONCLUSIONS

We find significantly reduction of in-hospital mortality in the COVID-19 group who were treated with intravenous vitamin-C. These results indicate that the administration of vitamin C should be considered in COVID-19 therapy and may have a positive effect as a supplement to previously known basic therapies.

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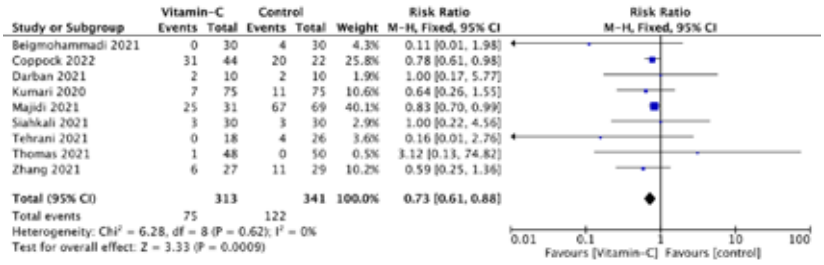

Figure 1. Forest plot in-hospital mortality among COVID-19 patients treated with and without vitamin C. The center of each square represents the risk ratios for individual trials, and the corresponding horizontal line stands for a 95% confidence interval. The diamonds represent pooled results.

Figure 2. A summary table of review authors' judgements for each risk of bias item for randomized trials

INTERLEUKINS AS A BIOMARKERS OF COVID-19 SEVERITY AMONG PEDIATRIC PATIENTS

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KEYWORDS: interleukin, biomarker, COVID-19, severity, meta-analysis

OBJECTIVE

Coronavirus disease 2019 (COVID-19), a newly emerging acute respiratory disease, is caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) initially detected in Wuhan, China. An uncontrolled overproduction of inflammatory cytokines contributing to an aberrant systemic inflammatory response known also as a cytokines storm, is a major pathological feature of acute respiratory distress syndromes being severe manifestations of COVID-19, thus highlighting its potential as a biomarker and therapeutic target for COVID-19 in adult patients as well as in pediatric population. We aimed to determine associations of circulating levels of inflammatory interleukins (IL-2, L-4, IL-6 and IL-10) with severity of COVID-19 in pediatric patients by systematic review and meta-analysis.

METHODS

This meta-analysis was reported in accordance with the Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) guidelines. A systematic review was conducted by searching the Scopus, Embase, MEDLINE and the Cochrane databases of studies available through August 25th, 2022. For database searching we use the terms „cytokin" OR "interleukin" OR "IL-2" OR "IL-4" OR "IL-6" OR "IL10" AND "COVID-19" OR "Corona Virus Disease 2019" OR "novel coronavirus" OR "SARS-CoV-2". Screening of articles, data extraction and quality assessment were carried out by two authors independently. Review manager (Revman version 5.4, The Cochrane Collaboration, The Nordic Cochrane Centre, Copenhagen, Denmark) was used. The standard mean difference (SMD) and 95% confidence interval (CI) were calculated using random or fixed-effects models. The heterogeneity of the results across studies was assessed using the I^2 statistic.

RESULTS

Our analysis showed that different interleukin levels among severe vs. non-severe groups. Pooled analysis showed in severe vs. non-severe statistical difference in levels of: interleukin-2 (SMD = 1.08; 95%CI: 0.28 to 1.89; p=0.008), interleukin-6 (SMD = 1.87; 95%CI: 0.47 to 3.28; p=0.009) and interleukin-10 (SMD = 5.51; 95%CI: 1.61 to 9.41; p=0.006). However, no statistically significant differences were observed in the level of interleukin 4 between the severe and non-severe groups (SMD = 0.54; 95%CI: -0.92 to 2.00; p=0.47).

CONCLUSIONS

Circulating levels of IL-2, IL-6 and IL-10 are significantly associated with severe COVID-19 in pediatric population. These biomarkers might help in prognostic risk stratification of pediatric patients with COVID-19.

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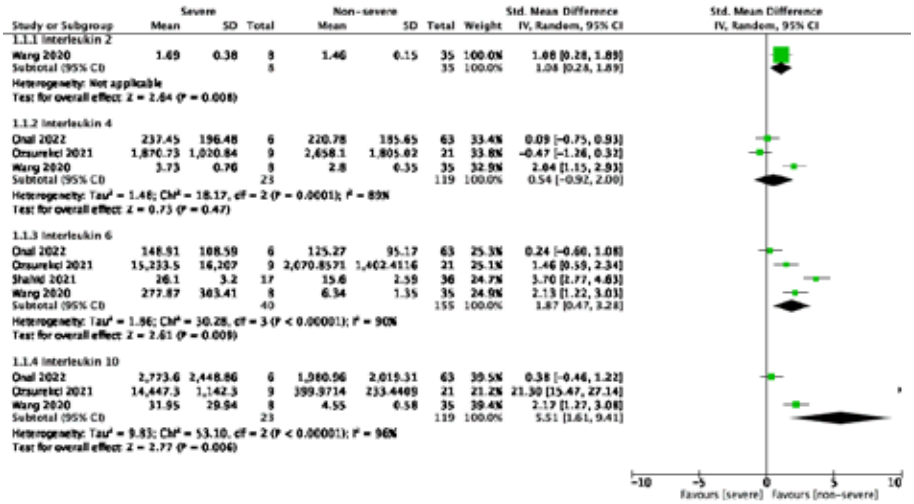

Figure 1. Forest plot of interleukin levels among severe vs. non-severe pediatric COVID-19 patients. Center of each square represents the standard mean differences for individual trials, and the corresponding horizontal line stands for a 95% confidence interval. The diamonds represent pooled results.

A CASE OF TORSADES DE POINTES DUE TO THE ANTIHISTAMINE INTOXICATIN

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INTRODUCTION: In patients who come to the emergency department with complaints of dizziness, recurrent syncope and seizures, it is very important to follow the correct path in diagnosis and treatment as it will reduce morbidity and mortality. We report a 56-year-old white male patient with significant QTc prolongation and multiple TdP-related episodes of circulatory arrest following diphenhydramine use. This case is presented in order to consider the cardiotoxic effects of the antihistamine drug diphenhydramine as a preliminary diagnosis in patients without any previous disease. A case who was admitted to the coronary intensive care unit with the diagnosis of Torsades de Pointes, which had a rare side effect as a result of the use of a ntihistamine , is presented.

KEYWORD: Cardiotoxicity, Anti-histamine, Prolonged QTc, Torsades de pointes (TdP)

CASE REPORT: A 56-year-old male patient was referred to our hospital emergency department (ER) due to ventricular arrhythmias, myoclonic contractions after being admitted to the external hospital with syncope attack several times in the last 2 hours. Cardiogenic syncope events mostly occurred at rest and were preceded by attacks of ventricular tachycardia and a symptom of blackouts. Each arrhythmia-associated episode of syncopea resolved on its own with a spontaneous return to the sinus rhythm before intervention (Figure 1). His past medical history was important for the diphenhydramine he had used for flu symptoms 1 month earlier. His vital signs were as follows: temperature 36 degrees, heart rate 90 beats per minute (bpm), blood pressure 140/70 mm Hg, respiratory rate 15 breaths per minute and 99% oxygen saturation in room air. Complete blood counts were normal; The full metabolic panel was notable for only 3.4 mg/dL of potassium. Magnesium and phosphorus were within normal limits. An electrocardiogram (ECG) was taken on the ER and showed significant QTc elongation in V1 and V2 leads and type 1 ST elevation in concave type Brugada (Figure 2). In the second hour of his presence in the emergency room, he had multiple TdPs leading to cardiorespiratory arrest. Cardiopulmonary resuscitation was started and successfully brought back to life. Therefore, he was referred to the coronary intensive care unit. The onset of syncope episodes was associated with diphenhydramine use. He stated that he had no cardiovascular symptoms prior to diphenhydramine use and had no family history. An echocardiogram was taken immediately after admission, and severe hypertrophic left ventricular size (IVS 1.6 cm) and normal left ventricular systolic function were observed, and the ejection fraction was between 60%. Their cover structure was degenerative. On the first electrocardiogram (ECG), sinus rhythm was seen with QRS dilation and prolonged corrected QT interval (QTc) of 520 ms per report. 3 hours after admission, TdP improved with medical treatment and electrical cardioversion; QRS enlargement, QTc prolongation and ventricular arrhythmias continued throughout the initial course. A lidocaine bolus was used for a short time. Symptom control was tried by starting IV Magnesium and Potassium for myocardial membrane stabilization. IV beloc and brevibloc were administered. In the coronary intensive care unit of the hospital where he was followed, it was learned that he had more than one TdP rhythm that led to cardiorespiratory arrest. The QTc of the patient given mexiletin was 490 Msn and shortened according to the day of arrival. Laboratories revealed normal serum electrolytes. After the left subclavian vein puncture in the coronary intensive care unit, the pocket was opened in the left pectoral region and the ICD Pacemaker battery was placed. and electrolytes were kept within normal range. However, the corrected QT interval was significantly prolonged 30 days after the last reported intake, increasing the suspicion of congenital long QT syndrome (LQTS) induced by diphenhydramine abuse (Figure 3).

Figure 1 . First arrival ECG of Torsades de Pointes patient

Figure 2 . During the syncope episode, the Electrocardiogram (ECG) shows marked prolonged QTc during presentation, Brugada type 1 ECG changes in V1 and V2 leads, prolonged PR interval, and abnormal T waves

Figure 3 . The patient's first electrocardiogram after transfer

He was admitted for a follow-up visit 10 days after being discharged from the hospital, during which time he reported no symptoms other than dizziness. However, the ECG continued to show prolonged QTc at the 450 ms limit.

CONCLUSION: Syncope and seizure are common causes of emergency room admission. The priority is to carry out patient vital controls and then to ensure stabilization. Classic H1 antihistamines, an over-the-counter flu or allergic therapeutic agent, bind to adrenergic and muscarinic receptors with higher affinity than next-generation antihistamines and can cross the blood brain barrier. Therefore, anticholinergic and central nervous system (CNS) suppressive effects are more common. This case report highlights the complex physiological interaction between repolarization changes caused by stalling electrolyte imbalances, as well as the potential for malignant ventricular arrhythmias associated with diphenhydramine-induced QT prolongation. To the best of our knowledge, this is a rare published case of diphenhydramine-related TdP and macroscopic T-wave changes.

VASKÜLER YARALANMA İLE ACİL SERVİSE BAŞVURAN ÇOCUK HASTALARIN CERRAHİ YÖNETİMİ

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Amaç

Çocuk hastalarda vasküler yaralanmalar nadir izlenir. Ancak, gereken tedavinin uygun ve zamanında yapılamaması durumunda, bu yaralanmalara bağlı olarak çocuk hastalarda ciddi mortalite ve morbidite görülebilir. Bu nedenle, nadir izlenen bu vaka grubunda edinilen deneyimlerin geriye dönük değerlendirilmesi önem arzeder. Bu çalışmanın amacı, vasküler yaralanma ile hastanemize başvuran çocuk hastaların tedavisinde uygulanan cerrahi yöntemlerin incelenmesi ve elde edilen sonuçların değerlendirilmesidir.

Method

Çalışma, Mart 2019 ile Haziran 2022 yılları arasında Ankara Şehir Hastanesi Acil servise vasküler yaralanma ile başvuran ve cerrahi tedavi uygulanan çocuk hastalarda gerçekleştirildi. Hastaların yaş, cinsiyet, ırk, yaralanma türü ve mekanizması , ilk değerlendirmedeki klinik durumu , hastanede kalış süresi, yoğun bakım yatış süresi , kullanılan tanı yöntemleri, gerçekleştirilen prosedürler ve taburculuk sonrası takiplerindeki ilk görüntüleme verileri retrospektif olarak incelendi.

BULGULAR

Mart 2019 ile Haziran 2022 yılları arasında 9 çocuk hasta, major vasküler yaralanma tanısı ile opere edildi. Hastaların yaşları 8 ile 16 arasında idi. Hastaların 8 i erkek 1 i kadın idi. Vakaların damar hasarları , 8 i penetran , 1 i künt travma sonrası sonrasında gerçekleşti (Tablo 1) .

Tablo 1

Yaralanma Biçimi				
	Hasta Sayısı	Ortalama Yaş	Künt Yaralanma	Penetran Yaralanma
Erkek	8	16±1,5	-	8
Kadın	1	12	1	-
Toplam	9	15	1	8

Penetran damar yaralanmaların 7 i delici kesici alet ile , 1 i patlama sonrası şarapnel hasarı ile gerçekleşti. Künt travma sonrası yaralanan 1 hastanın ise yaralanma mekanizması araç içi trafik kazası idi (Tablo 2).

Tablo 2

Yaralanma Mekanizması	
Hasta Sayısı (n = 9)	
Penetran Yaralanma	
Bıçak	7
Şarapnel	1
Künt Travma	
Yüksekten Düşme	1

Penetran vasküler yaralanma ile operasyona alınan bütün hastalar acil servise bilinci açık, hemodinamisi stabil ve kompresyon ile kanaması kontrol altında, genel durumları iyi şekilde başvurdu. Araç içi trafik kazası ile oluşan künt aort hasarlı hasta ise entübeydi ve hemodinamik olarak stabil değildi.Vakaların büyük çoğunluğunda alt ekstremite damarları hasara uğramıştır (Tablo 3).

Tablo 3

Yaralanan Damar	
Hasta Sayısı (n = 9)	
Orta Sakral Arter	1
Ana Femoral Arter	4
Yüzeyel Femoral Arter	1*
Popliteal Arter	1
Popliteal Ven	1
Radial Arter	1
Brakial Arter	1

*Hastanın eş seanslı ana femoral arter hasarı da mevcuttur.

Yine vakaların 6 sında primer tamir uygulanırken, 1 inde yapay damar interpozisyonu ve 2 sinde ise xenogreft yama arterio/venoplasti uygulandı. Venoplasi uygulanan hasta , şarapnel yaralanması sonucunda popliteal ven posterior duvarı hasarlanan hasta idi. Yüksekten düşme ile ilişkili künt yaralanma sonucunda orta sakral arteri transekse olan hastada ise ligasyon uygulandı. (Tablo 4).

Tablo 4

Uygulanan Cerrahi İşlem	
Hasta Sayısı (n = 9)	
Primer Tamir	5
Yama Arterio/ Venoplasti	2

Prostetik Damar İnterpozisyonu	1
Ligasyon *	1

*Hasta Orta Sakral Arter transeksiyonu idi. Ligasyon uygulandı.

Acile başvuran hastaların hepsi ekstübe, oryante, kanamaları turnike ile kontrol altında ve genel durumları iyi şekilde idi. Sadece orta sakral arter traseksiyonu izlenen hastanın derin hipotansiyonu olması üzerine elektif entübasyon uygulanmıştı. Hastaların hepsi hemodinamik olarak stabil olmalarından ötürü operasyon öncesi BT anjiografi ile değerlendirildi.BT anjiografi sonrası tanısı netleşen hastalar en hızlı şekilde operasyona alındı. Hastaların hiçbirinde intraoperatif resusitasyon yapılmadı ya da inotrop ihtiyacı izlenmedi. Orta sakral arter yaralanması ve şarapnel nedeniyle oluşan popliteal ven yaralanmalarna çocuk cerrahisi ve ortopedi ekipleri ile birlikte dahil olundu. Diğer vakalar çocuk kalp damar cerrahisi ekibi tarafından opere edildi. Hastaların hepsi operasyon sonrası ilk 6 saat içinde ekstübe edildi. Bütün hastalar post op 1. gününde servis izlemine alındı. Cerrahi uygulanan hiçbir hastada hastane içi mortalite izlenmedi. Bütün hastalar şifa ile taburcu oldu ve hastaların kontrol vasküler görüntülemelerinde işlem uygulanan damarların patent olduğu görüldü .

SONUÇ

Çocuk hastalarda vasküler yaralanmalar , erişkin hastalara göre daha nadir izlenmektedir.Çoğu cerrahi kliniğin , çocuk hastalarda vasküler yaralanma ilgili tecrübeleri sınırlıdır ve uygulanan tedavi metodları sıklıkla erişkin vasküler yaralanmalardan edilen deneyimlerle oluşturulur. Ancak, yine de bu hasta grubunda uygulanabilecek uygun tanı ve tedavi metodları ile mortalite ve morbiditenin önüne geçilebilir. Son yıllarda , gelişen tanı ve tedavi olanakları ile erişkin hastalarda olduğu gibi çocuk hastalarda da vasküler yaralanmaların tedavisinde önemli yol katedilmiştir. Buna rağmen çocuk hastaların doğasından kaynaklı anatomik ve fizyolojik zorluklar , bu hasta grubunda cerrahi müdahaleyi erişkine göre daha komplike hale getirmektedir. Bu çalışma ile kliniğimizde vasküler yaralanma nedeniyle acil servise başvurmuş ve cerrahi müdahale geçirmiş çocuk hastalara ait peroperatif veriler retrospektif olarak incelenmiştir.

Genel olarak bakıldığında , acil servislere travma ile başvuran çocuk hastaların büyük çoğunluğunda künt travma izlenirken,vasküler yaralanmanın eşlik ettiği travmaların büyük çoğunluğunu penetran travmalar oluşturmaktadır.Vasküler yaranma görülen hastaların 'yaralanma ciddiyeti skoru' na bakıldığında ise künt travma nedeniyle oluşan vasküler yaralanmalarda penetran yaralanmalara göre daha yüksek bir skor izlenmektedir. Hastanemize başvuran ve vasküler yapılarına cerrahi müdahale gereken çocuk hastaların büyük çoğunluğunda penetran travmalar izlenmiştir.

Çocuk hastalarda en sık vasküler yaralanmalar yaklaşık %36 oranı ile üst ektremite arter ve venlerinde oluşmaktadır. Bunu ise , %30 ile gövde yaralanmaları izlemektedir.Daha çok künt travmalar sonrası izlenen gövde yaralanmaları , mortalitenin en sık izlendiği yaralanma lokalizasyonudur ve hastalar daha acile başvurmadan yaklaşık %36 sı hayatını kaybetmektedir. Gövdede en sık yaralanana damarlar aorta ve vena cava inferiordur.Tüm vasküler yaralanmalı hastaların %25 i alt ekstremite arter ve venlerini kapsamaktadır.Bu gruptaki hastaların en sık yaralanan damarları diz altı lokalizasyonundayken bizim çalışmamızdaki tüm alt ekstemite yaralanmaları diz üstü damarlarında izlenmiştir.

Venöz damar yaralanmaları , arter yaralanmalarına oranla çok daha az miktarda görülür. Ancak iki damarın birlikte yaralandığı vakalarda mortalite riskinin artmış olduğu bildirilmektedir. Bizim örneklemimizde ven yaralanması sadece 1 vakamızda görülmüştür ve bu vaka da şarapnel yaralanması sonucu diz seviyesinde popliteal ven duvarının hasarı ile gerçekleşmiştir.

Cerrahi tedaviler sonrası çok çeşitli komplikasyonlar izlenebilir, bunlar , fasyotomi açılması gerekmesi, yara yeri enfeksiyonu , safen ven veya greft trombozu ve uzuv ampütasyonu olarbilir. Çalışmamızdaki hastalarda herhangi bir komplikasyon izlenmemiştir.

Çocuk hastalarda iatrojenik olmayan vasküler yaralanmaların erişkin hastalara göre birtakım farklılıkları vardır. Öncelikle çocuk hastaların damarları küçük çaplıdır, büyüme potansiyeli vardır olan ve vazospazma çok yatkındır.Bu özellikleri vakaların hem diagnostik hem de töropatik yönetiminde zorluklar yaratmaktadır.

Hasar tipinin künt yada penetran olması uygulanacak olan cerrahinin şeklini belirlemektedir. Penetran travmalarda sıklıkla yara yeri temizdir ve damarda bölgesel bir hasarlanma söz konusudur. Böylelikle primer tamir olanak dahilindedir. Ancak künt travmalarda daha çok yırtma ve koparma şeklinde doku üzerine yoğun bir stres oluştuğu için damarsal yapılarda doku bütünlüğü uzun segmentler arasında kaybolabilir. Bu hastalarda sıklıkla ters çevrilmiş safen ven veya prostetik damar interpozisyonu sıklıkla tek seçenektir. Prostetik damarlar daha fazla tromboza meyilli olmaları, enfeksiyona daha çok yatkın olmaları ve büyüme potansiyelleri olmamalarından dolayı çocuk hastalarda tercih edilmezler. Bizim çalışmamızdaki vakaların büyük çoğunluğunu penetran yaralanmalar oluşturduğu için primer tamir metodu en sık kullanılan cerrahi metod olmuştur.

Çocuk hastalarda vasküler yaralanmalarda cerrahi müdahale yapmadan hastanın yakın takibi de çeşitli durumlarda tercih edilebilir. Bu konuda net bir görüş birliği olmasa da özellikle gövdeye alınan travmalarda büyük damarlarda yaralanma gelişmişse öncelikle hemodinamik stabilite sorgulanmaktadır. Eger aktif kanama , ekstravazasyon ve hemodinamik stabilite yoksa bu durumlarda hastayı yakın takiple izleme almak bir seçenek olabiliir. Bunun dışındaki durumlarda acil cerrahi müdahale önerilmektedir. Ekstremite damarlarında tedavideki en önemli yönlendirici distal iskemi varlığıdır. Aktif kanama , distal iskemi ve hemodinamik dengesizlik izlenmiyorsa hastalara cerrahi müdahale gerekmeyebilceği belirtilmektedir.

Vasküler yaralanması olan pediatrik hastalarda aktif kanama olmaması durumunda tanısal yaklaşımda konvansiyonel anjiografi ve BT anjiografi kullanılabilmektedir. Konvansiyonel anjiografinin kullanımının , damarlarda tromboz oluşumu ve iskemi riski gibi dezavantajları mevcuttur. Bunun yanında BT anjiografi ise özellikle çok küçük çocuklarda, damar çaplarının ekstremite distallerinde çok küçülmesi , vazokonstrüksüyon etkisinin damarlar üzerinde belirgin olması ve kontrast maddenin görüntülenmek istenen damara ulaşması için uygun enjeksiyon zamanı gibi değişkenlerden etkilenmesi nedeniyle kullanılabilirliği kısıtlıdır. Tüm bunlarla birlikte kırıkların eşlik ettiği travmalarda damar yapılarının baskı altında kalması da kırıklara redüksüyon yapılmadan önce damar bütünlüğü konusunda net veri elde edilmesini zorlaştırabilir. Bizim çalışmamızdaki hasta profilinin nispeten büyük yaşta çocuklardan oluşması ve hemodinamik olarak stabil olmaları BT anjiografi görüntüleme metodunun tercih edilmesinde öncül sebep olmuştur.

Sonuç olarak, noniatrojenik pediatrik travmatik vasküler yaralanmalar nadir ve en sık ekstremitede gözlenmektedir.Penetran travmanın vasküler yaralanmaların en önemli meknizmasıdır.. Gövde damar yaralanmaları, diğer anatomik bölgelerdeki damar yaralanmalarından daha yüksek bir ölüm oranı taşır. Tüm damar yaralanmalarında olduğu gibi,çocuk hastalarda da erken teşhis ve tedavi, uzuv kurtarma fırsatını en üst düzeye çıkarır ve sonraki komplikasyonları azaltır.

ACİL SERVİSTE ANEMİ

GİRİŞ

Günümüz acil servis başvurularında anemisi olan hastalar sık gördüğümüz hasta gruplarındandır. Dünya Sağlık örgütüne göre yetişkin erkeklerde < 13,5 g/dL, yetişkin kadınlarda Hb < 12 g/dL olması anemi olarak kabul edilmektedir (1). Anemiler genelde üç şekilde (Patogeneze göre, Eritrosit morfolojisine göre, Klinik bulgulara göre) sınıflandırılar. Aslında, bu sınıflama ölçütlerinin hepsi de tanı konulması için önemlidir (2).Günlük hayatımızda ise sınıflama, eritrositlerin ortalama eritrosit hacmini [Mean Corpuscular Volume (MCV)] temel alan morfolojik yapılarına göre yapılmaktadır. Mikrositik, normositik ya da makrositik olarak yapılabilen bu sınıflama tanının konulmasında ciddi bir kolaylık sağlamaktadır (3). Anemi klinik görünüme göre de akut (genellikle kanama ya da hemolize bağlı) ya da kronik olarak sınıflandırılabilmektedir(4).

OLGU

Bilinen mental retardasyonu olan 53 yaşında kadın hasta halsizlik, yorgunluk, ateş şikayetleri ile acil servise getiriliyor. Hastaya yapılan tetkiklerinin sonucunda derin anemi ve covid pnömonisi ön tanıları ile danışılıyor. Hastanın soy geçmişinde özellik yok. Alkol ve sigara öyküsü yok. Yapılan fizik muayenesinde; bilinç açık, kan basıncı 70/50 mmHg, So2: %90 nabız 110 atım/dk, ateş: 36,7 C olarak tespit edildi. Sistem fizik muayenelerinde patolojik bulgu saptanmadı. Özellikle melana, hematokezya ve hematoemez saptanmadı. Hastanın tetkiklerinde kreatinin:0,8 mg/dl, üre: 20 mg/dl, BUN:16 mg/dl, AST:67 U/L, ALT:9 U/L, LDH:567 U/L,GGT:32 U/L, ALP:271 U/L total billirubin:1,49mg/dl, indirekt bil:1,11 mg/dl, direkt bil:0,38 mg/dl, sodyum:131 mmol/L, potasyum:3,6 mmol/l klor:96 mmol/L, HGB:5,3g/dl, trombosit:309 x103/ L, beyaz küre:13,31 x103/ L, CRP:304, MVC:91,6 f/L, HCT: %17,7, fibrinojen :530 ,D-dimer>4316 , İNR>1,28 µg/mL, ferritin:>1500 olarak saptandı. İdrar tahlilinde ürobilinojen ++ olarak saptandı. Hastanın tetkiklerinde saptanan değişiklerin enfeksiyon sekonder olabileceği düşünülse de hemolitik anemi açısından hastadan direkt ve indirekt coomb's istendi. Hastanın direkt coomb'su ++, indirekt coomb'sunu + olması üzerine hematoloji olan bir üst merkeze sevk edildi. Üst merkezlerinde takiplerinde otoimmün hemolitik anemi düşünülen hastaya ıv prednizolon tedavi verilmiş olup HGB değerleri yükselme eğilimine girdiği öğrenildi. HGB değerlerinin takiplerinde 4,4 g/dl den 10 sınıra kadar yükseldiği öğrenildi.

SONUÇ

Anemik hasta basit bir demir eksikliği anemisinden çok ciddi hastalıklara kadar uzanan geniş bir yelpazedir. Oral demir tedavisinden eritrosit replasmanı gidecek kadar geniş bir tedavi skalası olan gruptur. Bu tür hastaların değerlendirilmesin de genelde GİS kanama durumu ön planda olup onun ekartasyonuna öncelik verilmektedir. Diğer durumlarda genelde ikinci planda kalmaktadır. Aneminin diğer önemli nedenlerini de tanı anında gözden geçirmek faydalı olacaktır.

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GEÇ BAŞVURU NEDENİYLE KAYBEDİLEN SİGMOİD VOLVULUS VAKASI

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GİRİŞ: Sigmoid volvulus özellikle uzun sigmoid kolona sahip olan hastaların nispeten atonik bir kolon segmentinin bulunduğu uzun süreli kronik kabızlık sonrasında ortaya çıkar. Sigmoid volvulusta, mezenterik pedikülde dönme neticesinde gaz kıvrımları ile dilate olmuş ve dışkıyla dolu büyük bir sigmoid halka tıkanıklığı oluşturur. Düzeltilmezse, venöz enfarktüse perforasyona ve fekal peritonite yol açar. İskemik klinik tablo oluşmamış, erken başvuruda bulunan hastalarda kolonoskopik desuflasyon işlemi ile acil tedavisi gerçekleştirilebilir ve elektif operasyon planlanabilir. Fakat barsak duvarında iskemik değişiklikler meydana geldiğinde hastalar acil operasyona alınmalıdır.

OLGU: 52 yaşında erkek hasta üç gündür devam eden karın ağrısı, karında şişkinlik ve gaita yapamama şikayeti ile acil servise başvurusu üzerine değerlendirildi. Batında ileri derecede distansiyon mevcuttu. Laboratuar değerlerinde WBC: 13,700, Üre:59, LDH: 275, BUN: 27,8 olarak ölçüldü. Çekilen Ayakta direk batın grafisinde kahve çekirdeği görünümü ve karın bilgisayarlı tomografi görüntülemesinde tüm kolonik anslarda dilatasyon olduğu ve sigmoid kolon mezenterinde girdap bulusu olduğu görüldü. Bunun üzerine hasta sigmoid volvulus tanısı konulup derhal detorsiyon işlemi planlanarak Genel Cerrahi Anabilim Dalı Endoskopi Ünitesinde kolonoskopi işlemine alındı. Kolonoskopi de anal girimden itibaren 20. cm'de torsiyone alan olduğu görüldü, bu alanın proksimaline geçildiğinde hava ile genişlemiş barsak ansları içinde sıvı gaita koleksiyonu ve barsak duvarında iskemik değişiklikler olduğu gözlendi. Desufle edilerek işlem sonlandırıldı. Takiben hasta genel anestezi altında operasyona alındı. Operasyonda sigmoid kolonda gelişen volvulus nedeniyle iskemik değişiklikler mevcuttu ve tüm kolonik anslar ileri derecede dilate idi. Hastaya sigmoid ve sol kolon rezeksiyonu yapıldı, transvers kolon ve rektum arasına kolo- rektal uç yan anastomoz uygulandı.Operasyon sonrası entübe olarak yoğun bakım ünitesinde takip altına alınan hastanın klinik tablosunda ani bozulma gözlendi. Hasta sepsis nedeniyle post operatif 1. gününde kardiyak arrest gelişti ve exitus olarak kabul edildi.

SONUÇ: Sigmoid volvulus acil müdahale gerektiren bir rahatsızlıktır. Geç kalınmış vakalarda ölümle sonuçlanan bir durum haline gelebilmektedir. Bu nedenle sigmoid volvulus düşünülen hastalar zaman kaybedilmeden tedavi edilmelidir.

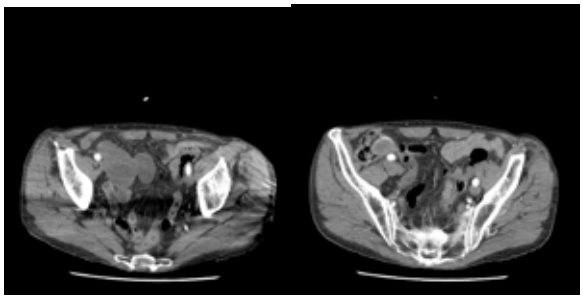
ANAHTAR KELİMELER: Detorsiyon, Kolonoskopi, Sigmoid Kolon, Volvulus

NADİR BİR AKUT BATIN SEBEBİ: PERFORE APPENDİKS MUKOSELİ

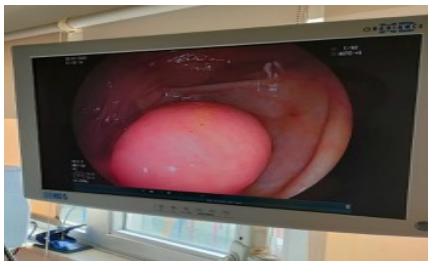
GİRİŞ: Appendiks mukoseli, bağırsak mukozasının neoplastik değişikliklerine sekonder olarak gelişen ve nadir görülen bir hastalıktır. Appendiks lümeni içerisinde anormal mukus birikimi sonucunda appendiks şişer ve kistik bir kitle halini alır. Appendektomi materyallerinin histopatolojik incelemelerinde appendiks mukoseli %0,1-0,3 oranında görülmektedir. Malign mukosel spontan olarak veya ameliyat esnasında rüptüre olduğunda psödomiksoma peritonei olarak tariflenen asite sebep olur ve sağkalım oldukça düşüktür. Bu nedenle mukoselin tanınması ve uygun tedavisi önem kazanır.

OLGU SUNUMU: 74 yaşında erkek hasta üç gündür devam eden karın ağrısı şikâyeti ile acil servise başvurusu üzerine değerlendirildi. Batında özellikle sağ kadranda hassasiyet ve rebaund mevcuttu. Laboratuar değerlerinde White blood cell: 7,400 mcL, hemoglobin 14,6 g/dl ve biyokimya parametreleri normal sınırlarda olarak görüldü. Hastanın kontraslı batın tomografi incelemesinde; çekum ve ileoçekal valv komşuluğunda inferiora ve lümene doğru uzanım gösteren, 8 cm uzunluğunda ve 4 cm çapında duvarında yoğun kontrast madde tutan tübüler kistik lezyon tespit edildi. Hastanın kolonoskopik incelenmesinde ise çekum lümenine protrüde olan 5*4 cm'lik lezyon izlendi. Endoskopik bulgular ise normal idi. Bu bulgular ışığında değerlendirilen hastaya, öncelikli olarak mukosel, ileoçekal valv veya çekum enterik duplikasyon kisti, çekal divertikül veya mezenterik kist ayrıcı tanıları düşünülerek laparoskopik cerrahi kararı alındı. Laparoskopik incelemede çekum lojunda ve rektovezikal alanda yoğun mukus vasfında sıvı mevcuttu ve perfore appendiks mukoseli düşünülerek açık operasyona geçildi. Yapılan laparatomide jelatinöz sıvı temizlendi ve perfore appendiks mukoselinin çekum tabanına invaze olduğu görüldü. Malign karakterde müsinöz kistadenom olduğu düşünülerek hastaya sağ hemikolektomi ve peritonektomi yapıldı. Postoperatif dönemde komplikasyon gelişmeyen hasta, 6. gününde taburcu edildi.

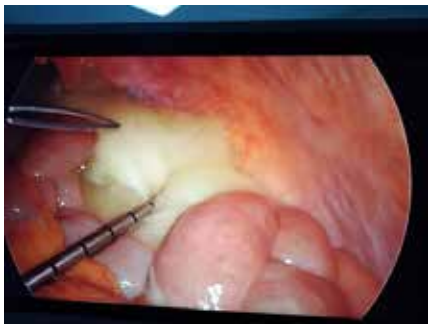
Şekil 1. Mukoselin preoperatif tomografi görüntüsü.



Şekil 2. Mukoselin preoperatif kolonoskopik görüntüsü.



Şekil 3. Mukoselin Laparoskopik görüntüsü.



TARTIŞMA VE SONUÇ: Appendiks mukoseli, appendiks lümeninde mukus birikimi sonucu oluşan appendiksin kistik bir dilatasyondur. Fekalit veya enflamasyona bağlı olduğu düşünülse de son yapılan bazı histopatolojik çalışmalar appendiks mukozasından gelişen neoplastik değişikliklerin mukosele yol açtığını göstermiştir. Benign mukosellerde %20 civarında perforasyon görülür. Perfore olması halinde müsin periapendiküler alana ve peritoneal kaviteye yayılabilir. Ancak mukus incelemesinde neoplastik hücre görülmez. Appendektomi bu tip için yeterli tedavidir. Müsinöz kistadenomlarda ise perforasyon daha az olarak görülür. Makroskopik olarak benign kistadenom ve kistadeno-karsinom ayırt edilemez. Ama neoplastik hücreler appendiks duvarını penetre edip appendiks çevresinde implantlar yaparsa ayırt edilebilir.

Mukoselin preoperatif olarak tanısının konulması hayati öneme sahiptir. Çünkü operasyon esnasında oluşacak olan rüptür, psödomiksoma peritonei oluşmasına sebep olacaktır. Özellikle de altta yatan sebep müsinöz kistadenom ise perforasyona bağlı gelişecek psödomiksoma peritoneide 5 yıllık sağkalım %20'leri geçmemektedir.

ANAHTAR KELİMELER: Appendiks mukoseli, Perfore Apandisit, Akut Batın

COPEPTIN AS A MARKER OF COVID-19 SEVERITY: EVIDENCE FORM META-ANALYSIS

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KEYWORDS: copeptin, SARS-CoV-2, COVID-19, severity, meta-analysis

OBJECTIVE

The severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) that causes the coronavirus disease 2019 (COVID-19) has spread globally and killed millions of people. The use of biomarkers in diagnosis, risk assessment, and medical decision-making is common. Mortality has been linked to markers of organ failure, coagulation, and inflammation in COVID-19 hospitalized patients. Identifying which patients are likely to pass away can help with early therapy intensification and closer monitoring. Additionally, research into novel biomarkers may provide fresh insights into the pathogenesis of COVID-19 and its consequences. Copeptin is the C-terminal peptide formed when pre-pro-arginine vasopressin is degraded. In reaction to a number of stimuli, including stress, it is released from the posterior pituitary into the bloodstream. Copeptin has been shown to have prognostic and, in some circumstances, diagnostic significance in the treatment of critical diseases such as sepsis, septic shock, community-acquired and ventilator-associated pneumonia. For this very reason we aimed to investigate the association between copeptin levels and COVID-19 severity.

METHODS

This meta-analysis was reported in accordance with the Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) statement. The Scopus, Web of Science, PubMed, Embase, Cochrane Library databases were searched to identify studies published between January 1 2020 and September 10th, 2022 that assayed copeptin levels in COVID-19 patients. The keywords were: “copeptin” AND “COVID-19” OR “Corona Virus Disease 2019” OR “novel coronavirus” OR “SARS-CoV-2”. Review manager (Revman version 5.4, The Cochrane Collaboration, The Nordic Cochrane Centre, Copenhagen, Denmark) was used to provide pooled estimates for mean difference (MD) with 95% confidence intervals.

RESULTS

A total of 579 patients were pooled from 4 studies. Pooled analysis of four trials showed that mean copeptin level in severe group was 26.64 ± 13.59 ng/mL compared to 16.75 ± 6.13 ng/mL in non-severe group (MD = 9.39; 95%CI: 1.38 to 17.40; p=0.02). Additionally, one trial (Indirli et al. 2022) reported copeptin levels among patients with COVID-19 who survived vs. died. Copeptin levels among this groups were 13.25 ± 3.23 vs. 44.65 ± 26.92 ng/mL, respectively (MD = -31.40; 95%CI: -42.93 to -19.87; p<0.001).

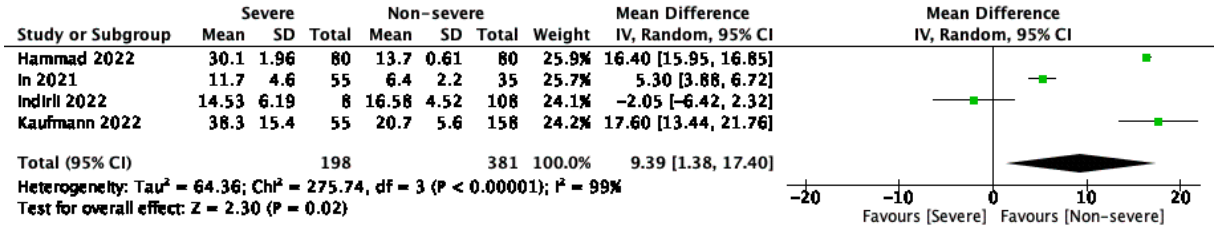

Figure 1. Forest plot of copeptin levels among COVID-19 patients in severe vs. non-severe groups. The center of each square represents the mean differences for individual trials, and the corresponding horizontal line stands for a 95% confidence interval. The diamonds represent pooled results.

CONCLUSIONS

Severe COVID-19 is associated with higher levels of copeptin than a non-severe disease, so tracking these markers may allow early identification or even prediction of disease progression.

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DİSPNENİN NADİR BİR NEDENİ: TRAKEAL DARLIK

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ANAHTAR KELİMELER: Dispne,Trakeal stenoz, tiroid malignitesi

GİRİŞ

Trakea ve ana bronşların tıkanması, çeşitli hastalık süreçlerinden kaynaklanabilen önemli morbidite ve mortalitenin nedenidir(1). Tiroid maligniteleri, özofagus karsinomu ve primer mediastinal tümörler gibi hava yollarına komşu maligniteler, hava yollarında dış kompresyon veya doğrudan tümör büyümesi ile hava yolu tıkanıklığına neden olabilirler. Maligniteye bağlı ana havayolu obstrüksiyonlarının semptomları genellikle şiddetli olup istirahat dispnesi, hemoptizi, obstrüktif enfeksiyonlar ve asfisksiye neden olmakla birlikte öksürük ve egzersiz dispnesi gibi hafif de olabilmektedir (2). Tiroid malign tümörleri ise sıklıkla trakeal stenoz ve rekürren sinir felci nedeniyle nefes almada zorluğa neden olurlar (3). Dıştan basının neden olduğu semptomatik malign hava yolu darlıklarında genellikle tedavi yaklaşımı dilatasyon veya stent uygulanmasıdır (2). Günümüzde trakeal stent uygulaması hem malign stenozu hem de benign stenozu olan hastalarda tercih edilebilen bir alternatiftir (4). Nefes darlığı acil servislere sık başvuru şikayeti olmakla birlikte nadir bir sebebi olan trakeal darlığın tanı ve tedavisini sunmayı amaçladık.

OLGU

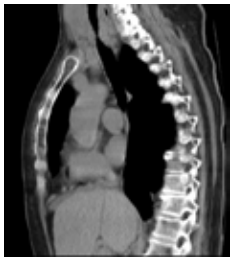
65 yaşındaki kadın hasta; 2 gündür devam eden nefes darlığı şikayeti ile Acil Servise başvurdu. Hastanın öyküsünde 15 gün önce başlayan ve giderek artan nefes darlığı şikayeti olması üzerine başka bir merkezde Kulak Burun Boğaz (KBB) polikliniğinde değerlendirilmiş, şikayetlerinin 2015 yılında tespit edilen ve takiplerini yaptırmadığı tiroid nodüllerine bağlı olabileceği söylenmiş. KBB önerisiyle Balıkesir Üniversitesi Genel Cerrahi polikliniğine başvuru yapmış ve multinodüler guatr ön tanısıyla tirod dokusundan biyopsi planlanmış.

Hastanın özgeçmişinde diyabet dışında tanı almış başka hastalığı bulunmamaktadır.

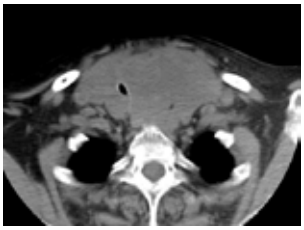
Fizik muayenesinde genel durumu iyi-orta ancak eforla artan dispnesi mevcuttu. Vital bulguları KB:110/60 mmHg, NB: 76 /dk, Vücut ısısı: 37,3 °C, Sat: 96% idi. Boyunda yaklaşık 8-10 cm büyüklüğünde tiroid nodülleri palpe edildi. Solunum sistemi muayenesinde sağ akciğer bazalinde solunum sesleri azalmış ve stridoru mevcuttu.

Hastanın biyokimyasal incelemesinde lökositoz (WBC:23,7 x10^3/µL) dışında herhangi bir patoloji yoktu. 4-5 lt/dk nazal oksijen altında alınan arter kan gazında pH: 7,29 pCO_2:54,7 mmHg, pO_2: 83,mmHg, HCO3:26.70 mmol/L ve cSO2: 94,6% idi. Planlanan biyopsi için invaziv Radyoloji Bölümüne götürülmek üzere sedyeden kaldırılan hastada nefes darlığı gelişmesi, ve oksijen saturasyonun 72% ye kadar düşmesi üzerine hasta acil olarak resüsitasyon odasına alındı. Non invaziv mekanik ventilasyona başlandı. O sırada alınan kan gazında PCO2: 113 mmHg, pO2:52 mmHg ve cSO2: 68,6% idi. Hastaya 1 mg/kg dan prednisolon uygulandı. NIMV un 30. dakikasında pCO2: 84 mmHg, pO2:68 mmHg ve cSO2: 81% ve 60. dakikada alınan arteriyel kan gazında pH: 7,32 pCO2 49 mmHg ve pO_2: 87,3 mmHg ve cSO2: 96,8% ölçüldü. Acil çekilen Toraks ve Boyun Bilgisayarlı Tomografi (BT)'sinde tiroid boyutları diffüz artmış olup, tiroid düzeyinde trakea bası altında; yapılan ölçümlerde trakea çapı carina düzeyinde 15x20 mm, en dar yerinde 4,2x8,7 mm ve supraklaviküler düzeyde 3,3x 10 mm olarak saptandı (Resim 1,2).

Resim 1.



Resim 2.



Hastada tirod malignitesine sekonder trakea basısı düşünülmesi üzerine Genel Cerrahi, Göğüs Cerrahisi ve Kulak Burun Boğaz bölümlerine konsülte edildi. Tiroid malignitesine bağlı olarak vokal kordlardan 3 cm sonra başlayan ve yaklaşık 4 cm'lik segmentte darlık mevcut olması üzerine Göğüs Cerrahisi tarafından stent takılması planlandı. Trakeal stent uygulaması için dış merkeze sevk edilen hastaya ertesi gün 16 mm trakeal stent takılıp, trakeal açıklığı sağlanan hasta taburcu edilmiş.

TARTIŞMA

Nefes darlığı olan bir hastanın değerlendirilmesi, teknolojideki gelişmelere rağmen ayrıntılı bir özgeçmişe ve fizik muayeneye bağlı olmaya devam etmektedir. Tedavide öncelikle semptomlara yol açan patolojik sürecin tanımlanmasına ve hafifletilmesine odaklanılmalıdır. Patolojik olaylara yönelik tercih edilen en doğru yaklaşıma veya optimal tedaviye rağmen dispnenin devam ettiği birçok hasta grubu bulunmaktadır (5). Acil Servis başvurularında dispnenin yaygın bir semptom olması, acil teşhis ve tedavi gerektirmesi nedeniyle sebep olan patolojinin hızlı ve doğru teşhisi çok önemlidir (6). Bu hastaların büyük çoğunluğunu Konjestif Kalp Yetmezliği (KKY), Kronik Obstrüktif Akciğer Hastalığı (KOAH), astım, pnömoni veya Pulmoner Emboli (PE) oluşturmaktadır (7). Bununla birlikte yaşlı yetişkinlerde komorbid hastalıkların da eşlik etmesi nedeniyle nefes darlığının birçok sebebi olabileceğinden doğru teşhisi koymak zorlayıcı olabilmektedir. Bu nedenle çoğu hasta pnömoni, KOAH akut alevlenmesi veya KKY akut alevlenmesi gibi tedavi edilmektedir (8). Nadir görülen bir durum olmasına rağmen klinik olarak malign santral hava yolu obstrüksiyonu da öksürük, nefes darlığı veya stridor ile kendini gösterebileceğinden ve potansiyel olarak hayatı tehdit eden bir durum olabileceğinden akılda tutulmalıdır (9,10).

Santral hava yolu darlıklarının en yaygın nedeni malignitedir (9). Malignitelere bağlı darlıklar morbidite ve mortalitenin önemli bir nedenidir ancak gerçek insidansı ve prevelansı bilinmemektedir. En sık malign hava yolu darlık nedeni ise hava yoluna komşu tümörün direkt invazyonudur. Genellikle akciğer kanserleri, sonrasında ise özefagus ve tiroid tümörleri oluşturmakla birlikte endobronşiyal metastaz yapan böbrek, kolon, meme karsinomları ve malign melanom gibi toraks dışı maligniteler de santral hava yollarında darlık yapabilmektedir (10). Bu hastalarda standart küratif tedavi tam tümör rezeksiyonu olmakla birlikte; cerrahi rezeksiyon mümkün değilse endoskopik girişimler, stent yerleştirme ve lokal veya harici radyoterapi gibi alternatif tedaviler ile palyasyon sağlanabilmektedir (11).

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EŞ ZAMANLI SAĞDA SUPERİOR OFTALMİK VEN TROMBOZU VE SOLDA SİNÜS VEN TROMBOZU

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ANAHTAR KELİMELER: Baş ağrısı, kemozis, sinüs ven trombozu, superior oftalmik ven trombozu

ÖZET

Superior oftalmik ven trombozu (SOVT) nadir görülen bir patoloji olup hastalığın etyolojisinde hiperkoagülasyon durumları, enfeksiyöz hastalıklar (enfeksiyöz sinüzit, orbital selülit), enflamatuar hastalıklar (sistemik lupus eritematozus, Behçet sendromu, sarkoidoz vb), neoplazmlar (lösemi, lenfoma, menenjiom), travma ve karotis-kavernöz fistül gibi durumlar rol oynar.

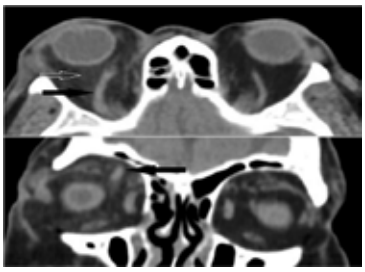
Serebral venöz sinüs trombozu ise dural sinüslerin ve/veya venlerin trombozunu içerir. Hastalar genellikle baş ağrısı veya fokal nörolojik defisit nedeni ile başvurur. Bu olgumuzda baş ağrısı ve gözde kızarıklık ile gelen hastamızda nadir görülen süperior oftalmik ven trombozu ile sinüs ven trombozu birlikteliğini sunmak istedik.

GİRİŞ

Superior oftalmik ven trombozu (SOVT) çoğunlukla kavernöz sinüs trombozu ile birlikte ortaya çıkmakla birlikte izole superior oftalmik ven trombozu oldukça nadir görülmektedir. Klinik bulguları ani ağrılı proptozis, kemozis, konjunktival tıkanıklık ve görme kaybıdır. Nadir görülmekle birlikte erken tanı konulup tedavi edilmezse ciddi komplikasyonlara ve ölüme neden olabilir.

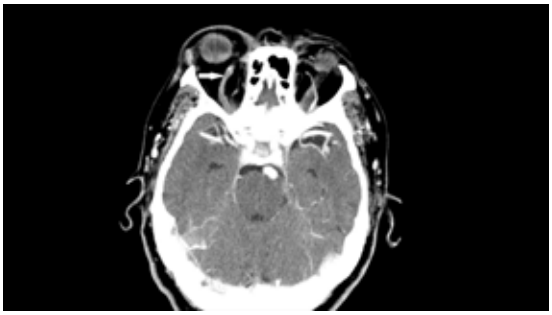
OLGU

75 yaş kadın hasta yaklaşık 2 haftadır olan bifrontal baş ağrısı 2-3 gündür olan sağ gözde ağrı, kızarıklık, şişlik şikayetleri ile kliniğimize başvurdu. Şikayetleri hareketle daha da artıyormuş. Benzer şikayetler ile daha önce acil servis ve nöroloji poliklinik başvuruları olan hasta semptomatik tedavi ile kısmen rahatlamış olsa da şikayetleri tam olarak geçmemiş. Hastanın vitalleri: TA:128/80 mmHg, Nabız:78/dk, Ateş:36.7 C Sao2:%91.Özgeçmişinde hipertansiyon ve koroner arter hastalığı bulunuyordu. Glaskow koma skoru:15, genel durum iyi, bilinç açık,koopere,oryante idi.Fizik muayenesinde: sağ göz kapakları ödemli,göz hareketleri her yöne serbest,ışık refleksi ++/++ ,pupiller:izokorik/izokorik,nörolojik muayenesi olağan,kas gücü tamdı.Solunum sesleri olağan,ek ses duyulmadı. Laboratuvar tetkilerinde:D-dimer:1.54 mg/L,WBC:13 600 mm3,CRP:150 mg/L,PLT:295 000 mm3,HGB:12.5 g/dL olarak sonuçlandı.Hastanın tekrarlayan hastane başvuruları ve geçmeyen baş ağrısı nedeniyle çekilen kontrastsız beyin BT'de: Sağda göz kapağı hafif kalın görünümde olup bu düzeyde ciltaltı yağ planlarında hafif dansite artışları mevcut ve sağda superior oftalmik ven kalibrasyonu simetriğine kıyasla artmıştı(şekil-1).Bulgular superior oftalmik ven trombozu açısından şüpheli olarak yorumlandı.

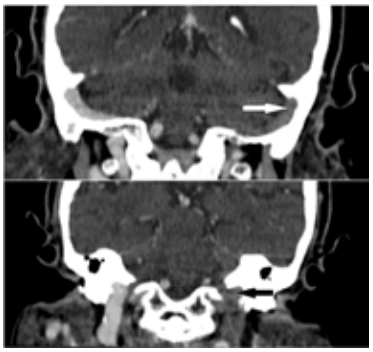


Şekil-1: Sağ süperior oftalmik vende çap artışı (siyah ok) ve intraorbital (beyaz ok) ve preseptal yağ planlarında hafif kirlenme izlenmektedir.

Göz hastalıkları ve nöroloji konsültasyonu istenen hastadan beyin BT anjiyografi ve Beyin MRG görüntülemeleri planlandı.Çekilen beyin BT anjiyografi görüntüleri Sağ superior oftalmik ven kalibrasyonu simetriğine kıyasla artmıştır. BT venografi tetkikinde sağda superior oftalmik ven lümeninde kontrast dolumu bu aşamada ayırt edilmemiştir. Bulgular ön planda superior oftalmik ven trombozu lehine değerlendirilmiştir. Solda transvers sinüs distalinden itibaren, sigmoid sinüs ve tetkike dahil juguler internal ven lümeninde kontrast dolumu ayırt edilmemiştir (Şekil 2-3). Bulgular ön planda dural venöz sinüs trombozu ile uyumlu olabilir şeklinde raporlanmıştır.

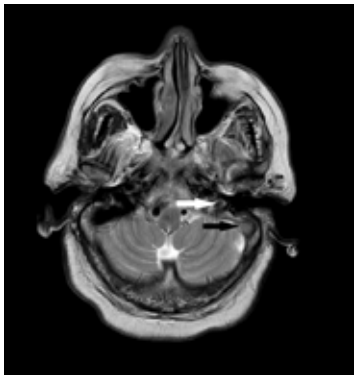


Şekil-2: Sağ süperior oftalmik vende çap artışı ve lümende torambüs nedeniyle kontrast madde izlenmiyor (beyaz ok).



Şekil-3: Solda sigmoid sinüs (beyaz ok) ve internal juguler (siyah ok) vende kontrastlanma izlenmemektedir.

Beyin MRG tetkikinde aksiyal T2 ağırlıklı görüntülerde solda transvers sinüs distalinden itibaren, sigmoid sinüs ve tetkike dahil internal juguler ven lümeninde signal void görünümde kayıp izlenmiştir. Bulgular ön planda dural venöz sinüs trombozu ile uyumlu olabilir(şekil-4).



Şekil-4: Sol sigmoid sinüs (siyah ok) ve internal juguler (beyaz ok) bende trombüse bağlı hiperintens görünüm izlenmektedir.

Girişimsel işlemlerin uygulanabilmesi açısından dış merkeze sevki yapılan hasta dış merkez nöroloji servisine yatırıldı.Enfektif tablo nedeniyle ampirik olarak ampisilin sulbaktam 4x2gr yanında 4x4 mg dekort ve 2x6000 IU enoksaparin başlandı.Hastaya fonksiyonel endoskopik sinüs cerrahisi işlemi uygulandı.Tedavisinin üçüncü gününde göz şikayetleri tamamen gerileyen hastanın enfektif tablosunun da düzelmesi üzerine yatışının 10.gününde nöroloji ve göz hastalıkları poliklinik önerilerek şifa ile taburcu edildi.

TARTIŞMA

SOVT, etyolojisinde hiperkoagülopati tabloları (oral kontraseptif kullanımı, gebelik trombositoz), enfeksiyöz hastalıklar (sinüzit, orbital selülit), enflamatuar hastalıklar (sistemik lupus eritematozus, Behçet hastalığı, sarkoidoz), neoplaziler (lösemi, lemfoma), travma ve karotikokavernöz fistülün rol oynadığı oldukça nadir görülen bir tablodur (1). En sık enfeksiyöz nedenlere bağlı gelişmektedir. SOVT orbital venöz drenajın bozulmasına bağlı olarak proptozis, oftalmopleji, kemozis, papilödem, konjunktival tıkanıklık ve görme kaybına neden olmaktadır (2). Çoğunlukla kavernöz sinüs trombozuyla birlikte görülmekle birlikte izole olarak izlenebilir. SOVT tedavisi altta yatan etyolojiye göre belirlenmekle birlikte genel olarak antikoagülasyon, antibiyotik, steroid ve cerrahi tedaviyi içermektedir. Enfeksiyöz nedenli oluşan SOVT' de geniş spektrumlu 2 hafta antibiyotik tedavisi önerilmektedir. İntrakranial kanama riski yoksa hemen antikoagülasyon tedavi için intravenöz heparin başlanmalıdır. Steroidler tromboflebit nedenli enflamatuar değişikliklerin sınırlandırılmasını sağlamakta ve eşlik eden kavernöz sinüs trombozu nedenli kraniyal sinir disfonksiyonu tedavisinde kullanılmaktadır. Orbital abse mevcutsa enfeksiyon kaynağını vücuttan en kısa zamanda boşaltmak için cerrahi müdahale gereklidir (3) Ani başlangıçlı ağrılı proptozis,kemozis ve görme kaybı olan hastalarda SOVT mutlaka akılda tutulmalıdır.

Venöz sinüs trombozunda semptomlar trombozun yerine göre değişiklik gösterse de en sık semptom baş ağrısıdır. Baş ağrısı günler içinde şiddetlenerek dayanılmaz bir hal alabilir. Hastanın o güne kadar yaşadığı en şiddetli baş ağrısı olarak tarif edilebilir. Bulantı, kusma, bulanık görme gibi yakınmalar olabileceği gibi hemiparezi, konuşma bozukluğu, görme alanı kaybı gibi fokal nörolojik defisite, konfüzyon ve koma gibi değişik düzeylerde bilincin etkilenmesine yol açabilir. Yakınmalar akut, subakut seyirli olabilir, günler-haftalar içinde artar. Fokal veya jeneralize epileptik ataklar, status epileptikus görülebilir. Epileptik atak venöz sinüs trombozunda diğer iskemik inmelerden daha sık görülür. Trombozun olduğu sinüs lokalizasyonu kliniğin oluşmasında belirleyicidir. En sık superior sagittal sinüs trombozu görülür (4). Bu sinüsün trombozunda intrakraniyal basınç artışına bağlı baş ağrısı ve papilödem ön plandadır. Transvers sinüs trombozunda ise kraniyal sinir tutulumları, mastoid bölgede ve kulakta ağrı, kulak enfeksiyonu bulguları görülebilir. Kavernöz sinüs trombozunda okülomotor paralizi ve orbital ağrı ön plandadır (5,6).

SONUÇ

Bu bilgiler ışığında ani gelişen ve giderek artan şiddetli baş ağrısında serebral ven trombozu akılda tutulmalı ve erken tedavi ile yüz güldürücü sonuçlar elde edildiği unutulmamalıdır.

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İNCE BAĞIRSAK NÖROENDOKRİN TÜMÖRÜNE BAĞLI İLEUS: NADİR BİR OLGU SUNUMU

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GİRİŞ

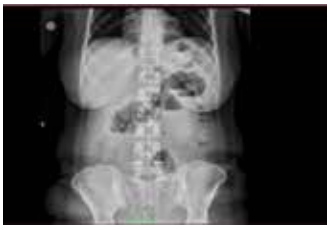
Nöroendokrin tümörler (NET) nadir görülen bir kanser tipidir. Nöroendokrin tümörler, vücutta bulunan nöroendokrin yapılı hücrelerden kaynaklanan heterojen, yavaş büyüyen tümörlerdir. Nöroendokrin hücreler santral sinir sistemi periferik sinir sisteminde ve endokrin sistemde bulunur. NET'li hastaların bazılarında karsinoid sendrom gelişir; bu sendrom fonksiyonel tümörden salınan hormon ve diğer biyokimyasal madde salınımı ile ortaya çıkmaktadır. Çok çeşitli klinik sendromlara yol açabilecek olan peptitler, nöroaminler ve diğer vazoaktif maddeler üretme eğilimi ile karakterize edilirler. İnce bağırsak Nöroendokrin tümörleri tüm gastrointestinal nöroendokrin tümörlerin %23 ile %25'ini oluşturur. Bu nöroendokrin tümörlerin çoğu fonksiyoneldir. Tanı anında %70'e varan lenf nodu metastazı ve %50'ye varan karaciğer metastazı saptanabilme ihtimali var. İnce bağırsak nöroendokrin tümörlerinin ayırt edici özelliklerinden bir tanesi vakaların yaklaşık %50 ye varan bir kısımda mezenterik fibrozise yol açan desmoplastik reaksiyon varlığıdır. Mezenterik fibrozis ince bağırsakta striktüre neden olup ileus gibi bir tablo ile karşımıza çıkabilmektedir

ANAHTAR KELİMELER: Nöroendokrin Tümör, İnce Bağırsak, İleus

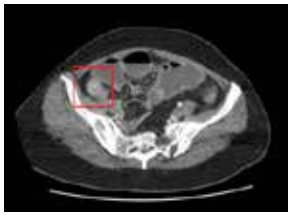
VAKA SUNUMU

Yaklaşık 8-9 aydır önceleri 1 hafta süreyle devam eden karın ağrısı olan hasta mükerrer poliklinik başvuruları sonucu hasta gastroenteroloji kliniğine yatırılmış hastaya endoskopi kolonoskopi yapılmış endoskopide pangastrit kolonoskopinin de normal gelmesi üzerine hasta inflamatuar bağırsak hastalığı olabileceği söylenmiş kontrol önerilerek taburcu edilmiş. Son 1 aydır şiddetlenen yaygın ve sürekli karın ağrısı olan hasta 10 gündür bulantı ve yediklerini içerir tarzda bulantının eşlik ettiği kusma şikayetiyle acil servisine başvurmuş ve genel cerrahi kliniğine konsulte edilerek ileus ön tanısı ile hasta genel cerrahi servisine yatırıldı. Hastanın şikayetleri geçmemesi ve kontrastlı batın bilgisayarlı tomografi (BT)'de şüpheli görünüm olması üzerine hasta operasyona alındı. Operasyonda ileoçekal valfin yaklaşık 50 cm proksimalinde tıkayıcı tümöral fibrotik kitle mevcuttu ve kitleye 10'ar cm'lik uzaklıklar ile tümörü içine alacak şekilde ince bağırsak segmenti rezeke edildi. Kalan kısım yan yana anastomoz edildi. Postop takiplerinde bulantı kusma şikayetleri geçen ve gaz gaita deşarjı başlayan hastaya rejim başlandı. Rejimden sonra takiplerinde herhangi bir şikayeti olmayan hasta şifa ile taburcu edilmiştir.

Şekil 1: İnce bağırsakta tıkanıklığa neden olan kitle



Şekil 2: Ayakta direk batın grafisi (ADBG)'de ileus hali hava sıvı seviyesi



İnce bağırsakta tıkanıklığa neden olan kitle

TARTIŞMA

NET'ler nöroendokrin sistemin bir neoplazmıdır. Nöroendokrin tümörler, vücuda dağılmış küçük hücre gruplarının oluşturduğu yaygın endokrin sistemi etkiler. Bu hücrelerin ana konsantrasyonu gastroenteropankreatik dokularda, özellikle bağırsak mukozasında ve submukozadadır. Solunum sistemi, timus, ürogenital sistem ve ciltte de bulunabilirler (1). Ana bağırsak hücre kümelenmesine rağmen, ince bağırsak nöroendokrin tümörü nadir görülen bir durum olarak kabul edilir (1,2).

Bu tip tümörün ince bağırsakta ortaya çıkması nadirdir ve etiyolojisinde genetik bir etki vardır. İnsidansı 197'den 2004'e 5 kat artarak 100.000 kişi/yıl başına 1.09'dan 5.25 yeni vakaya çıkmıştır (3). Bu, esas olarak, evreleme sistemleri, endoskopik muayeneler, görüntüleme modalitelerinin iyileştirilmesi ve cerrahi numunelerin patolojik incelemeleri dahil olmak üzere, son yıllarda geliştirilen yeni tıbbi cihazların kullanımı ile ilgilidir. İnce bağırsakların nöroendokrin tümörleri tüm nöroendokrin tümörlerin %20'sinden fazlasını oluştururlar ve ince bağırsakların en sık görülen maligniteleridir. İleum, ince bağırsak NET'lerin en yaygın yeridir ve hastaların üçte ikisinde ince bağırsağın son 100 cm'sinde tümör bulunur(4). İnce bağırsak NET'leri son zamanlarda adenokarsinomlardan daha yaygın hale gelmiştir(5). Bu tümörlerin çoğu iyi diferansiyedir ve yavaş seyirlidir. Erken bir aşamada, NET›ler genellikle küçüktür ve kısmi tıkanıklığa, karın ağrısına, kanamaya veya metastaza neden olana kadar sakin bir klinik seyir gösterirler. Klinik semptomlar spesifik olmadığı için tanı genellikle hastalığın geç bir aşamasında konur. Tüm hastaların yaklaşık üçte biri tanı anında uzak metastaz gösterir (6). Sonuç olarak, semptomların başlangıcı geç olur ve çoğu durumda tanı hastalığın ileri evrelerinde konur. Tümör boyutu ile tümör evresi arasında bir ilişki yoktur. <10 mm küçük tümörler bile lenfatik ve uzak metastaz riskini barındırır, böylece cerrahinin kapsamı primer tümörün boyutuna göre belirlenmez. Üst mezenterik arter boyunca sistematik lenfadenektomi ve retropankreatik lenf düğümlerinin çıkarılması ile bağırsak koruyucu rezeksiyon, hastalığın lokalize evrelerinde bile önerilir Seçilen tedavi yöntemi tümör rezeksiyonudur. İlk aşamalarda yöntem iyileşmeyi amaçlar; ileri evrelerde ise multidisipliner tedaviye bağlı sitoredüktif tedaviler hayatta kalma süresinde artış sağlar.

Karsinoid sendrom, bilindiği gibi klinik sendrom, serotonin üretimi sonucu ishal, yüzde kızarıklık, bronkospazm, siyanoz ve kan basıncında dengesizlik gibi bir dizi semptomdan oluşur. Sendrom, hastaların yaklaşık %5-7'sini etkiler (7-9). Bu olgu sunumunda hasta klinik sendromdan etkilenen azınlık grubunu temsil etmektedir. Metastatik hastalıkta, genellikle portal dolaşım yoluyla karaciğer metastazı olan veya sekretuar tümörlerde, karsinoid sendrom ve genellikle metastazla ilişkili sekonder konstriktif kardiyomiyopati gibi semptomlarla alerjiye neden olur (10). Kronik seyir bu tümörler için oldukça tipiktir. Bazı hastalar karın ağrısı, küçük enterorajiler ve bağırsak tıkanıklığı gibi daha az spesifik semptomlar gösterebilir. Bu tür semptomlar ve karsinoid sendromu mevcut olduğunda, bireylerin %12'si karaciğerde zaten uzak metastaz göstermektedir (1,9). Bu tümörleri tedavi etmenin en iyi yolu cerrahidir ve standart kriterdir, küçük ve/veya multifokal NET'leri tanımlamak için tüm jejunum ve ileumun dikkatli palpasyonu ile keşif amaçlı bir laparotomi yapılması gerekir (3).

Sonuç olarak nadir olmasına rağmen, ince bağırsak NET'lerin insidansı ve prevalansı artmaktadır. Hastalar belirsiz abdominal semptomlar, görüntülemede tesadüfen bulunan asemptomatik kitleler veya obstrüksiyon semptomları ile başvurabileceğinden, cerrahların klinik uygulamalarında ince bağırsak NET'leri ile karşılaşma olasılıkları giderek artmaktadır. Bir ince bağırsak NET teşhisinden şüpheleniliyorsa, hastalar görüntüleme, biyokimyasal testler ve gerekirse laparoskopik ya da açık cerrahi ile değerlendirmeye tabi tutulmalıdır.

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İNFERİOR MİYOKARD İNFARKTÜSÜNÜ TAKLİT EDEN SİTOMEGALOVİRÜS MİYOKARDİTİ VAKASI

GİRİŞ: Sitomegalovirüs (CMV), Herpesviridae ailesinden bir DNA virüsüdür. Tükürük, semen, idrar, gözyaşı, dışkı, servikovajinal sekresyonlar, anne sütü, kan gibi pek çok vücut sıvısında bulunduğu için çok çeşitli yollarla bulaş olabilmektedir. Gelişmekte olan toplumlarda seropozitiflik %90-100'dür. Primer CMV enfeksiyonu; immünitesi tam konakta genellikle asemptomatik seyreder ancak immunsuprese hastalarda ciddi tablolara yol açabilir. CMV immunsuprese hastalarda kolit, özofajit, hepatit, ensefalit, retinit ve pnömoni tablosuna daha sık sebep olmakla birlikte miyokardit vakası çok nadirdir.

OLGU: 32 yaşında erkek hasta acil servisimize 2-3 saattir şiddetlenen sol omuz ve epigastriuma yayılan göğüs ağrısı ile başvurdu. Romatoid artrit tanısı olan hasta steroid kullanmaktaydı. Fizik muayenede TA:100/60mmhg, KTA 112/dk, ateş:37,6 °C, saturasyon %99 idi. Kalp sesleri ritmik ve taşikardikti, akciğer sesleri normaldi ve batın muayenesinde özellik yoktu. Elektrokardiyografisinde DII, DIII ve AVF derivasyonlarında ST elevasyonu mevcuttu. Tetkiklerinde patolojik olarak CRP:108,1 mg/L(N:0-5), sedimentasyon:42 mmh/h(N:<20), AST 52U/L(N:<40), tam kan sayımında monosit%15,3(N:0-11.7), troponin2,3µg/L(N:<0,023) tespit edildi. Akut inferior miyokard infarktüsü ön tanısı ile kardiyolojiye konsülte edildi ve acil koroner anjiyografi kararı alındı. Öncesinde yapılan ekokardiyografide EF%50, hafif mitral yetmezlik ve hafif triküspit yetmezlik mevcuttu. Anjiyografide koroner arterlerin açık olduğu görüldü. Miyokardit ön tanısı ile viral seroloji istendi. Hastada CMV IgM pozitifliği ve düşük aviditeli CMV IgG pozitifliği tespit edildi. Laboratuvar tetkikleri primer CMV enfeksiyonu ile uyumlu olan hastaya enfeksiyon hastalıkları tarafından 14 gün süre ile valgansiklovir tedavisi başlandı.

TARTIŞMA: Miyokardın inflamasyonu ile karakterize olan miyokardit en sık olarak enfeksiyon hastalıkları, bağ dokusu hastalıkları ve kardiyotoksik ilaçların kullanımı nedeni ile ortaya çıkmaktadır. Ateş, göğüs ağrısı, taşikardi, kalp yetmezliği, senkop ile prezente olabilir. Akut miyokardit tamamen asemptomatik seyredebilir, subakut miyokardite ilerleyebilir veya ventriküler aritmi, tam blok, kardiyojenik şok gelişimine neden olarak mortalite ile sonuçlanabilir. Elektokardiyografide tutulan bölgeye göre sinüs taşikardisi, atriyoventriküler ileti kusurları, ST-T değişiklikleri gözükebilir. Ekokardiyografi tamamen normal olabileceği gibi kardiyomegali, diffüz veya global duvar hareket kusuru en sık görülen patolojik bulgulardır. Vakamızda hastamızda inferior miyokard infarktüsü düşündürecek şekilde DII-DIII ve AVF derivasyonlarında ST elevasyonu mevcuttu, ekokardiyografide EF %50 tespit edilmişti ve anjiyografide vasküler patoloji tespit edilmemesi üzerine miyokardit ön tanısı ile viral seroloji istenmişti. Tanıda altın standart endomiyokardiyal biyopsi olmak ile birlikte miyokarditin fokal doğası ve komplikasyon riskinden dolayı sıklıkla enzim immunassay yöntemi ile Ig düzeyi ölçümünden yararlanılmaktadır. Biz de vakamızda bu yöntemi kullarak tanı koyduk.

SONUÇ: Miyokardit kliniği, laboratuvar bulguları, elektrokardiyografi ve ekokardiyografi bulguları ile miyokard infarktüsünü taklit edebilen, mortalitesi yüksek bir hastalıktır. Göğüs ağrısı ile başvuran hastalarda ayırıcı tanıda mutlaka akla getirilmelidir. CMV'nin özellikle immunsuprese hastalarda etken olabileceği unutulmamalıdır.

ANAHTAR KELİMELER: akut miyokokardit, göğüs ağrısı, miyokard infarktüsü, sitomegalovirüs

A CASE REPORT OF SINKING WITHOUT SEQUELAE

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ABSTRACT

Aim: In our country, which is surrounded by sea on three sides, accidental sinking is very common. With this case report, we aimed to draw attention to the issue of sinking in water.

CASE REPORT: A 14-year-old male patient's, who was brought to the emergency department by the 112 emergency ambulance team due to immersion in water after falling into a pond, GCS was 13, a heart rate was 83 beats/min, a body temperature was 36.2°C, a respiratory rate was of 40/min, and a SpO2 was 86%. As a result of the thorax computed tomography of the patient with bilateral rhonchi, diffuse patchy ground-glass areas with centrally located localization were observed in all lobes and segments of the bilateral lung parenchyma. Since the findings were compatible with pulmonary edema in the patient with a history of sinking, the patient was followed up in the intensive care unit for 24 hours. The patient was discharged from the service on the 3rd day without any sequelae, with the patient's vitals stable, improvement in blood tests, and lack of oxygen need.

CONCLUSION: In cases of sinking, most victims die at the scene or in emergency department before they reach the hospital. It should be kept in mind by emergency physicians that sinking cases can be healed without sequelae with early intervention.

Key words: emergency department, children, pulmonary edema, sinking

INTRODUCTION

Drowning in water; it is death due to asphyxia as a result of immersion in water. Near drowning is a state of immersion in water that can result in a person's survival. Approximately 450,000 people die annually from drowning in the world. The population at greatest risk for drowning accidents are children and adolescents aged 1-4 years. The carelessness of parents plays a role in drowning in the pool at a young age. Causes of adult drowning cases; trauma, alcohol, drugs, suicide, murder and also primary neurological and cardiac events such as epilepsy, stroke, syncope, myocardial infarction, arrhythmia. In low- or middle-income countries, mortality from drowning is over 90%. Accidental sinking is also common in our country, which is surrounded by seas on three sides (1,2). Therefore, we aimed to draw attention to the issue of sinking in this case report.

CASE REPORT

A 14-year-old male patient was brought to the emergency department (ED) by 112 emergency ambulance team due to falling into a pond and sinking in water in June. The general condition of the patient was moderate, GCS was 13, heart rate was 83 beats/min, body temperature was 36.2°C, respiratory rate was 40/min, SpO2 was 86%. On physical examination, bilateral rhonchi were present. EKG was in normal sinus rhythm. Nasal oxygen support at 2 Lt/min was started for the patient. Nasogastric and urinary catheters were inserted. The patient was followed closely in terms of hypoxia and acidosis with blood gas measurements. When the blood test results are evaluated; glucose was 292 mg/dL, sodium 128 mmol/L, creatine kinase 232 IU/L and blood gas pH 7.17, pCO2 36.8 mmHg, pO2 81.8mmHg and SO2 89.9%. As a result of the patient's thorax computed tomography (CT); in the bilateral lung parenchyma, diffuse patchy ground-glass areas were observed in all lobes and segments, predominantly centrally located. Findings were consistent with pulmonary edema in the patient with a history of sinking.

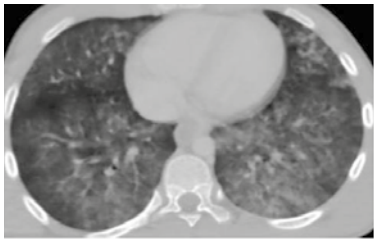

Figure 1: 14-year-old male patient. In the axial CT image obtained in the parenchymal window, widespread increased alveolar density and diffuse pulmonary edema in both lungs are observed.

The patient was consulted to the pediatric surgery and pediatric health and diseases department. The patient was admitted to the intensive care unit and was taken to the service on the 2nd day of hospitalization. The patient, who received supportive treatment and antibiotic therapy, was discharged from the service on the 3rd day of his hospitalization, recovering without sequelae, with stable vitals, no signs of lung listening, improvement in blood tests and lack of oxygen need.

DISCUSSION

Damage due to submersion in water, panic reaction and dysrhythmic respiration, which occurs when the face goes under the water, may be accompanied. The change in mental status further complicates this situation.

Sinking; it is evaluated in three categories as rescue from water, sinking and drowning. Rescue from water; it is used for people who are conscious but have difficulty swimming. The victim may have mild transient symptoms such as coughing. Person in a state of sinking; it is an individual who needs support at the scene and advanced examination and treatment in the ED. Drowning; it is the acceptance of the individual as dead after the sinking, where the person's resuscitation procedure is performed. (3,4,5) In this study, the victim was a patient who remained in the state of "sinking".

Hypoxemia is the most important clinical consequence of sinking. Aspiration of salt or fresh water causes hypoxemia with a significant alveolo-arterial oxygen difference. This may cause ARDS. In seawater aspiration, deterioration of the integrity of the alveolocapillary membrane may cause diffuse pulmonary edema with the advent of water and plasma proteins into the interstitium and parenchymal air spaces. Pulmonary edema developing as a result of freshwater aspiration occurs due to diffuse microatelectasis and hypervolemia in the lungs (5).

The most important factors determining the prognosis in the event of sinking are the duration of sinking in water and the duration and severity of hypoxia. For sinking patients; treatments for the correction of hypothermia, hypotension and metabolic acidosis and positive pressure ventilation should be applied if needed. Respiratory functions return to normal limits in survivors (6). In this case, the patient developed pulmonary edema. The patient recovered without any sequelae, with the rapid and correct approach to the patient in the ED, with intensive care follow-up and supportive treatment.

CONCLUSION

As a result, whether or not the victim will be mortal in drowning cases is related to the duration of immersion and intervention. Most victims die at the scene or in ED before reaching the hospital. Emergency physicians should keep in mind that sinking in water cases can be discharged without complications with early intervention.

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YABANCI CİSİM YUTMA NEDENİYLE ACİL SERVİSE BAŞVURAN HASTALARA YAKLAŞIM

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ÖZET

Yabancı cisimler yutulması, çeşitli iş ve ev kazaları sonucunda vücudun değişik yerlerinde yabancı cisim saptanması yaygın klinik bir problemdir. Yabancı cisim yutan hastalarda takılma hissi, ağrılı yutma ile uyumlu şikayetlerle hastalar başvurabilir. Hastanemize mahkum koğuşundan getirilen ve yabancı cisim yutan 5 hastanın dosya kayıtlarından retrospektif değerlendirme yaparak, bu konuyla ilgili deneyim ve sonuçları sunmak amaçlanmıştır. Kafkas Üniversite Tıp Fakültesi Genel Cerrahi bölümüne ceza evlerinden sevk edildikten sonra Acil servise başvuran 5 hastanın dosyaları retrospektif olarak incelendi. Yabancı cisim yutarak gelen hastalarımızın 5'i erkekti ve yaş ortalaması ise 43,4 yıl idi. Hastalarımızın 1 tanesinde pil yutma,4'ünde iğne yutma mevcuttu. Hastalarımızın hepsine radyolojik görüntüleme yöntemleri ve endoskopik işlemler yapılarak vücutta yerleşim yerleri tespit edildi. Endoskopi yapılan hastalarımız acil olarak dış merkezden sevk edildikleri için belli açlık süresi olmayan hastalardı. Yapmış olduğumuz endoskopik incelemelerde herhangi bir yabancı cisim saptayamazken, yapılan ayakta karın grafilerinde bir hastada midenin lokalizasyonuna uyan bölgede pil saptandı. Mideye uyan lokalizasyonda pil saptanan hasta ameliyata alınarak midedeki pil çıkarılarak mide primer dikişle onarıldı. Ayakta direkt karın grafisiyle barsakta iğne görüntüsü saptanan hastalar ise en az beş gün yatırılarak takipleri yapıldı. Takipleri esnasında en son ayakta direkt karın grafisinde yabancı cisim saptanmayan hastalarda ise yabancı cisimlerin gaita deşarjı ile atıldıkları düşüncesindeyiz. Cerrahi yapılan hastamızın yapılan kontrollerinde herhangi bir komplikasyon gelişmedi. Yabancı cisim saptanan hastalarda; hastaların şikayetleri ve semptomlarına bakılarak, uygun görüntüleme yöntemleri yapılarak, takip edilmesi gereken hastalar ve cerrahi yapılması gereken hastalar belirlenmelidir.

ANAHTAR KELİMELER: Endoskopi, grafi, yabancı cisim, yutma

GİRİŞ

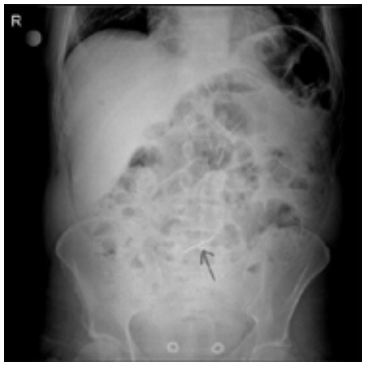
Yabancı cisimler yutulması, çeşitli iş ve ev kazaları sonucunda vücudun değişik yerlerinde yabancı cisim saptanması yaygın klinik bir problemdir. Ayrıca yabancı cisim yutma ile gelen hastalarda oluşabilecek komplikasyonlar gastrointestinal kanama, barsak perforasyonu ve barsaklarda meydana gelen tıkanmalara neden olabilmektedir. Yabancı cisim yutan hastalarda takılma hissi, ağrılı yutma ile uyumlu şikayetlerle hastalar başvurabilir (1). Hastanemize mahkum koğuşundan getirilen ve yabancı cisim yutan 5 hastanın dosya kayıtlarından retrospektif değerlendirme yaparak, bu konuyla ilgili deneyim ve sonuçları sunmak amaçlanmıştır.

MATERYAL VE METOD

Kafkas Üniversite Tıp Fakültesi Genel Cerrahi bölümüne ceza evlerinden sevk edildikten sonra Acil servise başvuran 5 hastanın dosyaları retrospektif olarak incelendi. Hastaların demografik bulguları, etiyolojik nedenleri, endoskopik inceleme, radyolojik görüntüleme sonuçları, cerrahi tedavi ve sonuçları, ve postoperatif komplikasyonları kaydedildi.

BULGULAR

Yabancı cisim yutarak gelen hastalarımızın 5'i de erkekti ve yaş ortalaması ise 43,4 yıl idi. Yutma sonucu yabancı cisim saptanan hastalarda yutma güçlüğü, takılma hissi, bulantı ve karın ağrısı gibi semptomlar oluşurken, üst ve alt ekstremitelerde saptanan yabancı cisimlerde ise semptomlar ağrı, hareket kısıtlılığı ve abse ile uyumluydu. Hastalarımızın bir tanesinde pil yutma, dördünde iğne yutma mevcuttu (Figür 1). Hastalarımızın hepsine radyolojik görüntüleme yöntemleri ve endoskopik işlemler yapılarak vücutta yerleşim yerleri tespit edildi. Endoskopi yapılan hastalarımız acil olarak dış merkezden sevk edildikleri için belli açlık süresi olmayan hastalardı. Yapmış olduğumuz endoskopik incelemelerde herhangi bir yabancı cisim saptayamazken, yapılan ayakta karın grafilerinde bir hastada midenin lokalizasyonuna uyan bölgede pil saptandı. Mideye uyan lokalizasyonda pil saptanan hasta ameliyata alınarak midedeki pil çıkarılarak mide primer dikişle onarıldı. Ayakta direkt karın grafisi (ADBG) ile barsakta iğne görüntüsü saptanan hastalar ise en az beş gün yatırılarak takipleri yapıldı. Son çekilen ADBG'de yabancı cisim saptanmayan hastalarda yabancı cisimlerin gaita deşarjı ile atıldıkları düşüncesindeyiz. Cerrahi yapılan hastamızın yapılan kontrollerinde herhangi bir komplikasyon gelişmedi.



Ayakta direkt karın grafisinde iğne görüntüsü

TARTIŞMA

Yabancı cisim yutma şeklinde acil servislere başvuran hastaların özelliklerine bakıldığında daha çok mahkum hastaları görmekteyiz. Mahkum hastaların alınan anamnezlerinde daha çok kendi istekleriyle yabancı cisim yuttukları görülmektedir. Özofagusta, midede yabancı cisimlerin kalma süreleri uzadıkça mediastinit, organlar arası fistül gelişimi, perforasyon ve abse gibi olumsuz durumların ortaya çıkabileceği unutulmamalıdır. Bu nedenle yabancı cismin tespitinin radyolojik görüntüleme ve endoskopik yöntemlerle tespit edilerek en kısa süre içerisinde çıkarılması gerekmektedir. Yabancı cisimler mide ve özofagusta kaldığı sürece yutma güçlükleri, özofagus ve midede ülserasyonlarla sonuçlanan durumlar ortaya çıkabilir (2,3). İnce barsak ve midede bulunan yabancı cisimler genellikle kendiliklerinden atılırlar. Fakat perforasyon gibi komplikasyonlarda akut karın bulgusu gelişen hastalarımızda acil cerrahi girişim yapılmalıdır (4). Hastalarda periton irritasyon bulgularının geliştiğinin saptanması ve yabancı cismin 48-72 saat aynı yerde kaldığı durumlarda laparotomi yapılmalıdır (4). Yapılan çalışmalarda yabancı cisimlerin sindirim kanalından geçiş süresi 3,6 ile 5,1 gün arasında bildirilmiştir (4,5). Tüm yabancı cisim saptanan olgularda eğer düz grafiler veya endoskopik işlemler esnasında herhangi bir yabancı cisim saptanmazsa; Bilgisayarlı Tomografi ve Magnetik Rezonans görüntüleme yöntemleri kullanılarak yabancı cisimlerin yerleşim yeri saptanabilinir (5,6).Yabancı cisim saptanan hastalarda, yabancı cisim yerleşim yeri olan bölgelerden çıkarılmazsa, bu bölgelerde ağrı, sellülit, enfeksiyon, geç iyileşme gibi komplikasyonlar oluşabilmektedir. Fakat uzun süredir hastalarda bulunan ve organlarda herhangi bir fonksiyon bozukluğu oluşturmayan olgularda yabancı cisimler çıkarılmayabilinir (1-3).

Bizim çalışmamızda özofagusta saptanan yabancı cisimler endoskopik yöntemle çıkarılırken, midenin dolu olması nedeniyle görülemeyen fakat ayakta direkt karın grafisiyle görüntülenen yabancı cisim saptanan hastamız ameliyata alınarak mideden iki adet pil çıkarılmıştır. Diğer hastalarımızda ise iğne yutması tespit edilerek hastalarımızın takip edilen ayakta direkt karın grafilerinde iğnenin görülmemesi üzerine ve hastalarımızın takipleri esnasında akut karın bulgularının saptanmaması nedeniyle bu hastalarımıza herhangi bir cerrahi girişim uygulanmamıştır. Hastalarımız en az 6 gün takip edilerek taburcu edildi.

SONUÇ: Yabancı cisim saptanan hastalarda; hastaların şikayetleri ve semptomlarına bakılarak, uygun görüntüleme yöntemleri yapılarak, takip edilmesi gereken hastalar ve cerrahi yapılması gereken hastalar belirlenmelidir. Yabancı cismin yerine göre cerrahi gereken hastalara gereken cerrahi işlem yapılmalıdır. Gastrointestinal sistemde saptanan yabancı cisimlere ise hastalarda obstrüksiyon ve perforasyon gibi komplikasyonlar gelişirse cerrahi işlem yapılmalı, komplikasyon görülmeyen hastalarda ise hasta takip edilerek cerrahi gereken durumlarda hastaya operasyon yapılmalıdır.

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A BEHÇET PATIENT WHO ADMITTED TO THE EMERGENCY DEPARTMENT WITH INGUINAL PAIN AND DIAGNOSED AS RUPTURED ILIAC ARTERY PSEUDOANEURYSM

ABSTRACT: Behcet's disease (BD) is an autoimmune disease characterized by oral and genital ulcers, and multisystemic involvement including major vessels. The disease may have both venous and arterial manifestations. Aneurysm and occlusion are the most common arterial manifestations (1). Surgical treatment of the aneurysms may be challenging in BD because the arteries are inflamed and prone to tearing while putting the stitches for anastomosis. Even after a successful surgical repair, vessels are likely to rupture or develop pseudoaneurysm (PA) from the anastomosis sites (2). In this case we aimed to share a BD patient who admitted to emergency department (ED) with swelling of the left leg and a lump in the groin and hospitalized becouse of femoral PA.

CASE: A 38-year-old male patient was admitted to the ED with swelling of the leg. There was no history of penetrating trauma or vascular puncture for intervention. He had a history of hospitalization twice with the same complaints and a spontaneous left common femoral PA was detected on computed tomography angiography (CT-A) (Figure 1). The PA was 27x23mm in size in April 2020 (Figure 1) and increased to 53x42mm in June 2020 with increased diameter of the left leg due to venous compression. In his last admission on July 2020; the PA size was 90x60mm, originating from common femoral artery (CFA), and extending to the iliofemoral region. The CFA portion inside the PA sac was occluded and the neck of the origin couldnot be discriminated. The patient was operated under urgent conditions. PA sac was removed and ilio-femoral bypass performed by using dacron graft (Figure 2).

DISCUSSION: Because of the involvement of medium and large vessels in BD, clinical manifestations can be very different (3). So BD should be kept in mind when atypical involvement is detected in patients who come to the emergency department with complaints such as groin, abdominal pain, hemoptysis, and diameter difference between extremities. Spontaneous PA of CFA without any penetrating trauma or an invasive medical procedure is rare but may be seen in BD. If atypical vascular lesions are seen in CT-A in the ED, it is necessary to exclude BD.

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PLACE OF METHOXYFLURANE IN PREHOSPITAL TRAUMA PATIENT TREATMENT

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KEYWORDS: methoxyflurane, treatment, pain, trauma, prehospital

OBJECTIVE

A halogenated ether called methoxyflurane was initially used in medicine as a volatile inhalational anesthetic. For the last 30 years, it has been used as an analgesic in Australia and New Zealand. Methoxyflurane has received approval for the emergency treatment of moderate to severe trauma pain in conscious adult patients in the UK and Europe. A portable inhaler is used to deliver Methoxyflurane to oneself. In prospective research, methoxyflurane was found to be more efficient than intramuscular tramadol at treating acute musculoskeletal pain used by paramedics. When used to alleviate pain brought on by ankle injuries in the emergency room, Methoxyflurane showed a quicker beginning of effect than tramadol. The far lower dosages used for pain management were not linked to nephrotoxicity or a higher risk of renal illness, despite the fact that methoxyflurane is known to be potentially nephrotoxic at anesthetic levels. In our analysis, we decided to examine the effectiveness and efficiency of Methoxyflurane in prehospital setting using time to pain relief of the Methoxyflurane and the change in pain intensity score at different times within 10-minutes follow-up after the start of treatment was reported.

METHODS

Eight studies were included in the meta-analysis, selected from scientific papers available in the MEDLINE/PubMed, SCOPUS, CENTRAL and Google Scholar databases between database inception till September 10th, 2022. The following terms were used for the search strategy: “methoxyflurane” AND “morphine” OR “paracetamol” OR “opioid” OR “morphine” OR “fentanyl” OR “NSAID” AND “emergency” OR “prehospital”.

RESULTS

Eight studies were included in this meta-analysis. Pool analysis of time to pain relief in the Methoxyflurane and SoC groups varied and amounted to 7.8 ± 3.5 min. vs. 20.1 ± 9.7 min., respectively (SMD = -5.02; 95%CI: -6.61 to -4.18; p<0.001; Figure 1). The change in pain intensity score at different times within 10-minutes follow-up after the start of treatment was reported in six studies and was -2.01 ± 2.0 points for Methoxyflurane, compared to -1.46 ± 1.77. points for SoC (SMD = -0.63; 95%CI: -0.81 to -0.44; p<0.001; Figure 2).

CONCLUSIONS

Methoxyflurane seems to be an effective and effective pain reliever in pre-hospital care, which works faster and stronger than alternative treatment, moreover, the advantage of Methoxyflurane is that it can be dosed in an inhaler by the patient, thanks to which he can dose himself according to the intensity of pain. The wider implementation of Methoxyflurane should be considered in pre-hospital care more widely around the world.

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Figure 1

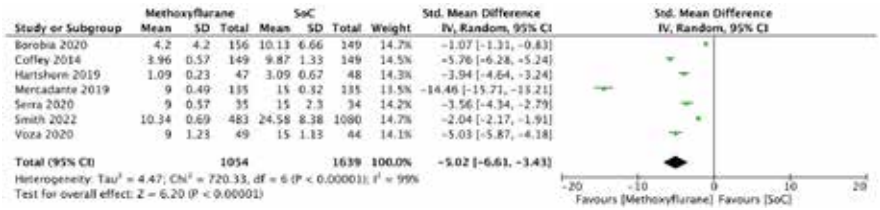

Figure 1. Forest plot of time to pain relief among patients treated with Methoxyflurane and Standard of Care group. The center of each square represents the mean differences for individual trials, and the corresponding horizontal line stands for a 95% confidence interval. The diamonds represent pooled results.

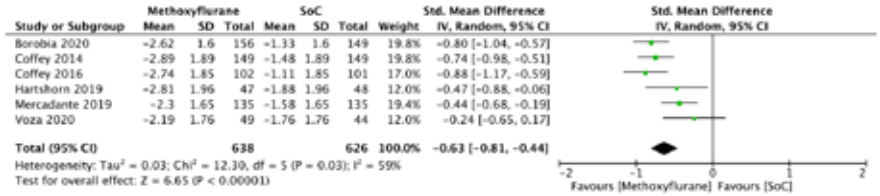

Figure 2. Forest plot of change in pain intensity score at different times within 10-minutes follow-up among patients treated with Methoxyflurane and Standard of Care group. The center of each square represents the mean differences for individual trials, and the corresponding horizontal line stands for a 95% confidence interval. The diamonds represent pooled results.

PERFUSION INDEX AND TRAUMA SCORE : CAN PREDICT OUTCOME?

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INTRODUCTION:

Traumatic injuries range from simple to complicated multiple injuries. The tissue perfusion value is an essential indicator of mortality and morbidity for patients admitted to the hospital with thoracic trauma. Thus, this study aimed to show the role of the perfusion index (PI) in predicting the prognosis of patients admitted to the emergency department for thoracic trauma.

MATERIAL METHOD:

This study was conducted prospectively on 187 patients who were admitted to the emergency clinic of a tertiary university hospital between January 1, 2019, and December 1, 2020.

Patients over 18 years of age who were admitted for thoracic trauma and whose PI values were measured on admission and 2 h after admission were included in the study. Patients with a known peripheral vascular disease, penetrating injuries, or positive COVID-19 polymerase chain reaction test were excluded from the study. Masimo Radical-7 pulse oximeters (Masimo Corporation, USA) were used to measure the PI.

The patients were assessed for their sex, age, triage codes on admission, Glasgow Coma Scale (GCS), Injury Severity Score (ISS), Revised Trauma Scores (RTS), fingertip oxygen saturation (SPO2), PI, presence of intubation, diagnoses, and outcomes (discharge, transfer to a department/ intensive care unit [ICU], and exitus).

RESULTS:

Based on the selection criteria, 37 patients were excluded from the study, and 150 patients were included. We observed isolated thoracic trauma in 29.3% (n=44) and multiple traumas accompanied by thoracic trauma in 70.7% (n=106) of the patients.

In this study, the GCS, ISS, and RTS scores and PI readings on admission and 2 h thereafter significantly affected the final outcomes ($P<0.05$).

The PI on admission was 2.92±0.51 for the discharged group, 1.90±1.13 for the hospitalized group, and 0.88±0.40 for the ICU and exitus group. As the clinical severity of the cases increased, the PI decreased significantly ($P<0.001$).

The ISS (odds ratio [OR] 2.077, 95% confidence interval [95% CI] 1.493–2.890) and the PI recorded on admission (OR 0.112, 95% CI 0.037–0.340) significantly affected ICU admission and exitus regardless of other variables ($P<0.001$).

The PI was 83.6% sensitive and 81.8% specific at a cut-off value of 0.95 in determining ICU admission or death (area under the curve [AUC] 0.896, 95% CI 0.846–0.946, $P<0.001$). The PI on admission correlated positively with the GCS, RTS and fingertip SPO2 and negatively with the ISS and at a significant level ($P<0.05$).

DISCUSSION:

PI is an indirect and noninvasive measure of peripheral perfusion. Lima et al showed that a PI value of ≤1.4 in patients with critical injuries is a strong indicator of disrupted perfusion. In our study, a similarly disrupted peripheral PI value at a cut-off value of 0.95 was significant in determining whether the patient needed ICU care.

In our study, we found that PI and ISS were superior to RTS for capability to predict prognosis for thoracic trauma cases.

We found that PI and ISS were independently related to ICU stay and mortality. Considering the purpose of ISS, it is an indicator of the severity of injury in trauma cases; hence, it is related to prognosis. Considering the outcomes of the studies on trauma scores and PI and our findings, PI and ISS can be more accurate predictors than RTS in determining prognosis in trauma cases. We found that PI and ISS on admission can predict ICU stay and mortality regardless of the other parameters examined. A low PI in patients who sustained hemothorax and pneumothorax improved rapidly after tube thoracostomy.

In the case of parenchymal injury (contusion), a ventilation-perfusion mismatch occurs in the lungs, causing oxygen saturation; hence, the PI is lower than normal. This shows that this drop in PI in thoracic trauma cases is more specific to a parenchymal injury

CONCLUSION:

PI in combination with ISS may be easily used for determining the prognosis of patients with thoracic trauma, especially those with lung parenchymal injury

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ACİL SERVİSE KOLUNDA DEMİR PARMAKLIKLAR İLE GETİRİLEN ÇOCUK HASTA

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GİRİŞ: Çocuklar oyun oynarken tehlikeli durumlar ile karşı karşıya kalabilmektedirler. Yüksekten düşme, kesici delici alet yaralanması, trafik kazaları gibi birçok üzücü durum sonucu acil servislere başvurular olur (1). Çocuk travmaya yaklaşım bir acil tıp doktorunun hakim olması gereken bir konudur. Burada bahçeye kaçan topunu almak için tırmandığı korkulukların üzerine düşüp koluna demir parmaklıklar saplanan bir vaka sunulmaktadır.

VAKA: Çocuklarda kazalara bağlı ekstremite yaralanmaları sık görülmektedir. Vakamızda olduğu gibi demir parmaklıklara bağlı delici-kesici ekstremite yaralanmalarında vasküler, sinir yaralanmaları açısından muayene çok önemlidir. 10 yaşındaki erkek çocuk bahçe korkuluklarına tırmanıkten demir parmaklıkların üzerine düşüyor. İtfaye ekipleri tarafından dikkatli bir şekilde kesilen parmaklıklar ile birlikte hasta 112 ekiplerince acil servise getiriliyor. Hastanın gelişinde bilinci açık koopere oryante, yaşam bulguları olağan ve sağ kolunda yaban cisim dışında herhangi bir travma izine rastlanmadı. Tüm sistem muayenesi olağandı. Hastanın sağ üst ekstremitesinde motor ve duyu defisiti bulunmamaktaydı. Radial, ulnar ve brakial nabızlar palpabldı. Ek bir travmaya neden olmaması için diğer sivri uçlar gazlı bez ile korumaya alındı. Hastaya sedoanaljezi için 30 mg IV Ketamin uygulandı. Demir parmaklık giriş şeklinin zıt yönünde çekilerek çıkarıldı. Yabancı cisim çıkarılması sonrası yapılan muayenede motor, duyu, dolaşım olağandı. Kolun lateralinde ve medialinde yaklasık 3 cmlik iki adet cilt ciltaltı kesi bulunmaktaydı. Çekilen röntgeninde kemik yapılar olağandı. Hastanın okul dönemi aşılarının hepsi uygulandığı için tetanoz profilaksisi uygulanmadı. Cilt ve cilt altı sutürasyonu sonrası uygun antibiyoterapi ve önerilerle taburcu edildi.

TARTIŞMA: Subklavian, aksiller ve brakial yaralanmalar vasküler yapıların diğer yapılarla komşuluklarından dolayı nörojenik, yumuşak doku ve osseöz yaralanmalara sık eşlik ettiği için, fonksyon kaybı ve amputasyon oranı distal yaralanmalara nazaran daha fazladır ve bu yaralanmalarda erken müdahale önem arz etmektedir (2). Kesici delici alet yaralanmaları ile acile getirilen hastalarda hızlı bir şekilde dolaşım, sinir ve tüm vücut muayenesi yapılmalıdır. Uygun müdahele sonrası taburcu etmeden önce tüm kontroller yapılmalıdır (3).

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ANAHTAR KELİMELER: çocuk travma, üst ekstremite yaralanması, kesici delici alet yaralanması

MAJOR KÜNT TRAVMAYA BAĞLI İZOLE DİYAFRAGMA RÜPTÜRÜ VE MİDENİN TORAKS BOŞLUĞUNA HERNİASYONU

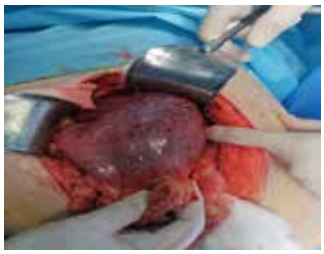
GİRİŞ: Künt travmaya bağlı diyafragma yaralanma sıklığı %3.3'tür. Diyafragma rüptürü ise nadir olup, travma nedeniyle hastaneye yatırılanların %0,8-1,6'sında görülmektedir. Bu çalışmada; majör künt travmaya bağlı izole diyafragma rüptürü nedeniyle mide fundus ve korpus kısmının toraks boşluğuna herniasyonu sonucu obstruksiyon gelişen hastaya uygulanan cerrahi işlemi sunmayı amaçladık.

OLGU SUNUMU: Araç içi trafik kazası sonucu yaralanan ve üst karın ağrısı şikayeti olan 28 yaşında erkek hasta acil servise getirildi. Bilinen ek hastalığı olmayan hastanın yapılan fizik muayenede epigastrik bölgede palpasyonla hassasiyeti ve solunum sıkıntısı mevcuttu. Laboratuvar tetkiklerinde patoloji yoktu. Direkt grafilerde sol toraks boşluğuna herniasyona bağlı hava sıvı seviyesi görüntüsü ve sağ pubik ramusta lineer fraktür mevcuttu. Çekilen batın tomografide (BT); sol hemitoraks tabanında mideye ait dev hava dansitesi bulgusu gözlendi. Acil ameliyata alınan hastada 6-7 cm'lik defekttten mide fundus ve korpusunun toraksa herniasyonu sonucu sıkışmaya bağlı proksimalde aşırı dilatasyon ve mide çıkışında obstrüksiyon mevcuttu. Eşlik eden başka bir batın içi patoloji yoktu. Sol diyafragmadaki rüptüre alan kesilip genişletilerek strangüle olan mide batın boşluğuna çekildi. Aşırı dilatasyona bağlı kanlanması bozulan fundus ve korpusun içeriği boşaltıldığında kan dolaşımının iyi olduğu gözlendi, sol toraksa göğüs tüpü konularak rüptüre olan diyafragma nonabsorbabl sütürlerle primer tamir edildi. Ameliyat sonrası 7. gün göğüs tüpü çekildi ve hasta şifa ile taburcu edildi.

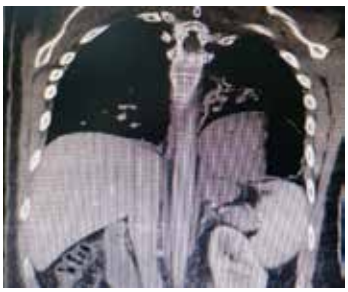
TARTIŞMA: Diyafragma yırtığı gelişen olgular semptomsuz olabileceği gibi karın organlarının herniasyonu geliştiğinde, solunum veya gastrointestinal kanalın mekanik tıkanıklık semptomları da ortaya çıkabilir. Radyolojik olarak PA akciğer grafi, Ekokardiyografi, MR ve kontrastlı grafiler kullanılır. Özellikle Toraks BT diyafragmatik rüptür tanısında oldukça faydalıdır. Spiral BT ise çoklu travmalı hastalarda diyafragma rüptürü erken tanısında kullanılır. Diyafragma rüptürü radyolojik olarak diyafragma yükselmesi, lokalize pnömotoraks, plevral sıvı, akut mide dilatasyonu ile karışabilir. Olgumuzda PA akciğer grafide; sol diyafragma sınırları izlenmedi. Göğüs BT de ise midenin sol hemitoraksta olduğu gözlendi. Künt travmaya bağlı diyafragma yırtılması genellikle soldadır. Herniye olan organlar solda genellikle mide, dalak, kalın barsak, ince barsaklar, omentum ve karaciğerdir. Diyafragma rüptüründe midenin herniye olduğu olgularda bulantı ve kusma belirgindir.

SONUÇ: Künt travmaya bağlı diyafragmada büyük rüptürler sonucu oluşan akut ve ciddi herniasyonda mediastinal shift ve kardiyak arrest gelişebilir. Bu nedenle meydana geliş zamanına bakılmaksızın künt veya penetran travma öyküsü olan hastada diyafragmatik herni tanısı mutlaka akılda bulundurulmalıdır. Bu nedenle iyi bir eksplorasyon ve dikkatli değerlendirme şarttır. Tüm bunlar morbidite ve mortalitenin önlenmesinde yardımcı olacaktır.

ANAHTAR KELİMELER: Künt travma, Diyafragma Rüptürü, Cerrahi onarım



Resim 1: Künt travma sonucu oluşan diyafragma rüptürüne bağlı midenin toraks boşluğuna herniasyonu



Resim 3: Midenin sol toraksa herniasyonunun Batın BT görüntüsü

A COMPARISON OF THE MCGRATH AND MACINTOSH LARYNGOSCOPES FOR OBESE PATIENT INTUBATION: A META-ANALYSIS OF RANDOMIZED CLINICAL TRIALS

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KEYWORDS: McGrath, Macintosh, laryngoscopes, obesity, meta-analysis

OBJECTIVE:

In the United States, more than two-thirds of adults are overweight or obese, and a rising number are severely obese. According to a number of publications, obese people are more likely than those who are not obese to have a difficult or unsuccessful intubation. Compared to 2.2%, the prevalence of difficult intubation is higher in the obese group with a BMI over 15.5%. Some experts contend that people who are extremely obese make it more challenging to execute tracheal intubation or get a clear view of the glottis. Recent studies have shown that video-laryngoscopy (VL) is preferable for intubating obese individuals because it can get the glottic image with less associated local airway trauma and sustain oxygen desaturation. However, some research indicate that using VL as opposed to conventional DL results in longer intubation times and greater intubation failure rates. Our study's objective was to evaluate the McGrath and Macintosh laryngoscopes for intubating obese patients in terms of intubation time, success on the first attempt, overall success rate, and clearer glottis view.

METHODS:

English language databases (Scopus, Embase, PubMed, Web of Science and Cochrane Library) were searched from their inception to August 2022. For predefined outcomes mean difference (MD) or odds ratios (OR) with 95% confidence interval (CI) was calculated. We strictly followed the Preferred Reporting Items for Systematics reviews and Meta-Analysis (PRISMA) guidelines in this review. This research was performed using Review Manager 5.4 software.

RESULTS:

Four studies included in this meta-analysis. Pooled analysis of intubation time in MCG and Macintosh laryngoscope varied and amounted to 36.1 ± 16.3 vs. 34.4 ± 19.4 sec (MD = 2.64; 95%CI: -4.05 to 9.34; Figure 1). First attempt intubation success rate was 89.7% for MCG and 88.8% for Macintosh group (OR = 1.09; 95%CI: 0.48 to 2.46; p=0.84). Overall intubation success rate between MCG and Macintosh groups was 98.5% vs. 95.6% (OR = 3.31; 95%CI: 0.64 to 17.05; p=0.15). However, better glottis view (Cormack-Lehane grade I) was statistically significantly better in MCG compared to Macintosh, 62.9% vs. 35.3% (OR = 4.00; 95%CI: 2.46 to 6.49; p<0.001; Figure 2).

CONCLUSIONS:

McGrath video laryngoscope improves glottis visualization versus Macintosh direct laryngoscopy in obese patients. However, no statistically significant differences were found between laryngoscopes in terms of intubation efficiency.

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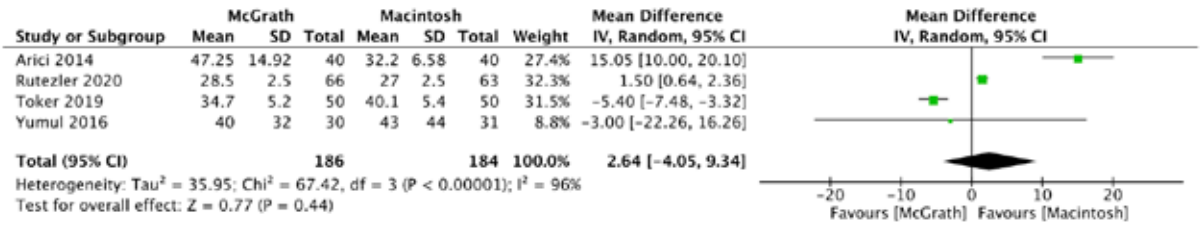

Figure 1. Forest plot of intubation time among McGrath vs. Macintosh laryngoscope group. The center of each square represents the mean differences for individual trials, and the corresponding horizontal line stands for a 95% confidence interval. The diamonds represent pooled results.

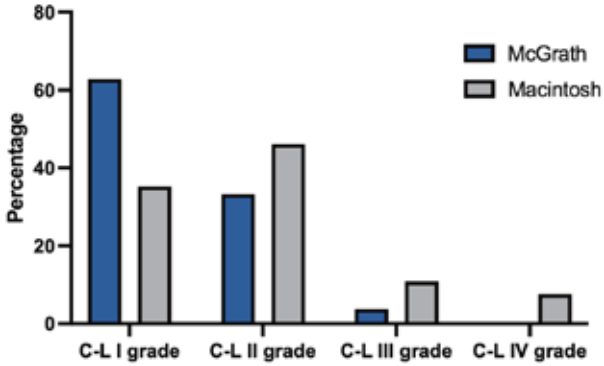

Figure 2. Percentage distribution of glottis visualization based on the Cormack-Lehane scale in the MCG and Macintosh groups.

ACİL SERVİSTE SIK ATLANAN ÇOÇUK KIRIĞI: TİBİA EMİNENTİA AVULSİYON KIRIĞI

İbrahim Tülüce
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GİRİŞ: Tibia eminentia avulsiyon kırığı, çoçuklarda oldukça nadir görülen bir patolojidir. Çoçuk kırıkları içerisinde 100000'de 3 oranında görülmesi nedeniyle, acil serviste atlanma oranı yüksektir(1,2). Tanı koymadaki gecikmeler, hastada klinik ve fonksiyonel açıdan kötü sonuçlara sebep olabilmektedir. Düşme sonrası tibia eminentia kırığı olan bir çoçuk hasta olgusu sunulacaktır.

GEREÇ VE YÖNTEM: Bisikletten diz üzerine düşme sonrası dizde ağrı şikayeti ile acil servise başvurmuş. 7 yaşında bayan hastanın klinik muaynesinde dizde minimal efüzyon ve çekilen iki yönlü direkt grafisinde patoloji saptanmayan hasta nonstreoid antiinflamatuar tedavi, istirahat ve ortopedi poliklinik kontrolü ile taburcu edilmiş. Hasta bir hafta sonra ortopedi ve travmatoloji polikliniğine ayaktan başvurdu. Yapılan fizik muaynesinde sol diz tibia proksimalde şişlik, ağrı ,dizde + 2 ballotman mevcut olan hastanın mukayeseli iki yön diz grafileri çekildi. Tibia eminentia bölgesinde ön çapraz bağın yapışma alanında avulziyon kırığı izlendi. Hasta ortopedi ve travmatoloji kliniğine yatırılarak aynı gün kapalı olarak 2 adet k teli ve kanüllü vida ile tespit edildi. Postoperatif 1., 2. ve 3. Ay takiplerinde diz eklem hareketleri açık aktif mobilize şekilde takiplerine devam edilmektedir.

SONUÇ: Eminentia kırıkları her ne kadar nadir olarak görülse bile çoçuklarda artan hareketlilik ve travmalarına bağlı olarak diz bölgesinin yaralanmalarında bu tür bir kırıkla karşılaşabileceği akılda tutulmalı, direkt grafide şüpheli bir lezyon varlığında ileri görüntüleme yöntemlerine başvurulmalıdır. Kırığın stabil bir tespitin sağlanması , tedavi sonucunu etkileyen önemli bir etmendir.

ANAHTAR KELİMELER: Tibia eminetia avulsiyon kırığı, Diz travması , Çoçuk travması

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MCGRATH IS SUPERIOR TO THE MACINTOSH LARYNGOSCOPE FOR NASOTRACHEAL INTUBATION: a meta-analysis

Michal Matuszewski [1], Michal Pruc [2], Togay Evrin [3], Zofia Zadorozna [4], Roman Sukhonos [5], Raul Juarez-Vela [6], Frank W. Peacock [7], Lukasz Szarpak [7,8]

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8. Institute of Outcomes Research, Maria Sklodowska-Curie Medical Academy, Warsaw, Poland;

KEYWORDS: Macintosh, McGrath, laryngoscope, intubation, meta-analysis

OBJECTIVE:

Nasotracheal intubation is commonly performed in oromaxillofacial surgeries. The aim of this meta-analysis was to assess the efficacy of the McGrath vs. Macintosh laryngoscopes in nasotracheal intubation.

METHODS:

The systematic search, data extraction, critical appraisal, and pooled analysis were performed according to the PRISMA guidelines. We extracted studies of adult prospective randomized trials comparing nasotracheal intubation between the McGrath and Macintosh laryngoscopes. An electronic database (PubMed, Scopus, Web of Science, Cochrane library) were searched until 11 September 2022. we extracted the following data from the identified studies: time to intubation, first attempt success rate, glottic visualization and Backward-Upward-Rightward-Pressure (BURP) maneuver. The odds ratios (OR) or mean differences (MD) and their corresponding 95% confidence interval (CI) were calculated.

RESULTS:

Six studies were included in this meta-analysis [1-6]. Time to intubation among McGrath and Macintosh laryngoscope varied and amounted to 37.4 (13.1) vs. 40.2 (48.0) sec, respectively (MD = -10.87; 95%CI: -17.56 to -4.17; p=0.001; Figure 1). Pooled analysis of first intubation success rate was 98.9% in McGrath group compared to 91.5% for Macintosh group (OR = 5.45; 95%CI: 1.54 to 19.24; p=0.008; Figure 2). The degree of glottis visualization assessed as the first degree in the Cormack-Lehane scale was 78.8% vs. 30.2% respectively (OR = 11.49; 95%CI: 6.78 to 19.47; p<0.001). In McGrath group BURB was used in 7.3% and in Macintosh group - 50.5% (OR = 0.09; 95%CI: 0.04 to 0.19; p<0.001).

CONCLUSIONS:

The use of McGrath in comparison with the Macintosh laryngoscope during nosotracheal intubation is associated with better visualization of the glottis, shorter duration of the procedure as well as statistically significantly higher effectiveness of the first attempt of intubation.

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Figure 1. Forest plot of first intubation attempt success rate among McGrath vs. Macintosh laryngoscope group. The center of each square represents the mean difference for individual trials, and the corresponding horizontal line stands for a 95% confidence interval. The diamonds represent pooled results.

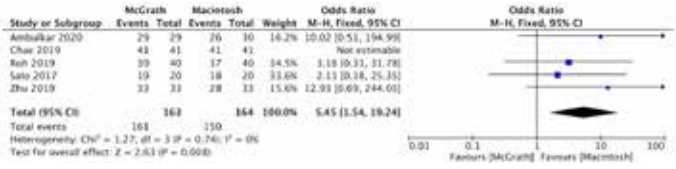

Figure 2. Forest plot of first intubation attempt success rate among McGrath vs. Macintosh laryngoscope group. The center of each square represents the odds ratios for individual trials, and the corresponding horizontal line stands for a 95% confidence interval. The diamonds represent pooled results.

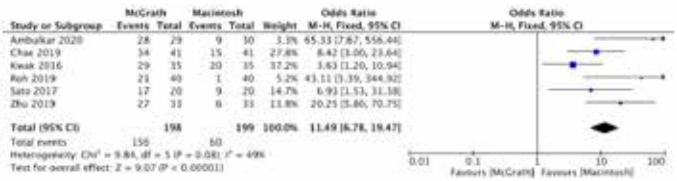

Figure 3. Forest plot of glottis visualization according to Cormack-Lehane 1st grade among McGrath vs. Macintosh laryngoscope group. The center of each square represents the odds ratios for individual trials, and the corresponding horizontal line stands for a 95% confidence interval. The diamonds represent pooled results.

ADÖLESAN BİR SPORCUDA EŞ ZAMANLI BİLATERAL TÜBEROSİTAS TİBİA AVÜLSİYON KIRIĞI

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GİRİŞ: Tuberositas tibia avulsiyon kırığı adölesan çağda görülen nadir bir kırıktır.Bu kırığın bilateral görülmesi ise oldukça nadirdir.Olgu sunumumuzda bilateral tuberositas tibia avulsiyon kırığı olan bir hastayı sunmayı amaçladık.

OLGU SUNUMU: 15 yaş erkek hasta basketbol maçı esnasında sıçrama sonrası düşme ile aniden başlayan her iki dizde ağrı ve yürüyememe şikayetleri ile acil servise başvurdu. Hastada geçmiş travma öyküsü, bilinen ek hastalık ve geçirilmiş ameliyat yoktu.Yapılan fizik muayenesinde her iki diz 15° fleksiyonda, şiş, ağrılı ve palpasyonla tüberositas tibia üzerinde hassasiyeti mevcuttu.Her iki alt ekstremitede yerçekimine karşı aktif diz ekstansiyonu yoktu.Her iki dizde belirgin efüzyon mevcuttu.Çekilen röntgenlerinde sol dizde Ogden sınıflamasına göre tip 3b, sağda posteriora açılanmış tip 4a tüberositas tibia avülsiyon kırığı mevcuttu(Şekil-1).Her iki kırığa da genel anestezi altında açık redüksiyon ve kanüllü ve başsız kompresyon vidaları ile tespit yapıldı(Şekil 1).Hastada yapılan laboratuvar incelemelerinde folat ve D vitamini eksikliği saptandı ve tedavisi başlandı. 3 hafta süre ile her iki bacakta tam ekstansiyonda açı ayarlı dizlik ile takip edildi.Takibinde dizlik üzerinden diz fleksiyon ve ekstansiyon egzersizleri ve quadriseps güçlendirici egzersizlere başlandı.İkinci ayın sonunda hasta tamamen desteksiz yürüdü, ağrısı yoktu ve her iki dizde hareket açıklığı tamdı.Post 1.yılda kontrol grafisinde kırıkları kaynamış ve ek patoloji yoktu(Şekil-2). Dizlerdeki fonksiyonu değerlendirmek için Modifiye Lysholm skorunu kullandık ve sonuçta sağ diz için 96, sol diz için 95 olarak bulduk(4).

TARTIŞMA: Tibial tüberkül kırıkları nadir görülen bilateral olanları ise çok daha nadir olan kırıklardır.Tüm fiziyel kırıklara oranı %0,4-2,7'dir.Literatürde sınırlı sayıda benzer vaka mevcuttur.Bu tip kırıklar genellikle adölesan çağda özellikle de 13-17 yaşlarda görülmektedir.Travma mekanizması olarak özellikle aktif spor yapanlarda (atlama sporları) ekstensör mekanizmanın kuvvet uyguladığı esnada halen kapanmamış olan zayıf proksimal tibial epifizin avulse olması sorumludur(1-2)Tibial tüberkül kırıklarının tedavisini özellikli kılan ise epifizi ilgilendiren bir kırık olması ve kaynama sonrası deformite, kısalık gibi problemlere neden olabilmesidir.Literatürdeki olgularda tedavide genellikle açık redüksiyon ve vida tespiti, daha nadir olarak U çivi tespiti, alçılama ve K teliyle tespit bildirilmiştir (3).Vakamızda tespit yöntemi olarak açık redüksiyon sonrası kanüllü ve başsız kompresyon vidaları ile tespit uyguladık. Bu tip kırıklarda literatürde belirtilen açık redüksiyonun önemini tekrar vurgulamaktayız.Bu vakada hastanın açık redüksiyon ve internal fiksasyon sonrası erken hareket başlanarak hastanın günlük yaşamına erken şekilde ve fonksiyonlarında kısıtlılık kalmadan dönmesi sağlanarak iyileşme gözlendi.

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ANAHTAR KELİMELER : Tuberositas tibia, avülsiyon kırığı, Adölesan

A CASE REPORT OF ANAPHYLAXIS AFTER A SINGLE DOSE OF HYOSCINE BUTYLBROMIDE (BUSCOPAN) WITHOUT PREVIOUS EXPOSURE TO THE DRUG

ABSTRACT

A 66-year-old female patient was admitted to the emergency department with complaints of fever for 3-4 days, inability to eat and drink, cramp-like abdominal pain, diarrhea, and burning in urination. The patient's general condition in the medical examination was excellent and conscious. The arterial blood pressure was 110/70 mmHg, and the heart rate was 86/minute.

The patient complained of severe lower abdominal pain. The patient developed severe hypotension and loss of consciousness shortly after an intravenous dose of hyoscine-N-butyl bromide (Buscopan®). After that, an intravenous dose of hyoscine-N-butyl bromide was stopped. Resuscitation was performed over a couple of minutes and was successful. Finally, it was postulated that the drug had caused an anaphylactoid reaction. Herein, it aimed to present a case of anaphylaxis after using Hyoscine –N-butyl bromide parenterally.

KEYWORDS: Anaphylaxis, Hyoscine butyl bromide, Buscopan,

INTRODUCTION

Hyoscine butyl bromide (scopolamine butyl bromide) [Buscopan/Buscapina] is an antispasmodic drug indicated for the treatment of abdominal pain associated with cramps induced by gastrointestinal (GI) spasms. It was first registered in Germany in 1951 and marketed in 1952. It has become available worldwide as a prescription drug and over-the-counter medicine in many countries. Hyoscine butyl bromide is an anticholinergic drug with a high affinity for muscarinic receptors located on the smooth-muscle cells of the GI tract. Its anticholinergic action exerts a smooth-muscle relaxing/spasmolytic effect. Blockade of the muscarinic receptors in the GI tract is the basis for its use in treating abdominal pain secondary to cramping [1].

Hyoscine-N-butyl bromide is a quaternary ammonium compound with anticholinergic properties. It shows its effect through nicotinic and muscarinic receptors. Suppressing cholinergic activity, it exerts a spasmolytic influence on the abdominal and par inguinal parasympathetic ganglia [2]. Its oral bioavailability is very low; therefore, parenteral usage is recommended [2, 3].

Anaphylaxis is a medical emergency. Anaphylaxis is a severe, potentially fatal, systemic allergic reaction that occurs suddenly after contact with an allergen [4].

This report aims to present a case of anaphylaxis caused by Hyoscine-N-butyl bromide (Buscopan) and to discuss its accompanying literature.

CASE REPORT

A 66-year-old female patient was admitted to the emergency department with complaints of fever for 3-4 days, inability to eat and drink, cramp-like abdominal pain, diarrhea, and burning in urination. The patient's general condition was good, and she was conscious. The arterial blood pressure was 110/70 mmHg, and the heart rate was 86/minute. She stated that she went to infectious diseases with these complaints yesterday. She said that she regularly took hypertension medication for her chronic condition. The patient's PCR test was found harmful in yesterday's examinations. A complete urinalysis test showed 13 leukocytes in each field, and leukocyte esterase was found to be positive. It was found that stool and urine cultures requested from the patient resulted in negative. Intravenous access was established, and isotonic fluid therapy was started. One ampoule of buscopan (20 mg of hyoscine-N-butyl bromide) was added to the isotonic liquid to the patient, who declared that her pain had increased after 30 minutes. The patient stated that he had difficulty breathing within a few minutes. When the patient's clinic was evaluated, it was found that she had tachypnea, tachycardia, and tongue enlargement (Figure 1). Oxygen was started at 2-4 lt/minute, and the patient was monitored. Their heart rate was 130/minute, and their respiratory rate was 22/minute.

Since the patient developed an allergy to buscopan, fluid containing buscopan was stopped. Isotonic fluid was given to the patient. Hyperemia in the neck region and tongue enlargement was detected. Since the vascular access was active, 0.05 mg of epinephrine was given to the patient. Avil (Sandoz) (45.5 mg pheniramine maleate) and phenol (Mustafa Nevzat) (medilprednisolan 80 mg) were given to the patient. The case was relieved within minutes. No feature was improved in the follow-up.

DISCUSSION

Hyosin N-butyl bromide belongs to the group of antispasmodic drugs. It is one of the agents frequently used in emergency services with its antispasmodic effect. It is widely used in the world. Although it is included in the other agents' section under the title of Medicines for other common symptoms in palliative care in the world health organization list, there is no FDA approval of the drug for human use in the United States [5].

Hyoscine-N-butyl bromide has an antispasmodic effect by relaxing the smooth muscles of the gastrointestinal tract and genitourinary system. We aimed to use hyoscine-N-butyl bromide to reduce the cramp-like abdominal pain of the case by utilizing its effect on smooth muscles.

Anaphylaxis can develop within minutes and result in death if not diagnosed and treated quickly [3, 6]. Since this case was under observation in the emergency department, it was diagnosed, and treatment was started early.

Many factors are held responsible for the etiology of anaphylaxis. One of these factors is drugs. It has been reported that it develops most frequently against antibiotics, analgesics, and radiocontrast agents among drugs [7]. In our case, it is thought that anaphylaxis was developed against buscopan.

Since anaphylaxis is a medical emergency, emergency workers should be prepared for anaphylaxis.

If the agent can be detected in the treatment of anaphylaxis, contact should be stopped. Protecting the airway is a top priority. Intubation should be performed when oxygen support is necessary. In drug therapy, epinephrine should be used as primary therapy, and antihistamines and corticosteroids should be used in secondary treatment. Hypotension that may develop should be combated. In our case, anaphylaxis was diagnosed in the early period; oxygen support was provided primary and secondary treatments were applied. Isotonic fluid support was started. A few similar cases of buscopan are presented in the English literature. However, these cases developed mainly when the gastrointestinal tract was administered during the procedure [8, 9]. However, in these cases, it was combined with other drugs. It is difficult to attribute the developing side effects to buscopan alone. The most crucial difference in our case was the development of anaphylaxis when buscopan was used alone.

As a result, like all given drugs, buscopan can also cause anaphylaxis. The patient should be cared for well while administering parenteral therapy and followed closely. In patients who develop anaphylaxis, treatment should be started in the early period, and epinephrine administration should not be avoided.

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RAMAZAN AYI İLE DİĞER AYLAR ARASINDA İÇİ BOŞ ORGAN PERFORASYONU ARASINDA FARK VAR MIDIR?

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GİRİŞ

Perforasyon akut karın nedenleri arasında en sık rastlanan sebeplerdendir(1). En tipik bulguları hastanın epigastrik bölgesinde bıçak saplanır gibi bir ağrı hissetmesi ve ağrının daha sonra latent döneminden sonra platoya ulaşıp şiddetle seyretmesi, batın muayenesinde muskuler rijidite olması ve direkt karın grafisinde diafragma altında hava gölgesi olmasıdır.

Oruç tutulan süre de genellikle 11-19 saat kadardır. Oruç tutma ibadetinde o süre içerisinde yeme içme olmaması, sigara içilmemesi, oral- intra musküler veya inta venöz ilaç kullanılması yasaklanmıştır (2).

AMAÇ:

Çalışmaya Pamukkale üniversitesi acil servise Ocak 2012- Aralık 2018 yılları arası içi boş organ perforasyonu (İBOP) tanısı konan ve genel cerrahi servisine yatırılan hastalar retrospektif olarak arşiv taraması yapılarak 18 yaş üzeri hastalar dahil edildi. Çalışmanın amacı İBOP tanısı alan hastaların ramazan ve ramazan ayı dışındaki zamanda farkını ortaya koymaktı. Bu çalışma için Pamukkale üniversitesi girişimsel olmayan etik kuruldan izin alındı.

GEREÇ VE YÖNTEM:

Çalışmaya toplam 44 hasta alınmış olup bunlardan 9 hasta ramazan ayı içerisinde tanı konularak genel cerrahi servisine yatırılarak takip edilmiştir. Çalışmaya alınan iki grup arasında cinsiyet, yaş, Hb, Htc, CRP, Wbc, BUN, Üre, kreatin, AST, ALT, tanı koymada kullanılan görüntüleme yöntemleri, malignite varlığı, geçirilmiş operasyon öyküsü, komorbid hastalıklar, hastanın opere edilip edilmediği, perforasyon yeri ve yatıkları gün sayıları kıyaslanmıştır. Tanımlayıcı test olarak Fisher's Exact testi ve Student T testi kullanılmıştır. Normallik testleri vaka sayısı <50 olduğundan Shapiro-Wilk testi uygulanmıştır.

BULGULAR:

Çalışmaya katılan 44 hastanın erkek olanlardan 6'sı ramazan ayında, 23 hasta da ramazan ayı dışında başvurmuş iken kadın hastalardan 3'ü ramazan ayı içerisinde ve 12'si ramazan ayı haricinde başvurmuştur. Ramazan ayı ve ramazan ayı harici aylardaki hematolojik ve biyokimyasal parametrelerinde CRP haricinde fark bulunmamıştır. CRP değeri ramazana ayında 8.68±5.13 iken ramazan haricinde 16.39±10.49'tür (p=0.004 Student t testi). Hasalara yapılan görüntülemede ramazan ve ramazan ayı haricinde anlamlı fark yoktur. Ramazan ayında başvurup İBOP tanısı konarak genel cerrahi servisine yatan hastaların yatış gün sayısı ortalama 9 (6-105) iken ramazan haricinde bu 10 (6-45) gündür.

SONUÇ:

Bu çalışmanın bazı sınırlamaları vardır. Ramazan ayının her yıla göre 10 gün önce kutlanması nedeni ile yaklaşık 36 yıllık verilerin değerlendirilmesi gerekmektedir. Coğrafi olarak da Türkiye'de bir bölgenin çalışmayla değerlendirilmiş olması ve diğer bölgelerde farklı süre ve koşullarda da ramazan kutlanması arasında farlılıklar olacaktır. Bunun için farklı bölgeleri içeren çalışmaların yapılması gerekmektedir.

Sonuç olarak ramazan ayında içi boş organ perforasyonu diğer aylara göre CRP haricinde bir fark yoktu. Çalışmanın daha çok hasta ile yapılması durumda istatiksel anlamlı olabileceği düşünülmektedir.

ANAHTAR KELİMELER: İçi boş organ perforasyonu, Ramazan, Genel cerrahi

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Tablo 1: Biyokimyasal parametreler

	Gruplar		p
Parametreler Normal dağılanlar (ortalama ±SD)	Ramazan	Non ramazan	
Hb	12.37±2.82	12.96±2.65	0.56[x]
Htc	37.40±7.49	39.46±7.79	0.48[x]
Crp	8.68±5.13	16.39±10.49	0.004[x]
mannheimmpi	14.56±9.51	16.74±9.36	0.53[x]
Parametreler Normal dağılmayanlar (Median(min-max))			
Yatış gün	9(6-105)	10(6-45)	0.79[y]
Wbc	14120 (3630-32360)	10630 (1580-31450)	0.45[y]
BUN	14(2-31)	17(6-73)	0.56[y]
Üre	42(25-66)	37(7-156)	0.89[y]
Kreatin	0.79(0.64-1.61)	0.84(0.35-5.19)	0.97[y]
Ast	24(10-62)	24(7-288)	0.58[y]
Alt	17(5-35)	15(7-126)	0.91[y]

[x]:*Student t testi*

[y]: *Mann Whitney U testi*

Tablo 2: Tetkik-tedavi ve özgeçmiş

		Gruplar		P*
		Ramazan	Non ramazan	
Adbg(%)	Var	7(21.9)	25(78.1)	0.53
	Yok	2(16.7)	10(83.3)	
Bt	Var	7(17.9)	32(82.1)	0.26
	Yok	2(40)	3(60)	
USG	Var	0(0)	2(100)	0.62
	Yok	9(21.4)	33(78.6)	
MR	Var	1(100)	0(0)	0.20
	Yok	8(18.6)	35(81.4)	
Malignite	Var	2(16.7)	10(83.3)	0.53
	Yok	7(21.9)	25(78.1)	
Geçirilmiş operasyon	Var	1(50)	1(50)	0.37
	Yok	8(19)	34(81)	
Morbidite	Var	5(18.5)	22(81.5)	0.61
	Yok	4(23.5)	13(76.5)	
Kan transfüzyonu	Var	3(15.8)	16(84.2)	0.39
	Yok	6(24)	19(76)	
HT	Var	2(15.4)	11(84.6)	046
	Yok	7(22.6)	24(77.4)	
DM	Var	2(50)	2(50)	0.18
	Yok	7(17.5)	33(82.5)	
KOAH	Var	1(33.3)	2(66.7)	0.50
	Yok	8(19.5)	33(80.5)	
AKS	Var	1(14.3)	6(85.7)	0.78
	Yok	8(22.2)	28(77.8)	
Sigara	Var	4(21.1)	15(78.9)	0.61
	Yok	5(20)	20(80)	
Alkol	Var	0(0)	3(100)	0.49
	Yok	9(22)	32(78)	
PPI	Var	1(25)	3(75)	0.61
	Yok	8(20)	32(80)	
NSAID	Var	1(9.1)	10(90.9)	0.27
	Yok	8(24.2)	25(75.8)	
Diğer	Var	0(0)	3(100)	0.49
	Yok	9(22)	32(78)	
Cerrahi	Takip	0(0)	4(100)	0.48
	Laparotomi	9(23.1)	30(76.9)	
	Laparoskopi	0(0)	1(100)	
Perforasyon Çapı (median(min-max))		5(4-20)	6(0-20)	0.70ˣ

**: Mann Whitney U*

**: Fisher's Exact test*

HYDROPNEUMOTHORAX: A RARE COMPLICATION OF LUNG CANCER

OBJECTIVE:

Lung cancer is the most common cancer worldwide today. Pneumothorax or hydropneumothorax, as a presenting finding, is rare. Less than 0.5% of lung cancer cases have been reported to be complicated with pneumothorax and 1.4% cases of pneumothorax had underlying lung cancer approximately.

CASE:

A 75-year-old lung cancer patient presented to the emergency department with complaints of increasing dyspnea and cough in recent days. In order patient's blood pressure, SpO2 and respiratory rate per minute were 130/90 mmHg, 84% and 26. Examination of respiratory system revealed absent breath sound in the right hemithorax. His X-ray was shown on Figure-1. Intercostal tube thoracostomy was done. Pleural fluid was aspirated. Dyspnea decreased. The patient was admitted to the thoracic surgery clinic for follow-up.

RESULT:

De-novo hydropneumothorax in lung cancer is rare complication but may occur.

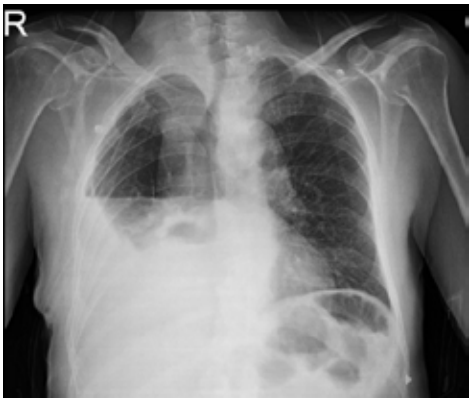

Figure-1. Right sided hydropneumothorax.

YEMEK YEMİYOR HOCAM

GİRİŞ:

Yabancı cisim yutmaları çoğunlukla 6 ay-3 yaş çocuklarda görülür. Çoğunlukla çocuklar asemptomatiktir veya yutma sırasında geçici semptomlara sahiptir. Yakınları tarafından yutmanın görülmesi üzerine hastaneye başvuru olur.

VAKA:

16 aylık erkek hasta yakınları tarafından birkaç saattir bir şey yemek istememesi, verilen şeyleri de kusması nedeniyle acil servise getirildi. Bilinen bir hastalığı kullandığı herhangi bir ilacı yoktu. Ateş ishal kabızlık ek bir şikayeti olmamış. Anamnez derinleştirildiğinde bir şey yutmuş olabileceği öğrenildi. Çekilen direkt grafide boğazda yabancı cisim görülen hasta kulak burun boğaz kliniğine konsülte edildi. Acil serviste bakılan direkt laringoskopide glottis seviyesinde yabancı cisim olduğu görülmesi üzerine kulak burun boğaz kliniğince ameliyathane şartlarında yabancı cisim çıkarıldı. Takiplerinde ek şikayeti olmayan hasta şifa ile taburcu edildi.

SONUÇ:

Yabancı cisim yutma çoğunlukla asemptomatik iyi seyirli ve tanıklı olsa da özellikle uygun yaş grubunda açıklanamayan kliniklerde mutlaka aklımızda olmalıdır.

ANAHTAR KELİMELER: Yabancı cisim, Çengelli iğne, kusma

DOĞUM SONRASI PULMONER TROMBOEMBOLİ

GİRİŞ:

Pulmoner tromboemboli, pulmoner arter veya dallarından birinin trombüs ile tıkanmasıdır. Gelişiminde kalıtsal ve edinilmiş birçok faktör olmakla beraber çoğunlukla alt ekstremite proksimal venlerin trombozundan kaynaklanır. Pulmoner tromboemboli nonspesifik ve çok değişken bir çok klinik tabloyla karşımıza gelebilir ve ölümcül olabilmektedir.

VAKA:

32 yaşından kadın hasta 3 saat önce başlayan sırt ağrısı nedeniyle acil servise başvurdu. Geliş vitallerinde nabız:140(sinüs taşikardisi) tansiyon 90/60 so2: 94 olan hastanın ananmezinde aniden başlayan sırt ağrısı olduğu eşlik eden nefes darlığı göğüs ağrısı olmadığı öğrenildi. Öyküsünden 2 ay önce sezaryen ile doğum öyküsü mevcut harici bir özellik yoktu. Tahlilerinde d-dimer ve troponin yüksekliği olan hastaya pulmoner tromboemboli ön tanısıyla çekilen toraks BT anjiyografisinde bilateral ana pulmoner arterlerde dolum defekti mevcuttu. Hasta göğüs hastalıkları kliniğince değerlendirildi. Masif pulmoner tromboemboli olan ıv trombolitik tedavi planlanan hastanın yoğun bakım yatışı yapıldı. Yoğun bakım ve servis takiplerinin ardından şifa ile taburcu edildi.

SONUÇ:

Hastalarda çoğunlukla beklenen başvuru şekli nefes darlığı olsa da atipik semptomlar, risk faktörleri varlığında genç hastalarda da pulmoner tromboemboli açısından değerlendirilme yapılmalıdır.

ANAHTAR KELİMELER: Pulmoner tromboemboli, sırt ağrısı, taşikardi

ACİL SERVİSTE ATLANMAMASI GEREKEN TANILARDAN BİRİ: TTP

GİRİŞ: Trombotik trombositopenik purpura'nın (TTP) mikroanjiyopatik hemolitik anemi,trombositopeni,bozulmuş böbrek fonksiyonu,ateş ve nörolojik bozukluklarla karakterizedir. TTP, hızlı tanı ve tedavi gerektiren tehlikeli bir durumdur. Acil klinisyenlerin bu bozukluğu nasıl teşhis edip tedavi edeceklerini bilmeleri önemlidir. Vakamız aniden bilinç değişikliği gerçekleşen yabancı uyruklu yetişkin hastadır.

VAKA: 43 yaşında erkek hasta acil servisimize ilçe devlet hastanesinden ileri tetkik ve tedavi amacıyla 112 aracılığıyla sevk edilmiştir. 2 hafta önce Romanya'dan Salihli ilçemize iş amacıyla gelmiştir. Hasta 12 saat önce halsizlik,kas ve eklem ağrısı,hafif ateş şikayetiyle dış merkeze başvurmuş. Hasta yakınına enfeksiyon değerlerinde yükseklik ve kansızlık denilerek poliklinik önerisiyle tabucu edilmiş. Hasta tabucuğundan yaklaşık 8 saat sonra yüksek ateş ve bilinç bulanıklığı ile tekrar başvurunca hastanemize sevk edilmiş. Hastanın gelişinde 157/91 mmH-g,nabız 127/dk,ateş 38,5°C,parmak ucu satürasyon %88,GKS: E1M4V1 koopere oryante olmadığı görüldü. Hastanın bilinç değişikliği ve ciddi solunum sıkıntısı göz önüne alınarak havayolu güvenliği için entübe edildi. Hastanın detaylı fizik muayenesinde IR:+/+ izokorik,solunum sesleri olağan patolojik ses yok,aksillada,bacaklarda,gövdesinde peteşi,purpura ve ekimotik alanları mevcuttu.Hastanın arkadaşından ingilizce diliyle alınan anamnezde bilinen herhangi bir hastalığının olmadığının,kullandığı ilaç olmadığının ve geçirilmiş operasyon öyküsü olmadığı öğrenildi. Hastanın yaklaşık 1 ay önce yurt dışında yapılan hemogram ve biyokimya değerlerinde anlamlı bir bozukluk olmadığı görüldü.Laboratuvar sonuçları resim 2'dedir.Çekilen beyin difüzyon MRI incelemesinde akut difüzyon kısıtlılığı saptanmadı.Çekilen BT görüntülemelerinde sözel ön yorumunda beyin BT'de akut patoloji yok,toraksta sol tarafta sıvama tarzında,sağda ise yaklaşık 3 cm kalınlığında ölçülen yoğun içerikli plevral effüzyon izlenmekte,batında karaciğer boyutu 17 cm ile artmış ve haricinde akut patolojik bulgu saptanmamıştır şeklinde yorumlandı. Periferik yayma:Teknik suboptimal olup birçok alanda 6-7 civarı fragmante eritrositler görülmüştür. Derin trombositopeni ile uyumlu şeklinde raporlandı.Hasta acil serviste VC-SIMV modunda mekanik ventilatör ile takip edildi.2 ünite eritrosit süspansiyonu,1 ünite Taze donmuş plazma,uygun antibiyoterapi ve serum fizyolojik sıvı tedavisi verildi.Hasta mevcut haliyle değerlendirildiğinde bilinc değişikliği,ateş,yaygın ekimozlar ve derin anemi,trombositopeni, lökositozu bulunan ve güvenilir anamnezi alınamayan hastada ön planda;Hemolitik Üremik Sendrom,Trombotik trombositopenik purpura,Dissemine intravasküler koagülopati,Kırım Kongo kanamalı ateşi,Serebrovasküler hastalıklar ön tanılarıyla Hematoloji, Enfeksiyon Hastalıkları,Nöroloji ve Anestezi yoğun bakım ünitelerine konsülte edildi.Hasta Anestezi yoğun bakım ünitesine devredildi.Hastaya Hemotoloji tarafından gerekli tetkikler sonrasında TTP tanısı konulduğu öğrenildi.

SONUÇ: Trombotik trombositopenik purpura (TTP) hayatı tehdit edici,immün aracılı, sıklıkla ölümle sonlanan nedeni bilinmeyen, mikrodolaşımı etkileyen, ateş,trombositopenik purpura, mikroanjiyopatik hemolitik anemi,renal disfonksiyon ve fluktuasyon gösteren nörolojik bulgularla karakterize bir hastalıktır. Hematolojik hastalıklar, merkezi ve periferik sinir sistemini çok çeşitli nörolojik bozukluklar oluşturacak şekilde değişik yollarla etkileyebilirler. Detaylı anamnez, fizik muayene, tetkik sonuçlarıyla değerlendirip olası tanıları tespit etmek özellikle bir acil servis hekimi için mühimdir.

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ANAHTAR KELİMELER: Bilinç değişikliği, trombositopeni, TTP

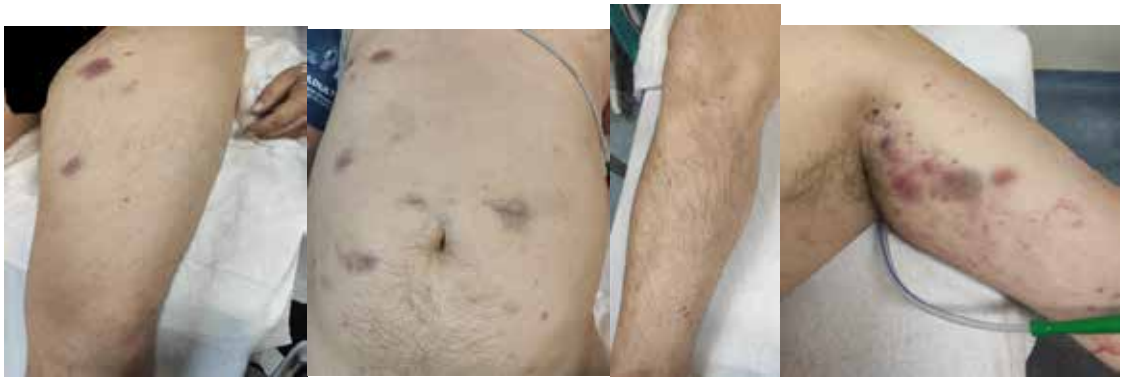
Parametre Adı	Sonuc	Birim	Normal Değerler	
NLR	2.8		0	3.13
HGB (STAT)	6.5	g/dL	13.6	17.2
HCT (STAT)	19.1	%	39.5	50.3
MCV (STAT)	94.4	fL	80.7	95.5
MCH (STAT)	31.9	pg	27.2	33.5
MCHC (STAT)	33.8	g/dL	32.7	35.6
RDW (STAT)	14.2	%	11.7	13.4
PLT (STAT)	9	10^3/µL	156	373
MPV (STAT)	7.9	fL	7.4	10.4
PCT (STAT)	0.01	%		
PDW (STAT)	15.1	fL		
LYM# (STAT)	3.73	10^3/µL	1.3	3.5
MON# (STAT)	1.09	10^3/µL	0.3	0.8
BASO# (STAT)	0.06	10^3/µL	0	0.2
NEU# (STAT)	10.44	10^3/µL	2.1	6.1
EO# (STAT)	0.01	10^3/µL	0	0.5
LYM% (STAT)	24.3	%	20	44
MON% (STAT)	7.1	%	5.1	9
BASO% (STAT)	0.4	%	0.3	1.5
NEU% (STAT)	68.1	%	50	70
EO% (STAT)	0.1	%	0.9	4
NRBC%(STAT)	0			
NRBC# (STAT)	0			
IMG% (STAT)	2.2			
IMG# (STAT)	0.33			
WBC (STAT)	15.33	10^3/µL	4.5	10.3
RBC (STAT)	2.03	10^6/µL	4.38	5.77

Parametre Adı	Sonuc	Birim	Normal Değerler	
Magnezyum (STAT)	2.3	mg/dL	1.7	2.6
Fosfor (STAT)	4.4	mg/dL	2.5	4.5
Kalsiyum (STAT)	8.3	mg/dL	8.8	10.6
Direct Bilirubin (STAT)	1.8	mg/dL	0	0.2
Klor (STAT)	105	mEq/L	99	109
Potasyum (STAT)	4.2	mEq/L	3.5	5.1
Sodyum (STAT)	138	mEq/L	136	146
Lipaz (STAT)	137	U/L	0	67
Amilaz (STAT)	46	U/L	28	100
CK (Kreatin Kinaz) (STAT)	509	U/L	0	171
LDH (Laktat Dehidrogenaz) (STAT)	2145	U/L	0	248
Total Bilirubin (STAT)	5.5	mg/dL	0.3	1.2
CRP (STAT)	3.3	mg/dL	0	0.5
Albumin (STAT)	3.8	g/dL	3.5	5.2
ALT (Alanin Aminotransferaz) (STAT)	96	U/L	0	50
AST (Aspartat Transaminaz) (STAT)	130	U/L	0	50
Ürik Asit (STAT)	8.3	mg/dL	3.5	7.2
eGFR	45		> 60	
Kreatinin (STAT)	1.78	mg/dL	0.67	1.17
Üre (STAT)	67	mg/dL	17	43
Bun (STAT)	31.3	mg/dL		
Glukoz (STAT)	124	mg/dl	74	106

Parametre Adı	Sonuc	Birim	Normal Değerler	
PT (SN)	16.6	sn	9.2	12.8
PT (%) (STAT)	58	%	70	130
PT (INR) (STAT)	1.43	INR	0.8	1.2
APTT(STAT)	33.1	sn	25.1	38
Fibrinojen (STAT)	326	mg/dL	200	393
D-Dimer (STAT)	2396	ng/mL	< 243	

Parametre Adı	Sonuc	Birim	Normal Değerler	
Kütle CK-MB (STAT)	3.3	ng/mL	0.6	6.3
Troponin I Stat (Yüksek Hassasiyetli)	303	ng/L	14	42.9

Parametre Adı	Sonuc	Birim	Normal Değerler	
Etanol Promil (STAT)	<0.05	promil		
Etanol (STAT)	<5	mg/dL		



ACİL SERVİSE MOTOSİKLET KAZASİ VE ARAÇ İÇİ TRAFİK KAZASİ NEDENİYLE BAŞVURAN HASTALARIN TRAVMA SKORLARININ VE PROGNOZUNUN KARŞILAŞTIRILMASI

Doç. Dr. Muhammed İkbal ŞAŞMAZ, Dr Ersin İMAL

Manisa Celal Bayar Üniversitesi Acil Tıp Anabilimdalı

GİRİŞ VE AMAÇ

Travma tüm dünyadaki ölümlerin %8 ile önemli bir sebebidir. Genç erişkin yaş grubunda ise en sık ölüm nedenidir. Her yıl 4 milyondan fazla insan travma sebebiyle hayatını kaybetmektedir. Bu travmaların en büyük sebepleri trafik kazaları, cinayetler ve intihardır. (1)

Giderek artan ulaşım ve taşıma ihtiyacı, her geçen gün trafiğe yeni araçların çıkmasına ve trafik kazalarının artmasına neden olmaktadır (2). En verimli çağındaki genç erişkilerin yaralanmasına ve ölmesine sebep olmakta ülke ekonomilerine ciddi zararlar vermektedir. Önlenebilir ölüm sebepleri arasında yer alan trafik kazaları, bu özellikleri bakımından ciddi önlemler alınması gereken bir konudur (3).

Trafik kazalarının büyük bir kısmı araç içi trafik kazalarından oluşmaktadır. Aşırı hız dikkatsizlik, uykusuzluk, kurallara uyulmaması gibi nedenlerle gerçekleşen kazalarda her yıl milyonlarca kişinin yaralanmasına ve ölmesine sebep olmaktadır (4). Gelişen teknolojiler ile araçlardaki emniyet kemeri, hava yastığı gibi koruyucu sistemlerin morbidite ve mortalite üzerine olumlu etkisi bilinmektedir (5).

Trafik kazalarının önemli bir bölümünü oluşturan motosiklet kazaları her yıl yüzbinlerce kişinin ölümüne, sakat kalmasına sebep olmaktadır. Motosiklet gibi araçların kolay elde edilmesi, yakıt tüketiminin daha avantajlı olması, trafikte ulaşımın kolay park probleminin az olması, göreceli olarak sürüşünün keyifli olması sebebiyle kullanımı giderek artmaktadır (6). Motosiklet kullanıcılarının bir trafik kazasında, otomobil kamyonet gibi kapalı kafes içinde araç kullanıcılarına göre 13 ile 18 kat arasında daha fazla ölüm riskine sahiptir (7). Motosikletlerde hava yastığı, emniyet kemeri gibi sistemlerin olmaması, kullanıcıların kask, koruyucu giysi gibi ekipmanların kullanılmaması ölüm oranını arttırmaktadır. Kişisel koruyucu ekipman kullanılması ve kurallara uyulması mortalite ve morbiditeyi önemli ölçüde azaltmaktadır (8)

Trafik kazası sonrası kazazedelerin bir kısmı olay yerinde ölürken büyük bir kısmı ise acil servislere yönlendirilmektedir. Travmalı hastalarda ölüm oranlarının yüksek olduğu, hızlı ve etkin müdahalenin hayat kurtardığı travmanın ilk saatleri golden hour (altın saat) olarak adlandırılmaktadır (9,10).

Trafik kazası sonrası hastalar küçük izole yaralanmalardan hayatı tehdit eden multitravmalara kadar geniş yelpazede başvurmaktadır. Bu durum klinisyenlerin hızlı karar verme ve müdahale etmesini zorlaştırmaktadır. Hastaya yaklaşımı sistematik hale getirmek için çeşitli algoritmalar ve travma skorları kullanılmaktadır. Klinisyenlerin hastaya sistematik yaklaşımı prognozunu olumlu yönde etkilediği bilinmektedir. Orta ve düşük gelir düzeyine sahip ülkelerde hava yolu obstrüksiyonu, izole karın içi organ yaralanması gibi tedavi edilebilir nedenler ölüm oranı yüksektir. Bunlardan dolayı hastalara yaklaşımını kolaylaştırmak, klinisyenler arasında ortak dili sağlamak, hastanın prognozonu üst merkez ihtiyacını öngörmek amacıyla travma skorları kullanılmaktadır. Günümüzde çok çeşitli travma skorları kullanılmakta ve hala ideal travma skorlama sistemi ile ilgili çalışmalar devam etmektedir (11,12,13,14,15).

Biz çalışmamızda multitravmalı trafik kazalarında araç içi trafik kazası ve motosiklet kazası ile başvuran hastaların demografik verilerini, travma bölgelerini, travma skorlarını, tedavilerini ve sonlanımlarını karşılaştırmayı, bu veriler ışığında acil servise başvuran trafik kazalı hastaların kaza şekline göre klinisyenlerin hastaya yaklaşımını kolaylaştırmayı hedefledik

GEREÇ VE YÖNTEM

Manisa Celal Bayar Üniversitesi Tıp Fakültesi Hastanesi Acil Servisinde gerçekleştirilen bu çalışmaya 10 Şubat 2021- 10 Şubat 2022 tarihleri arasında araç içi trafik kazası veya motosiklet kazası ile başvuran 18 yaş üzeri multitravmalı hastalar dahil edilmiştir.

Bu araştırmanın evreni belirtilen tarihlerde hastanemiz acil servisine başvuran multitravmalı, kayıtları tam olan, 30 günlük mortalite bilgilerine ulaşılabilen 18 yaş ve üzeri olgulardan oluşmaktadır.

Çalışmada kaydedilen parametreler şu şekildedir.

o Hasta özellikleri

o Cinsiyet

o Yaş

o Klinik özellikleri

o Trafik kazası tipi

o Vital bulguları

o Laboratuvar bulguları

o Yaralanma bölgeleri ve tanıları

o Glaskow koma skalası (GKS)

o Yaralanma Ciddiyet Skoru (Injury Severity Score-ISS)

o Kısaltılmış Yaralanma Skalası (Abbreviated Injury Scale-AIS)

o Klinik sonlanımı (Hastanın servise yatışı, yoğun bakım ünitesine yatışı, taburculuğu, vefat durumu)

o 30 günlük mortalitesi

Çalışmaya Dahil Edilme Kriterleri

• Araç içi trafik kazası veya motosiklet kazası ile başvurmak

• 18 yaş ve üzerinde olmak

• En az 2 bölgede yaralanması olması

ÇALIŞMADAN DIŞLANMA KRİTERLERİ

• 18 yaşından küçük olmak

• Gebe olmak

• İzole travması olması

• Başka merkeze sevk olan vakalar

• Çalışmaya katılmaya gönüllü olmayanlar

BULGULAR

Çalışma için 10.02.2021 – 10.02.2022 tarihleri arasında Manisa Celal Bayar Üniversitesi Hastanesi Acil Servisi'ne 389'u araç içi trafik kazası ve 145'i motosiklet kazası olmak üzere 534 hasta incelenmiştir. Belirtilen tarihlerde acil servisimize başvuran 389 araç içi trafik kazası vakasının 246'sı minör travma olması, 33'ü 18 yaş altı olması, 10'u yetersiz veri sebebiyle çalışmaya dahil edilmedi. Ayrıca 145 motosiklet kazası vakasının ise 46'sı minör travma olması, 18'i 18 yaş altı olması, 6sı yetersiz veri sebebiyle çalışmaya dahil edilmedi. Çalışma kriterini karşılayan 100 araç içi trafik kazası vakası, 75 motosiklet kazası vakası olmak üzere toplam 175 hasta çalışmaya dahil edilmiştir

Olguların araç içi trafik kazası grubundakilerin %75 i erkek %25 i kadın, motosiklet kazası olgularının %94,7 si erkek %5,3 ü kadın idi. Yaş ortalaması araç içi trafik kazası ile başvuran olgularda 37,29 ± 16,02 saptanırken motosiklet kazalı olgularda 37,85 ± 15,40 saptanmıştır.

Tablo 1. Araç içi trafik kazalı ve motosiklet kazası olguların yaralanma bölgelerine göre dağılımları

	Araç İçi Trafik Kazası		Motosiklet Kazası		
Yaralanma Bölgesi*	n*	%	n*	%	p
Baş boyun Yaralanması	69	69	45	60	0,218
Kranial Fraktür	16	16	18	24	
Subaraknoid Kanama	17	17	14	18,6	
Subdural Kanama	7	7	6	8	
Epidural Kanama	3	3	3	4	
İntraparankimal Kanama	7	7	8	10,6	
Maksillofacial Yaralanma	39	39	30	40	0,894
Toraks Yaralanmaları	71	71	41	54,6	0,026
Kot Fraktürü	44	44	20	26,6	
Pnömotoraks	24	24	11	14,6	
Hemotoraks	16	16	5	6,6	
Akciğer Kontüzyonu	41	41	18	24	
Sternum Fraktürü	7	7	2	2,6	
Scapula Fraktürü	3	3	3	4	
Batın ve Pelvik Bölge Yaralanmaları	38	38	23	30,6	0,437
Karağier Laserasyonu	16	16	4	5,3	
Böbrek Laserasynu	13	13	4	5,3	
Dalak Laserasyonu	10	10	2	2,6	
Batın İçi Sıvı-Kanama	21	21	9	12	
Ekstremite Yaralanmaları	76	76	56	74,6	0,840
Üst Ekstremite Yaralanmaları	33	33	22	29,3	
Alt Ekstremite Yaralanmaları	43	43	34	45,3	

***Tablodaki olgularda aynı hastada birden fazla yaralanma saptanabilmesinden dolayı toplam sayı olgu sayımızdan fazladır.**

En sık yaralanma bölgesi araç içi trafik kazalı olgularda %76 motosiklet olgularda ise %74,6 ile ekstremite yaralanması olduğu belirlendi. İki grup yaralanma bölgelerine göre karşılaştırıldığında ise toraks yaralanmaları araç içi trafik kazasında anlamlı olarak yüksek saptanmıştır. (p:0,026)

Tablo 2. Olguların Travma Skorları Dağılımı

	Araç İçi Trafik Kazası		Motosiklet Kazası		p
	Mean	± Ss	Mean	± Ss	
Injury Severity Score (ISS)	24,28	±16,69	22,25	±17,32	0,308
Abbreviated Injury Score (AIS)	3,59	± 1,20	3,40	±1,26	0,182
Glaskow koma skalası (GKS)	13,30	± 3,56	13,0	±3,09	

Travma skorları incelendiğinde GKS ortalaması araç içi trafik kazalı olgularda 13,30 +-3,56 motosiklet kazalı hastalarda 13,0+-3,09 dur. ISS ortalaması ise araç içi trafik kazasında 24,28+-16,69 saptanırken, motosiklet kazalılarda 22,25+-17,32 saptanmıştır. Abbreviated Injury Score (AIS) karşılaştırıldığında araç içi trafik kazalı hastalarda 3,59 ± 1,20, motosiklet kazalı hastalarda 3,40 ± 1,26 saptanmıştır. Travma skorları arasındaki fark istatistiksel olarak anlamlı bulunmamıştır.

Araç içi trafik kazalı olgularda cerrahi girişim oranı %24, motosiklet kazalı olgularda %13,3 saptandı. Olguların her iki grubunda da mortalite %8 saptandı.

TARTIŞMA

Travmalar özellik trafik kazaları genç erişkinlerde, gelişmiş ülkelerde en önemli ölüm nedenidir (16). Araç sayılarının, trafik yoğunluğunun ve sürücü sayısının artışıyla beraber önemi giderek artmaktadır. Trafik kazası sonrası acil servislerde sık karşılaşılan travma hastalarına, hızlı ve etkin müdahale mortalite ve morbidite açısından önemlidir (16). Travma hastasına standartlaşmış tedavilerin ve algoritmaların uygulanması mortalite ve morbiditede oranlarında iyileşmelere neden olmaktadır (17).

Yapılan birçok çalışmada trafik kazası ile başvurularda erkek cinsiyetin fazla olduğu gösterilmiştir. Çalışmamız alınan 175 hastanın 146 (%83,3)'sı erkek, 29 (%16,57)'u kadındır. Kaza çeşitleri olarak baktığımızda araç içi trafik kazası ile başvuran 100 olgumuzun 75 (%75)'i erkek, 25 (%25)'i kadın, motosiklet kazası ile başvuran 75 olgunun 71 (%94,7)'i erkek, 4 (%5,3)'ü kadın olarak saptandı. Diğer çalışmalara incelendiğinde erkek oranı Koçak ve ark. bisiklet ve motosiklet kazalı olgularda %91, Güngör ve ark. motosiklet kazası olgularında erkek oranı %86 bulmuştur (18,19). Araç içi trafik kazalarında ise erkek oranı Tekyol ve ark. çalışmasında %63,74, Doğan ve ark.'da %64,8 saptanmış (20,21). Erkek cinsiyet oranının yüksek olması literatür ile uyumludur. Bizim çalışmamızda erkek cinsiyet oranı göreceli olarak daha yüksektir. Yapılan çalışmalarda cinsiyetlere göre kıyaslandığında erkeklerin ölümcül kazalara karışma oranı daha yüksektir (22). Ölümcül kazalarda multitravmalı hasta sayısı artmaktadır. Bizim olgularımız multitravmalı hastalardan seçilmiştir

Çalışmamızda yaralanma bölgelerine bakıldığında araç içi trafik kazalı olgularda en sık %76 oranında ekstremite yaralanması saptanmıştır. Bunu sırasıyla %71 oranıyla toraks yaralanması, %69 baş boyun yaralanması, %38 ile batın ve pelvik yaralanma izlemektedir. Küçüker ve ark çalışmasında en sık yaralanan bölge %20,3 ile baş-boyun bölgesi olmuştur (23). Varlık ve ark. çalışmasında ise en sık %53 ile baş boyun yaralanması olmakla beraber 34 %45,9 ile ekstremite yaralanması ikinci sıklıktadır. Oransal farlılıklar coğrafi, kültürel ve yasal farklılıklardan kaynadığını düşünmekteyiz. (24) Motosiklet kazası olgularının %74,6'sında ekstremite yaralanması izlenmektedir. Bunu sırasıyla baş boyun yaralanmaları (%60), toraks yaralanmaları (%54,6) ve batın ve pelvik bölge yaralanmaları (%30) izlemiştir. Motosiklet kazası çalışmaları incelendiğinde en sık yaralanan bölgeler Özkan ve ark. %30 ile baş-boyun ve %21 ile batın travması olarak saptarken Alicioğlunun çalışmasında %50 kas iskelet sistemi yaralanması, %48,6 kafa travması olarak saptanmış (23,25). Kraus ve ark ölümcül motosiklet kazalarında yaralanma oranını baş-boyunda %73, toraksta %65, batın ve pelviste %26 saptamış. Ölümcül olmayan yaralanmalarda ise en sık ekstremite yaralanması izlenmiş (26). Bizim çalışmamızda sadece multitravmalı hastaları aldığımız ve her hastanın en az 2 bölgede yaralanması olduğu için yaralanan bölgelerin oranlarının yüksek olduğunu düşünmekteyiz.

İki başvuru grubu yaralanma bölgesi olarak değerlendirildiğinde toraks yaralanması araç içi trafik kazalı olgularda (%71,0) motosiklet kullanıcılarına (%54,6) göre istatistiksel olarak daha yüksek oranda saptanmıştır. (p=0,026)

Travma ile acil servise başvuran hastalarda hastaların hızlı, etkin değerlendirilmesi ve belirlenen algoritmaya uyulması mortalite ve morbiditeyi olumlu yönde etkilemektedir. Günümüzde birçok merkez hastaların tirajını yapmak, sevk olacak hastaları belirlemek, klinisyenler arasında ortak dil kullanabilmek amacıyla travma skorları kullanılmaktadır. Günümüze multitravmalı hastalarda en sık kullanılan travma skorlarının başında GKS ve ISS gelmektedir. (11,12)

ISS travmanın ciddiyeti, hastaneye yatışı, morbiditesi ve mortalitesi hakkında bilgi vermektedir. ISS skoru yüksek olan hastalarda mortalite oranı da daha yüksektir. Değeri 3 ile 75 arasında değişmektedir. Bizim çalışmamızda ISS skoru araç içi trafik kazalı hastalarda 24,28 ± 16,69, motosiklet kazalı hastalarda 22,25 ± 17,32 bulunmuştur (p=0,308). İstatistiksel olarak anlamlı fark saptanmadı. Aydın ve ark. yaptığı çalışmada tüm travmalı olgularda ISS ortalamasını 19 olarak saptamıştır (27). Motosiklet kazalı 35 olgularda ise Yadollahi ve arkadaşları ISS ortalamasını sürücülerde 6,67 ± 9,55 yolcularda 4,28 ± 7,36 saptamış. (28) Graniere ve ark. motosiklet kazalarında ISS skorunu 17.02±14,48 saptamış. (29) Kaya ve ark. araç içi trafik kazalarında ISS skorunu 2.75 ±4.87 saptamıştır. (30). Bizim olgularımız multitravmalı hastalardan oluştuğu için ISS skoru diğer araştırmalara göre daha yüksek saptanmıştır.

Glasgow koma skalası uzun yıllardır travma hastaları dahil birçok hastada ilk değerlendirmede önemini korumaktadır. Bizim çalışmamızda GKS araç içi trafik kazası olgularında 13,30±3,56, motosiklet ile başvuran olgularda 13,0±3,09 saptanmıştır. Koçak ve ark. bisiklet ve motosiklet kazalı olguların araştırmasında GKS ortalaması 12,8±3,9 tespit edilmiş. (18). Bayissa ve ark. çalışmasında acil servise travma ile başvuran olguların GKS skorları, %2,3 ü 8 ve altında, %5.2 12-14 aralığında, %83,8 ise 15 saptanmıştır.(31) Polat ve ark yaptığı çalışmada trafik kazası ile başvuran olguların %0,8 i 8 ve altında, %0,9 unun 9-12 puan aralığında olguların %98.3 ünün ise 13-15 aralığında olduğu saptanmış.(32). Bilgin ve ark. GKS belirtilen hastalarda, GKS skoru 8 ve altındaki oran % 5,3, 9-14 arası %7,8, 15 olan %86 saptanmış (33). Koçak ve ark. ortalama GKS skoru 12.8±3.9 saptamış (18). Sonuçlarımız Literatür ile Uyumludur.

Bizim çalışmamızda acil cerrahi girişim oranı toplam hastalarda %19,42, araç içi trafik kazalarında %24, motosiklet kazalarında %10 olarak saptandı. Perysinakis ve arkadaşlarının çalışmasında trafik kazası ile başvuran tüm olgularda acil cerrahi girişim oranı %0,3 olarak saptanmış (34). Çalışmamıza sadece multitravmalı hastaları dahil ettiğimiz için oran yüksek saptanmıştır. Çalışmamızdaki araç içi trafik kazası olgularının %40'ı yoğun bakıma yatırılırken, %24 ü servise yatırılmış, %31 i taburcu olmuş. Acil serviste mortalite oranı %5 saptanmıştır. 3 hasta ise yoğun bakım takiplerinde vefat etmiş. 30 günlük mortalite ise %8. Motosiklet kazalı olgularda ise %32'si yoğun bakıma yatırılırken, %22,7'si servise yatırılmış, %40'ı tabucu olmuş. Acil serviste mortalite oranı %5,3. Yoğun bakım takiplerinde 2 hasta vefat etmiş. 30 günlük toplam mortalite oranı %8. Koçak ve ark. çalışmasında motosiklet 36 ve bisiklet kazalı olgularda mortalite oranı %8 saptanmış. Hastaların %40,4'ü acilden taburcu olmuş. (18) Güngör ve arkadaşlarının motosiklet kazalı olguların %59'u taburcu olurken yatış oranı %32,8, sevk oranı %5,7 saptanmış (19). Armağan ve ark. çalışmasında trafik kazalarında mortalite %1,9 saptanırken Varlık ve ark çalışmasında araç içi trafik kazalı olgularda mortalite %0,9 olarak saptanmış (35,24). Bilgin ve arkadaşlarının çalışmasında trafik kazalı hastalarda, hastaların %77,2 si taburcu olurken mortalite oranı ise %0,9 dir (33). Sonuçlarımız literatür ile uyumludur.

SONUÇ

Travma hastaları acil servis başvurularında büyük bir paya sahiptir. Travmaya bağlı ölümlerde ise en büyük pay dünyada ve ülkemizde trafik kazalarına aittir.

Çalışmamızda literatür ile uyumlu olarak hem araç içi trafik kazası hem de motosiklet kazası, genç erişkin yaş grubunda ve erkeklerde daha sık görülmektedir.

Çalışmamızda multitravmalı hastalarda araç içi trafik kazası ile motosiklet kazası hastaları arasında travma skorları ve mortalite açısından istatistiksel olarak anlamlı fark saptanmadı. Yaralanma bölgesi olarakta torakal bölge dışında bölgesel yaralanma açısından da fark yoktur. Bu nedenle multitravmalı hastalarda araç içi trafik kazası ve motorsiklet kazası olgularına yaklaşımda; spesifik bir ayrım olmaksızın kılavuzlara uygun şekilde birincil ve ikincil değerlendirme benzer şekilde yapılmalıdır.

Trafik kazası gibi multitravma ile gelen hastalarda majör travmaya odaklanarak geri kalan travmalar gözden kaçırılmamalıdır. Travma hastalarının hızlı ve etkin müdahale edilmesi, hastaya sistematik yaklaşılması prognozu iyileştirmektedir. Travma hastaları için travma merkezlerinin algoritmalarını oluşturması önerilmektedir. Hastaların klinik durumunu ön görmek, klinisyenler arasında iletişimi sağlamak, hastaya yaklaşımı kolaylaştırmak için travma skorları efektif kullanılmalıdır.

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SODA KAPAĞI İLE OLUŞAN PENETRAN GÖZ YARALANMASI SONUCU İRİS PROLAPSUSU GÖRÜLMESİ

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GİRİŞ:

Perforan göz travması en ciddi oküler travma tipi olup, ciddi görme kaybı ve iş gücü kaybına neden olan bir problemdir. Ciddi perforan göz yaralanmalarına hifema, iris prolapsusu, katarakt, iridodiyaliz gibi ön segment patolojileri ve vitreus hemorajisi, koroid rüptürü, retina dekolmanı gibi arka segment patolojileri eşlik edebilir (1). Oküler travmalar tüm bedensel yaralanmaların %7'sini ve göz hastalıklarının %10-15'ini oluşturur (2,3).

Oküler penetran travmalar sıklıkla çocukluk ve ergenlik döneminde gözükmektedir (4). Göz travmaları önemli fonksiyonel, tıbbi ve sosyoekonomik yük getiren; önlenebilir karakterlerinden dolayı dikkate alınması gereken bir halk sağlığı sorunudur (5).

ANAHTAR KELİMELER: Göz Travması, Penetran Yaralanma, İris prolapsusu

OLGU SUNUMU:

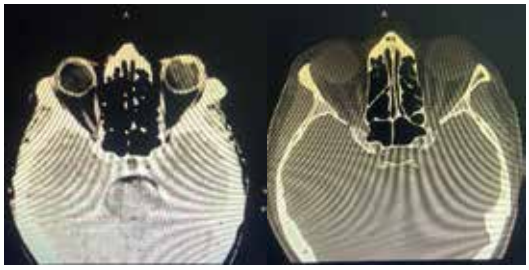
55 yaşında kadın hasta maden sodası şişesinin kapağını yabancı bir cisim ile açmaya çalışırken kapağın fırlayıp gözüne çarpması sonucunda acil servise ağrı ve gözünde yırtık oluşması sebebiyle başvurdu. Bilinen ek hastalık öyküsü yok. Geliş vitalleri Ta: 125/77 Nabız: 85 Ateş:36,2 spo2: 99 olarak tespit edilmiştir.

Muayenesinde GKS:15, bilinç açık, koopere, oryante, dır/ıdır ++/++, pupiller izokorik, bakış kısıtlılığı yok, kranial sinir muayenesi olağan, solda konjoktiva hiperemik, kornea nazalde limbusa uzanan perforasyon hattı ve bu hatta prolabe olmuş iris gözükmekte. Geri kalan sistemik muayeneleri olağan.

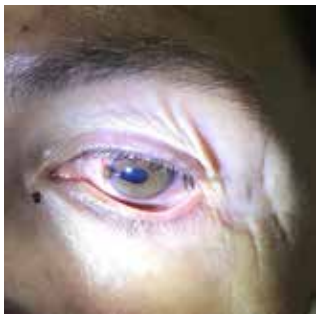
Perforasyondan ötürü orbita bilgisayarlı tomografisi (BT) planlandı. Çekilen tomografi sonucunda sol gözde glob distansiyonunu korumakta olup hastanın muayene bulgusunda belirtilen sol göz nazalde perforasyon bulgusu BT sınırlarında net ayırt edilememektedir şeklinde raporlanmıştır.

Göz hekimine konsültasyonu sonucunda hastanın perforasyon açısından acil operasyona alınmasına karar verilmiştir. Acil serviste kan hazırlıkları yapılan hasta ameliyathaneye tranfer edilmiştir.

Göz hekimlerince perforasyon hattının tamiri yapıldıktan sonra kullanması gereken ilaçlar reçete edilerek şifa ile taburcu edilmiştir.



Sol glob distansiyonunu korumakta olup hastanın muayene bulgusunda belirtilen sol göz nazalde perforasyon bulgusu BT sınırlarında net ayırt edilememektedir. Solda radyoopak yabancı cisim izlenmemiştir.



Sol gözde perforasyon hattı ve prolapsus olan iris tabakası

TARTIŞMA :

Oküler travma, dünyada tek taraflı önlenebilir görme bozukluğu ve kaybının önde gelen nedenlerinden biridir (4). Bu tarz travmaların erkeklerde daha sık görüldüğünü bildiren birçok çalışma mevcuttur (9).

Literatürdeki bazı çalışmalarda sağ göz bazı çalışmalarda ise sol gözün yaralanmasının görülmesinin daha yüksek oranda olduğu bildirilmiştir (4,10).

Geriatrik olmayan popülasyonda en sık görülen göz yaralanması kornea yaralanmaları iken, geriatrik popülasyonda korneaskleral yaralanmalar olarak belirtilmektedir.

İleri yaş, zayıf görme keskinliği, yaralanmanın tipi ve kapsamı, vitreus kanaması, retina dekolmanı varlığı hastalığın prognozunu negatif olarak etkileyen faktörler arasında gösterilmiştir (6-8).

Perforan göz travmalarında oküler travmanın tipi ve yeri de sonuç görme keskinliğini etkilemektedir. Açık glob yaralanmalarında görsel sonuç kapalı glob yaralanmalarına göre daha iyi bulunmuştur. Shah ve ark açık glob yaralanması olan olguların %48'inde, kapalı glob yaralanması olanların %29'unda 20/60 ve daha iyi görme olduğunu bildirmiştir (11).

Cerrahi sonuçlar çok iyi olsa bile uzun dönemde endoftalmi, glokom, retina dekolmanı gibi çeşitli komplikasyonlarla karşılaşılabilir. Brar ve ark oküler travma sonrası postoperatif komplikasyonların cerrahi sonrası görmeyi etkileyen en önemli faktör olduğunu bildirmiştir (12).

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COMPARISON OF SERUM CORTISOL LEVEL FOR PREDICTIVING THE WEIGHT LOSS AFTER BARIATRIC SURGERY ACCORDING TO GENDERS

ABSTRACT

Background: Bariatric surgery is an effective treatment for morbid obesity and its associated comorbidities. Preoperative factors that predict postoperative weight loss remain to be fully characterized, We have therefore performed a study for preoperative anthropometric and laboratory data for individuals with morbid obesity who underwent LSG to compare sex-specific predictors of postoperative weight loss.

METHODS: All of the data were collected retrospectively for morbidly obese patients who underwent laparoscopic sleeve gastrectomy (LSG) between April 2018 and July 2021 at our clinic. Preoperative factors that predicted weight loss at 6 months after LSG were investigated.

RESULTS: A total of 42 subjects (17 men, 25 women) underwent LSG. The mean ± SD age and body mass index at surgery were 45.2 ± 8.4 years and 43.7 ± 5.2 kg/m2. The %EWL showed a significant inverse correlation with serum cortisol level in men and with age versus women. Regression analysis showed the presence of diabetes and the serum cortisol concentration to be negatively associated with %EWL among all subjects.

Conclusions: Preoperatively Serum cortisol concentration was identified as a predictor for

weight loss in men versus women. This outcome can help us to perform LSG procedure in morbidly obese population.

KEYWORDS: bariatric,cortisol,gender

INTRODUCTION

Obesity triggers a wide variety of health problems and thus leads to a decline in the quality and expectancy of life [1]. Bariatric surgery is effective not only for weight loss but also for comorbidities of obesity such as diabetes mellitus (DM) [2], and it has been rapidly and widely adopted as a treatment for severe obesity—in particular, since the introduction of lower-risk laparoscopic procedures [3]. Laparoscopic sleeve gastrectomy (LSG) is one of the most commonly performed types of bariatric surgery, in the world [4]. Laparoscopic sleeve gastrectomy has showed that as an effective process in weight loss. Some researchs described a lower weight loss with restrictive procedures, we have obtained excellent results, comparable to gastric bypass or even with malabsorptive procedures. The pattern of fat accumulation differs between the sexes [5], however, suggesting that the pathophysiology as well as the efficacy of treatment for obesity might also differ. As far as we are aware, no previous study has analyzed sex-specific predictive factors for postoperative weight loss in individuals who undergo bariatric surgery. We have therefore now performed a retrospective study to examine preoperative anthropometric and laboratory data for 40 individuals with morbid obesity who underwent LSG in an attempt to identify sex-specific predictors of postoperative weight loss.

MATERIALS AND METHODS

PATİENTS

This retrospective observational study was approved by the institutional review board of

our hospital and confirmed to the provisions of the Declaration of Helsinki (as revised in 2013). The study subjects were all patients (42 subjects (17 men, 25 women)) who underwent LSG at our hospital by bariatric surgeon team between April 2018 and July 2021. All participants had a BMI of >40 kg/m2 with obesity-related comorbidities and failed to achieve a substantial weight reduction despite more than 3 months of medical therapy. Patients were excluded if they had endocrinological abnormalities.

STUDY DESİGN AND MEASUREMENTS

laboratory data were obtained immediately before and 6 months after the surgery. The serum cortisol concentration was evaluated in the morning and at rest. The percent excess weight loss (%EWL) was calculated as: 100 * (operative weight - follow-up weight)/(operative weight - ideal body weight).

STATİSTİCAL ANALYSİS

All statistical analysis was performed with the use of SPSS version 24 (NC, USA). Analysis of variance (ANOVA), correlation analysis, multivariable regression analysis, and receiver operating characteristic (ROC) curve analysis were performed as appropriate. Multivariable

regression analysis was performed to identify potential independent predictors of postsurgery weight loss. Age, BMI, and serum cortisol level were included [6].

DISCUSSION

We have demonstrated that the serum cortisol level as a predictive factor for efficient weight loss morbid obes population. our research is the first to analyze predictive factors for the outcome of bariatric surgery. Cortisol is an obesogenic hormone that stimulates food intake [7]. It is showed that cortisol initiates the human adipocytes are plenty in visceral tissue. Cortisol also redistributes adiposity from peripheral to central depots, which are metabolicallymore active, activating lipolysis and the release of free fatty acids into the circulation, increasing the risk of atheromatosis and finally the cardiovascular risk.

The reason why the serum level of cortisol was correlated with weight loss only in men is still unknownr. We found that DM negatively influenced the extent of weight loss after surgery in the present study. Although the underlying mechanism of this association remains unclear, insufficient adherence to diet therapy might be responsible, as suggested by a previous study [8,9]. Moreover, performed different studies about weight loss such as Al-Khyatt et al and Dixon et al explained that antidiabetes therapy, showed that the increase of weight gain in patients did not heal even after LSG [10-13]. On the other hand Nickel et al and also Ohira et al found that preoperative BMI and age were correlated with weight loss after bariatric surgery [14-16].

Of course we have detected several limitations in our study. Fistly the study was retrospective in , secondly restricted to a single tertiary center, thirdly have a relatively small sample size. In addition, we analyzed only the total cortisol level, not the free cortisol concentration, the latter of which directly reflects the action of the hormone. Finally, we cannot exclude possible effects of medical drugs that reduce body weight, such as liraglutide modalities.

CONCLUSION

Our data show that the serum cortisol level is an independent predictor of weight loss after LSG in morbidly obese men versus women. Such a predictor may be helpful for the choice of surgical procedure, such as LSG or biliopancreatic diversion with duodenal switch, which can be expected to achieve greater weight loss than LSG.

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EPİLEPTİK NÖBET GEÇİRİP DÜŞME SONRASINDA BİLATERAL OMUZ ÇIKIĞI

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GİRİŞ:

Vücudumuzdaki hareket genişliliği en yüksek olan eklem omuz eklemidir. Bundan ötürü instabilite açısından da risk oranı en yüksek olan eklemdir. Toplumdaki ortalama travmatik instabilite oranı %1,7 olarak tespit edilmiştir (1). Anterior omuz çıkıklarının yaklaşık %95'inden fazlasını, yine posterior omuz çıkıklarının %67'sini oluş mekanizmasında travmatik olaylar yer almaktadır (2,3). Travmatik omuz çıkıklarının ise %90'ından fazlasını anterior çıkıkları oluşturmaktadır (4,5).

Omuz ekleminin tüm yönlerdeki iki taraflı eşzamanlı çıkıkları oldukça nadir yaralanmalardır (6,7). Olguların çoğu arkaya omuz çıkığı şeklindedir ve bildirilen olgular genellikle grand mal tipi epilepsi nöbetlerinde görülen yaygın kasılmalar sonrası veya güçlü elektrik çarpmalarından/elektrik şoklarından sonra ortaya çıkar (8,9). Literatürde oluş mekanizmasında birçok farklı etkenler olan olgu sunumları mevcuttur. Epileptik nöbetler veya elektrik çarpmaları birçok kez omuzun posterior çıkıklarına sebep olabilir (10).

ANAHTAR KELİMELER: Omuz Travması, Omuz çıkığı, Omuz kırığı, bilateral omuz çıkığı

OLGU SUNUMU:

36 yaşında erkek hasta düşme sonrası omuzlarında ağrı şikayeti sebebiyle acil servise başvurdu. Bilinen epilepsi tanısı mevcut. Yakınlarının belirttiğine göre kahvaltı yaptıktan sonra ayakta iken nöbet geçirip düşmüş. Geliş vitalleri Ta: 130/80 Nabız: 75 Ateş:36,1 spo2: 99 olarak tespit edilmiştir.

Muayenesinde GKS:15, bilinç açık, koopere, oryante, dır/ıdır ++/++, pupiller izokorik, bakış kısıtlılığı yok, kranial sinir muayenesi olağan, her iki omuzda hareket kısıtlılığı mevcut. Sağ omuz bölgesinde daha şiddetli olmakla birlikte bilateral omuzlarda hassasiyet mevcut. Periferik nabızlar açık. Motor duyu defisit yok. Geri kalan sistemik muayeneleri olağan.

Omuzlarındaki ağrıdan ötürü omuz direkt grafilerini çektirdik. Röntgen sonuçlarında her iki omuzda çıkık olduğu görülmüş olup sağ omuzda humerus başında çıkığa eşlik eden fraktür alanı da tespit edilmiştir. Acil serviste ağrı palyasyonunu sağladığımız hastamızın sol omzu eksternal dış rotasyon yöntemi kullanılarak kapalı redüksiyon yapılmıştır. Sağ omzunda kırıklı çıkık olduğu için ortopedi konsültasyonu yapılmış ve sonucunda sağ omuz için açık redüksiyon kararı verilmiştir. Acil serviste kan hazırlıkları yapıldıktan sonra hasta ortopedi kliniğine devredilmiştir.

Sağ omuz humerus başında fraktür ve çıkık, sol omuzda humerus başında çıkık

TARTIŞMA :

Posterior omuz çıkıkları epileptik nöbetler ve travmadan sonra daha sık olmakla birlikte çok nadir görülen bir yaralanmadır. Hastadaki nöbet öyküsü, travma ve kliniğindeki omuzlardaki ağrı veya sertlik ve hareketlerinde kısıtlama mutlaka posterior omuz çıkığını düşündürmelidir (11).

İki taraflı eşzamanlı çıkık oluşumu için her iki eklemde de eşzamanlı olarak benzer şekildeki kuvvetlerin etkin olması gerekmektedir. Genellikle epilepsi veya diğer nedenlere bağlı, nöbetle seyreden kasılmalı hastalıklarda şiddetli adale kasılması sonrası humerus başı genellikle arkaya çıkar (12,13). Çıkığın oluşabilmesi için infrasupinatus ve teres minör adalelerinin deltoid, latissimus dorsi ve teres major adaleleri boyunca kuvvet uygulamaları gerektiğini bildirmiştir. Eğer bu dönemde nöbet şeklindeki kasılma sona erer ise humerus başı glenoid arka dudağında kilitli kalır. Nöbet şeklindeki kasılmalar devam eder ise tipik olarak arkaya kırıklı-çıkık meydana gelir (13).

Kırık görülmeyen omuz çıkıklarında ana tedavi kapalı redüksiyon işleminin uygulanıp kol-boyun askısı kullanımı şeklindedir. Omuz çıkığına neden olan travma büyüklüğü ile tekrarlama riski seviyesinin ters orantılı olduğunu bildirmişlerdir. Düşük travmalar sonrası olan çıkıklarda tekrarlama riski daha fazladır. Bunun nedeninin altta yatan bir eklem laksitesinin olduğu düşünülmektedir (14).

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INTRAVENOUS LIPID EMULSION İN TREATMENT OF HALOPERIDOL TOXICITY

BACKGROUND:

The use of intravenous lipid emulsion in poisoning was started by a group of anesthesiologists incidentally. Weinberg et al., the father of lipid emulsion therapy, started to work on this issue in 1997, when a patient applied Bupivacaine when ventricular arrhythmia developed. It has been used in a large number of poisonings, mostly in case reports, and intoxications of antidepressant, antipsychotic and cardiovascular drugs. However, apart from these successful cases, there are many cases that were not successful. The most curious subject of lipid emulsion therapy in poisoning is what dose we will use and for how long.

CASE:

A 22-year-old female patient was brought to the emergency room via 112, after consuming a high dose of her own drug, haloperidol, for suicide. The patient's general condition was poor, Glasgow Coma Scale was E1M5V2, blood pressure: 85/60 mmHg, Oxygen saturation: 94%, fever: 36.6 C, and pulse: 300/min (VT). The patient's vascular access was established, crystalloid fluid and 2Lt/dk O2 were given, and ECG, Oxygen saturation and pulse were monitored. Although the patient underwent a total of 3 cardioversions due to unstable VT, the normal rhythm could not be restored(Figur 1). No response was obtained from biperiden (0.04 mg/kg) and diphenhydramine (2 mg/kg) treatments given to the patient during resuscitation. Meanwhile, Intubation procedures were delayed because the patient had adequate spontaneous respiratory rate and the risk of aspiration was not high. Since there was no improvement in the patient's condition, it was decided to give lipid emulsion treatment (İntralipR 20%) after obtaining the consent of the relatives of the patient. A total of 1.5mg/kg blous was given 2 times through the subclavian catheter, then 0.25mg/kg/min infusion was given for 3 minutes, followed by 0.025mg/kg/min infusion. At the 11th minute of treatment, VT returned to normal rhythm and blood pressure returned to normal ranges (110/68 mmHg) at the 2nd hour of treatment (Figur 2) (Figure 3).

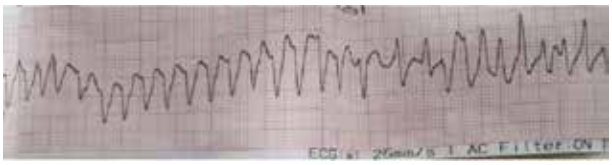
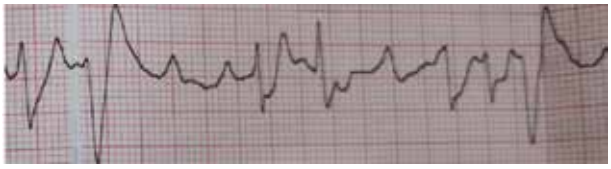


Figure 1: ECG of the patient at the time of admission



Figur 2: ECG of the patient at the 11'th minute after the lipid emulsion infusion was given.

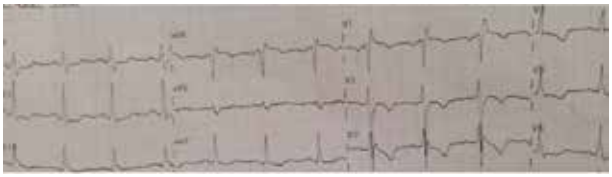


Figure 3: ECG of the patient at the 120'th minute after the lipid emulsion infusion was given.

DISCUSSION:

Lipid-sink theory suggests that introducing an expanded lipid compartment into the intravascular space draws lipophilic agents out of the aqueous plasma phase; reducing bioavailability (Harvey and Cave, 2006). Also ILE has antidotal effect of against HA-induced catalepsy. The co-administration of voltage calcium channel blockers with HA could increase the catalepsy score of rats and decrease the onset of catalepsy by reducing the neurotransmitter dopamine in striatal region (Bia□a, 2000). It is known that flunarizine and cinnarizine, two piperazine calcium channel blockers, can provoke Parkinsonism, tardive dyskinesia, and akathisia. It has also been reported that the duration of catalepsy would be prolonged, if the levels of calcium (Ca) and magnesium (Mg) in drinking water were low (Nakagawasai et al., 2012). Fast infusion of ILE has been reported as a treatment for patients with cardiotoxicity induced by a lipophilic drug that does not react to conventional therapies (Jovic-Stosic et al., 2011). Arslan et al. (2013), reported that when Intravenous lipid emulsion (ILE) was administered at a dose higher than that used in the standard management of toxicity. Rapid improvement was observed and no additional treatment was required. No adverse effect of lipid administration was observed. Intravenous lipid emulsion treatment seems to have great potential in the management of lipophilic drug toxicity but their reliability has not been proven yet so they cannot replace common antidotes or supportive special treatments (Jamaty et al., 2010). The findings of Sahin et al. (2016) indicate that in a toxicity model of rats produced with verapamil, intralipid 20% and medialipid 20% solutions partially eliminate cardiac-depressant effects and increase the survival rate. Some studies reported that ILE could reverse local anesthetic CNS toxicity and it raised the Glasgow coma scale of intoxicated patients (Taftachi et al., 2012). And other studies demonstrated the efficacy of lipid emulsion in reducing serum phenytoin levels in animal model and stated that lipid emulsion shows potential manner for treatment of phenytoin intoxication (Kayipmaz et al., 2017).

CONCLUSION:

In this case, lipid emulsion treatment prevented cardiac toxicity and reduced the need for mechanical ventilators. We think that lipid emulsion is a hopeful option that should be considered in the treatment of haloperidol poisoning. In addition, the treatment dose protocol we applied in this case gave very satisfactory results.

KEYWORDS: haloperidol, lipid emulsion, intoxication

GİRİŞ

İlk olarak 2019 aralık ayında Çin' in Wuhan kentinde fark edilen COVID-19 hastalığı dünya genelinde hızla yayılmış ve pandemiye neden olmuştur. Hastalar asemptomatik olabileceği gibi; vakalarda pnömoni, akut respiratuar distress sendromu ve çoklu organ yetmezliği gibi ağır klinik tablolar gelişebilmektedir. Ölüm genellikle solunum yetmezliği sonucu oluşmaktadır (1,2). SARS-CoV-2 virüsüne bağlı gerçekleşen hastalık, çeşitli mikroorganizmaların sebep olduğu üst solunum yolu enfeksiyonu (ÜSYE) ile benzer semptomlar göstermektedir(3). COVID-19 hastalığı da ÜSYE gibi ateş, yorgunluk, kuru öksürük, iştahsızlık, miyalji ve nefes darlığı yapabilmektedir (3,4). Semptom ve bulguların ÜSYE ile benzerlik göstermesinden dolayı ayırıcı tanıda ek incelemeler yapılması gerekmektedir. COVID-19 hastalığının tanısında standart olarak real time polimeraz zincir reaksiyonu testi (RT-PCR) ile viral nükleik asit ampfilikasyonu ve serum antikor ölçüm testleri sıklıkla kullanılmaktadır (5,6). Görüntüleme yöntemlerinden ise akciğer grafileri ve toraks bilgisayarlı tomografileri ayırıcı tanıda öncelikle kullanılmaktadır (7). Bununla birlikte; RT-PCR yönteminin sensitivitesinin düşüklüğü, hastalığın erken döneminde akciğer bulgularının oluşmaması gibi sebeplerden dolayı tanı klinik bulgular ve laboratuar testleri ile desteklenmelidir (8-11). Hemogram testi (tam kan sayımı) kolay ulaşılabilir olması, hızlı sonuç vermesi ve ucuz olmasından dolayı sağlık kuruluşlarında sıklıkla uygulanabilen bir laboratuar testidir (12,13). Hemogram parametreleri; lökosit (WBC) ve lökositin; nötrofil (NE), lenfosit (LY), monosit (MO), eozinofil (EO), bazofil (BA) farklı tiplerinin sayısal değerleri ve yüzdeleri,e-ritrosit (RBC), hemoglobin (HGB), hematokrit (HCT), eritrosit dağılım genişliği (RDW), ortalama eritrosit hacmi (MCV), ortalama eritrosit hemoglobini (MCH), ortalama eritrosit hemoglobin konsantrasyonu (MCHC), trombosit (PLT), ortalama trombosit hacmi (MPV), trombosit dağılım genişliği (PDW) gibi değerlerin bilgisini verir(14-16). Çalışmamızda COVID-19 hastalığı tanısı alan hastalarla, ÜSYE tanısı alan hastaların hemogram parametrelerini kıyaslayarak sonuçları değerlendirmek amaçlanmıştır.

MATERYAL VE METOD

Araştırmanın Etik Yönü: Çalışmamıza; T.C. Tokat Gaziosmanpaşa Üniversitesi Tıp Fakültesi Dekanlığı Klinik Araştırmalar Etik Kurulundan onay alınmıştır (Tarih: 20.01.2021, karar no: 21-KAEK-017). Çalışma ayrıca Uluslararası Helsinki Deklerasyonu ilkelerine göre yürütülmüştür.

Araştırmanın Tipi: Çalışmamız tanımlayıcı-kesitsel olarak retrospektif veri analizi ile dizayn edildi.

Araştırmanın Yeri, Zamanı ve Evrensel Örneklemi: Çalışmanın örneklemi, Tokat Gaziosmanpaşa Üniversitesi Tıp Fakültesi Hastanesine 11 Mart- 31 Mayıs 2019 tarihleri arasında başvurarak ÜSYE tanısı alan hastalar ile, 11 Mart-31 Mayıs 2020 tarihlerinde başvurarak COVID-19 hastalığı tanısı alan toplam 361 hasta ile yapıldı. Çalışmaya 18 yaş üstü hasta grubu dahil edildi. Çalışmaya dahil edilen tüm hastalardan alınan kan örneklerinin analizi sysmex Xn 1000 cihazında yapılmıştır. Verilerin istatistiksel analizi için IBM Statistical Package for Social Sciences (SPSS) 22 kullanıldı. Sonuçlar; parametrik varsayımların sağlandığı durumda İki Ortalama Arasındaki Farkın Önemlilik testi ile parametrik varsayım sağlanmadığı durumda ise Mann Whitney U testi ile değerlendirildi. Nitel değişkenler arasındaki ilişki olup olmadığını değerlendirmek için çapraz tablolar ve Ki-Kare testinden faydalanıldı. Nicel değişkenler arasındaki ilişki için pearson korelasyon katsayısı kullanıldı. İstatistiksel olarak p değerleri 0.05'den küçük hesaplandığında anlamlı kabul edildi.

BULGULAR

Çalışmaya dahil edilen toplam 361 hastanın 163' ü (%45,2) ÜSYE, 198' i (%54,8) COVID -19 tanılı idi. Hastaların 164' ü (%45,4) kadın, 197' si (%54,6) erkekti. ÜSYE tanılı hastaların % 51,5' i erkek, %48,5' i kadın iken COVID-19 tanılı hastaların % 57,1' i erkek, % 42,9' u kadındı. Çalışmamızdaki tüm hastaların yaş ortalaması 51,53±20,48 iken, erkeklerde 51,82±20,62 kadınlarda 51,19±20,37' du. ÜSYE hastalarının yaş ortalaması erkeklerde 47,5 iken, kadınlarda 41, COVID -19 hastalarının yaş ortalaması erkeklerde 60 iken kadınlarda 59 olarak saptandı (p<0,05).

Tüm hastaların hemogram verileri cinsiyete göre kıyaslandığında WBC, NE, MO, RBC, HGB, HCT, MCV, MCH değerleri erkeklerde, PLT değerleri kadınlarda daha yüksek saptandı (p<0,05). Kadınlarda COVID-19 hastalarının BA değerleri, ÜSYE tanılı kadın hastalara göre yüksek bulunmuşken; RDW değeri ÜSYE grubunda anlamlı yüksekti (p<0,05). Her iki cinsiyette COVID-19 hastalarının ortalama MCV, MPV, PDW, MO/BA, MCH ve yaş değerleri ÜSYE tanılı hastalara göre daha yüksek saptandı. ÜSYE' de MCHC değerleri tüm hastalarda COVID-19 tanılılara göre yüksek bulundu (p<0,05)(Tablo 1.).

Tablo 1. ÜSYE ve COVID-19 hastalarının hemogram parametrelerinin değerlendirilmesi

	Erkek		t yada z	P	Kadın		t yada z	P
	ÜSYE	COVID-19			ÜSYE	COVID-19		
Yaş	47,17±19,51	55,28±20,82	2,779	0,006	45,1±19,12	56,85±19,96	3,842	<0,001
WBC	9,66±6,99	10,15±5,86	0,531	0,596	8,41±3,56	8,67±4,2	0,414	0,679
NE%	77,1±47,19	70,17±15,41	1,460	0,146	70,5±11,99	67,74±15,29	1,282	0,202
LY%	18,4±9,43	19,98±13,2	0,930	0,354	20,49±9,87	22,3±12,13	1,046	0,297
MO%	8,77±11,19	7,5±4,71	1,078	0,282	7,02±3,45	7,57±6,61	0,659	0,511
EO%	0,8[0,2-1,9]	1,16[0,74-2,19]	0,678	0,498	0,8[0,2-1,9]	1,23[0,71-2,28]	0,960	0,339
BA%	0,4[0,3-0,9]	0,62[0,43-0,89]	0,972	0,332	0,5[0,2-0,7]	0,73[0,47-1]	2,399	0,018
NE#	6,5[3,8-9,1]	6,11[4,1-9,6]	0,536	0,593	5,6[3,8-7,4]	5,18[3,55-8,25]	0,205	0,838
LY#	1,4[1-1,9]	1,43[0,84-2,2]	0,594	0,553	1,5[1-2,1]	1,52[1,07-2,18]	0,585	0,560
MO#	0,6[0,5-0,8]	0,57[0,41-0,85]	0,579	0,563	0,5[0,4-0,7]	0,51[0,38-0,62]	0,090	0,929
EO#	0,1[0-0,1]	0,13[0,06-0,21]	0,068	0,946	0,1[0-0,1]	0,09[0,05-0,17]	1,311	0,192
BA#	0[0-0,1]	0,06[0,04-0,09]	0,287	0,774	0[0-0,1]	0,05[0,04-0,08]	2,531	0,012
RBC	4,87±0,66	4,75±0,8	1,133	0,259	4,43±0,63	4,31±0,56	1,229	0,221
HGB	14,1±2	13,95±2,3	0,497	0,620	12,3±1,86	12,34±1,71	0,129	0,897
HCT	40,96±5,5	41,98±6,91	1,109	0,269	36,3±5,28	37,03±5,08	0,903	0,368
MCV	84,46±6,16	88,65±5,4	5,071	<0,001	82,38±7,58	86,08±6,7	3,322	0,001
MCH	29,06±2,37	29,48±2,26	1,267	0,207	27,96±3,24	28,71±2,67	1,624	0,106
MCHC	34,39±0,82	33,24±1,17	7,681	<0,001	33,88±1,29	33,34±1,15	2,834	0,005
RDW	14,46±2,1	14,8±1,67	0,949	0,344	15,17±2,26	13,94±1,62	2,722	0,008
PLT	237,23±76,28	231,7±102,54	0,416	0,678	265,58±89,48	261,15±103,04	0,293	0,770
MPV	7,82±1,16	8,73±0,89	6,221	<0,001	7,86±0,76	8,9±0,87	8,150	<0,001
PCT	0,18±0,05	0,2±0,08	1,845	0,067	0,21±0,07	0,23±0,09	1,839	0,068
PDW	16,94±1,99	18,33±1,33	5,877	<0,001	16,96±0,69	18,58±1,25	10,207	<0,001
NE/LY	4,14[2,47-7,06]	4,22[2,46-7,7]	0,598	0,550	3,42[2,14-6,33]	3,36[1,88-7,01]	0,200	0,842
PLT/LY	166,43[116,92-244]	145[93,49-234,21]	0,150	0,881	168,24[116,36-240]	154,63[104,89-226,38]	0,193	0,847
MO/BA	5[3,25-7]	10,25[7,22-15]	4,591	<0,001	5[4-7]	9,28[6,75-12,13]	3,465	0,001

Veriler Ortalama±Standart Sapma veya Ortanca[Ç1-Ç3] şeklinde gösterilmiştir

Ç1: Birinci Çeyrek Değer; Ç3: Üçüncü Çeyrek Değer.

t: Bağımsız Örneklem T Testi, z: Mann Whitney U Testi (*)

TARTIŞMA

COVID-19 hastalığı tüm dünyada yayılmaya ve mortal seyretmeye devam etmektedir. Hastalıkta bulaşın öncelikle üst solunum yolu ile olmasından kaynaklı klinik bulgular ve laboratuvar parametreleri diğer üst solunum yolu enfeksiyonlarına benzerlik gösterebilir (3,4). Bu iki hastalığın ayırıcı tanısında hastaların demografik verilerinin ve laboratuvar testlerinin değerlendirilmesi önem kazanacaktır. COVID-19 hastalığı tüm yaş gruplarında görülse de, orta ve ileri yaşlarda hastalık daha ağır seyredebilmektedir. Yapılan bazı çalışmalarda hastaneye yatırılmış hastalarda ortalama yaş 49-56 arasında olduğu bildirilmiştir (1,3). Çin Hastalık Kontrol ve Koruma Merkezi verilerine göre hastalığa yakalanmış 44.500 kişinin % 87' sinin 30 ile 79 yaş arasında olduğu tespit edilmiştir (17). Bizim çalışmamızda COVID-19 hastalarında ortalama yaş 55,95 iken; ÜSYE ve COVID-19 tanılı tüm hastalarda erkeklerde median yaş kadınlara göre daha yüksekti. Demografik verilerin yanı sıra hemogram testi; hızlı sonuç vermesi ve kolay ulaşılabilir olmasından dolayı bu iki klinik durumun ayırıcı tanısında faydalı olabilir. COVID-19 hastalığında hemogram sonuçlarında lökosit ve lökositin farklı tiplerinin değerleri değişkenlik gösterebilmekle birlikte sıklıkla lökopeni, lökositoz ve lenfopeni geliştiği bildirilmiştir (1,3). Özellikle hemogram sonuçlarında lenfopeni gözlenen hastalarda mortalitenin yüksek gözlendiği raporlanmıştır (4). Bizim çalışmamızda COVID-19 ve ÜSYE tanılı tüm hastalardaki lenfopeni seviyesi istatiksel olarak anlamlı bulunmadı. Bu durumun çalışmadaki hasta popülasyonunun ayaktan poliklinik başvurusu olmasından kaynaklandığını düşünmekteyiz. Soraya G. T. ve ark.'nın yaptığı bir çalışmada trombositopeninin COVID-19 hastalarında, olmayan hastalara göre daha şiddetli olduğu saptandı (18). Bizim çalışmamızdaki COVID-19 tanılı ve ÜSYE tanılı hastaların trombosit seviyeleri arasında anlamlı bir fark saptanmazken, COVID-19 tanılı erkek hastalarda kadınlara göre istatistiksel olarak düşük trombosit değerleri tespit edildi. Yang A. P. ve ark.' nın yaptığı çalışmada nötrofil lenfosit oranı (NLR) ve trombosit lenfosit oranı (PLR) değerlerinin COVID-19 tanılı hastalarda anlamlı yüksek olarak bildirilmiş (19). Bizim yaptığımız çalışmada NLR, PLR ise istatistiksel anlamlı olarak fark saptanmazken, MO/BA oranı COVID-19 tanılı hastalarda ÜSYE tanılı hastalara göre yüksek bulundu. Taneri P.E. ve ark.' nın yaptığı metaanalizde RDW değeri COVID-19 hastalığında hastalığın şiddeti arttıkça yükseldiği bildirilmiş (20). Bizim çalışmamızda; RDW değeri COVID-19 tanılı erkek hastalarda ÜSYE tanılı erkeklere göre daha yüksek iken, COVID-19 tanılı kadın hastalarda ÜSYE tanılı kadın hastalara göre düşük saptandı. Qin C. ve ark.' nın yaptığı araştırmada COVID-19 tanılı hastalarda kliniğin şiddetlenmesi ile BA değerlerinin de düştüğü bildirilmiş (21). Bizim yaptığımız çalışmada COVID-19 tanılı kadın hastaların BA değerlerinin ÜSYE tanılı kadın hastalara göre daha yüksek olduğu gözlendi. Ersöz A.'nın yaptığı çalışmada COVID-19 hastalarının takibinde hemogram parametreleri değerlendirilirken WBC sayıları ve aneminin birlikte dikkate alınması gerektiği önerilmiş (22). Bizim çalışmamızda hem COVID-19 hem de ÜSYE tanılı hastalarda kadınlarda aneminin daha fazla olduğu, WBC değerlerinde ise istatiksel olarak anlamlı fark olmadığı saptandı.

SONUÇ

Çalışmamızda ÜSYE ve COVID-19 tanılı hastaların hemogram parametreleri ayrı ayrı değerlendirildiğinde bazı hemogram değerleri ile hastaların demografik özelliklerinin her iki hastalığın ayırıcı tanısında yardımcı olabileceği sonucuna varılmıştır. Çalışmamız sonuçlarına göre COVID-19 hastalığı, ÜSYE tanılı hastalara göre erkeklerde ve ileri yaşlarda daha fazla görülmektedir. Hemogram parametrelerinde ise; her iki cinsiyette COVID-19 hastalarının ortalama MCV, MPV, PDW, MO/BA, MCH ve yaş değerlerinin ÜSYE tanılı hastalara göre daha yüksek saptandığı görülmüştür. Özellikle trombosit değeri COVID-19 hastalığında erkeklerde, kadınlara göre düşük gözlenmiş, BA değerinin ise kadınlarda COVID-19 hastalığında ÜSYE tanılı kadın hastalara göre yüksek saptandığı belirlenmiştir. ÜSYE tanılı hastalarda MCHC değeri COVID-19 hastalarına göre yüksek bulunmuştur. Bu hastalar değerlendirilirken iyi bir anamnez ve ayrıntılı fizik muayene yanında hemogram testi çalışılması tanıda yol gösterici olacaktır.

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BAŞ AĞRISINI GEÇİRMEK İSTERKEN BAŞINA DAHA ÇOK İŞ AÇAN BİR İNTOKSİKASYON VAKASI

GİRİŞ:

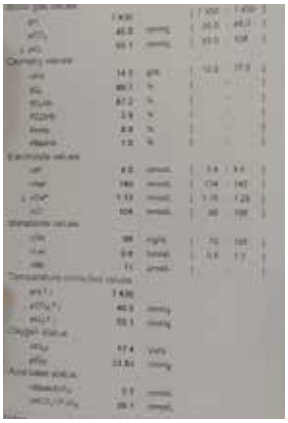
Datura stramonium Türkiye'de doğal florada yaygın olarak bulunan yabani bir bitkidir. Bu bitki, yapısında antikolinerjik zehirlenmeye neden olan atropin, hiyosiyamin ve skopolamin içermektedir. (8-9) Bu bitki halk arasında şeytan elması, boru çiçeği, abu zambak, cin otu, tatula, tatala ve domuz pıtırı isimleriyle bilinmekte olup bazı bölgelerde süs bitkisi olarak bahçelerde yetiştirilmektedir. (resim 1) Halk arasında astım, bronşit, egzema ve hemoroid tedavilerinde bitkisel ilaç olarak kullanılmaktadır. Hallüsinojenik ve öforik etkisinden dolayı kullanımı suistimal edilebilmektedir. Bu bitki bilinçsizce fazla miktarda ağız yoluyla alındığında antikolinerjik etkilerinden dolayı toksisite ile sonuçlanabilmektedir.(1-3)
Bu olgu sunumunda acil servise (AS) antikolinerjik semptomlarla başvuran ve Datura stramonium zehirlenmesi tanısı konulan 53 yaşında erkek hastayı sunmayı amaçladık.

OLGU SUNUMU

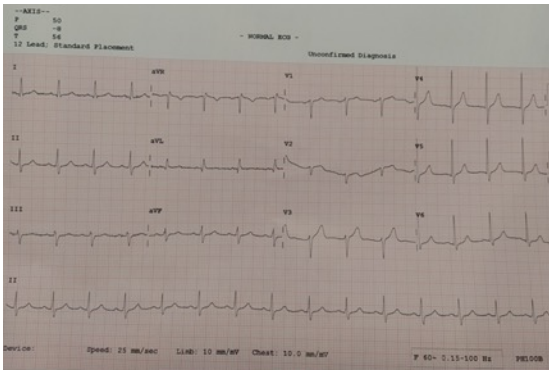
53 yaşında erkek hasta önceki gün öğle saatlerinde ense ağrısı nedeniyle bir miktar tatula otu (Datura stramonium) yeme sonrası görsel ve işitsel hayaller görme ve yüzde kızarıklık şikayetleriyle acil servisimize getirildi. Bilinen herhangi bir hastalığı ve düzenli kullandığı ilacı olmayan hastanın fizik muayenesinde; bilinç açık, koopere, oryante ve GKS 15 olarak hesaplandı. Yüzde kızarıklık görüldü ama terleme mevcut değildi. Her iki pupil izokorik ve ışık refleksi mevcuttu fakat bilateral midriyatik görünüm vardı. Nabız: 93/dk, TA: 131/97, SaO2: 95, Ateş: 36.5 olarak ölçüldü. Ekstremite duyu ve motor muayeneleri olağan saptandı. EKG normal, sinüs ritmindeydi. (resim 4) AKG: (resim 3) Tam kan değerlerinde WBC 12.500 görüldü, diğer değerler normal sınırlardaydı. Biyokimya tetkikinde CK total: 3147 U/L, BUN: 32 mg/dl ÜRE: 70 mg/dl Kreatinin: 1,03 mg/dl crp: 26 mg/dl LDH: 350 U/L saptandı, diğer değerler normal sınırlardaydı.Troponin değerleri 4 saat arayla sırasıyla 58, 50 ng/dl saptandı. Kanda etanol negatif değerdeydi. Tam İdrar Tetkiki değerleri normal sınırlardaydı. PAAC grafisi ve ADBG'de patolojik bir görünüm saptanmadı. Hastaya semptomatik sıvı tedavisi başlandı. Zehir Danışma Merkezi arandığında önerileri; semptomatik tedaviyle izlem, yakın vital takibi (hipertermiye yatkınlığa dikkat edilmeli) antikolinerjik sendrom gelişirse fizostigmin uygulanması şeklinde oldu. Hasta yatış açısından genel dahiliye birimine konsülte edildi, servis yatışı yapıldı. Acil serviste kaldığı süre boyunca yeni gelişen bir semptom veya vitallerde değişiklik gözlemlenmedi.

resim 1

resim 2



resim 3



resim 4

TARTIŞMA

Datura stramonium ülkemizin hemen her bölgesinde yol kenarlarında, boş alanlarda yetişen yabani bir bitkidir. Dünya üzerinde 10 kadar tür tanımlanmış olup ülkemizde DS ve Datura metel türleri yetişmektedir. Bitkinin tüm parçaları belladonna alkaloidi olan atropin hiyosiyamin ve skopolamin içermektedir. Her bir tohum tanesi 0,1 mg atropin içermektedir. İnsan için 10 mg'ın üzerinde atropin alımı ölümcül olabilmektedir.(1-6) Bizim hastamızda ne miktarda maruziyet olduğu bilinmiyordu. Ülkemizde DS zehirlenmesi genellikle bireylerin hatalı ve bilinçsiz bitkisel ilaç kullanımı nedeniyle olmaktadır. Batı ülkelerinde daha sıklıkla genç erişkinlerin ev partilerinde sigara şeklinde öforik etkisinden dolayı kötüye kullanımı şeklinde görülmektedir (4-7). DS zehirlenmesinde klinik bulgular oral alımdan yaklaşık 30-60 dk sonra başlar. Başlangıç semptomları işitsel ve görsel hallüsinasyonlar, mukozalarda kuruluk, aşırı susuzluk hissi, pupillerde dilatasyon, görme bozukluğu, konuşma bozukluğu ve titremeyi içerir. Takiben taşikardi, idrar retansiyonu ve ileusu içeren semptomlar görülür. Nadiren hipertermi, solunum arresti ve konvülziyonlar görülebilir. Santral sinir sistemi depresyonu, dolaşım kollapsı ve hipotansiyona bağlı olarak ölüm meydana gelebilir. Gastrointestinal motilitenin azalması toksinin eliminasyonunu geciktirir ve semptomların 24-48 saate kadar devam etmesine neden olabilir (4,5).
Sonuç olarak hastane acil polikliniğine açıklanamayan antikolinerjik belirti ve şikâyetlerle başvuran her hastada yabani bitki zehirlenmesi mutlaka düşünülmeli, hasta bu açıdan sorgulanma ve değerlendirmelidir. Ayrıca toplum yabani bitki zehirlenmeleri yönünden bilgilendirilmeli ve eğitilmelidir.

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A RARE CASE IN THE EMERGENCY DEPARTMENT: OCULOMOTOR NERVE PALSY DUE TO ACUTE INTERNAL CAROTID ARTERY OCCLUSION

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INTRODUCTION

Nervus oculomotorius is the cranial nerve that innervates the levator pelpebra superior, inferior, superior and internal rectus muscles and inferior oblique muscle. Oculomotor nerve palsy presents with different clinics due to various reasons in anatomical localizations from the nucleus in the midbrain to the orbital segment (1). The most common cause of oculomotor nerve palsies without pupillary pathology is microvascular ischemia of the nerve due to atherosclerosis (2). In patients accompanied by pupillary pathology (e.g. mydriasis), vascular causes and aneurysms are the leading causes of paralysis (3). In this case, we want to present a patient who admitted to the emergency department with ptosis and was diagnosed with oculomotor nerve palsy caused by acute internal carotid artery total occlusion.

CASE

An 86-year-old female patient admitted to the emergency department with complaints of left eyelid closure, headache, and nausea-vomiting that started approximately 12 hours ago. She had a history of multiple drug use due to diabetes mellitus, hypertension, asthma and hyperlipidemia. In vital signs, blood pressure; 160/100 mmHg, heart rate: 103 beats/min, SO_2; 100%, body temperature; 36.0□. Physical examination revealed ptosis and mydriasis in the left eye (Figure 1). Limited inward and downward movements were detected in the left eye. Direct/indirect pupillary reflex was negative in the left eye. Other neurological examinations were normal. Her ECG showed atrial fibrillation, 66 beats/min, right axis deviation. She was started to be examined with the preliminary diagnosis of oculomotor nerve palsy. No pathology was detected in blood tests. No acute pathology was detected in cranial CT. Cranial MRI revealed ischemic hyperintense lesions in the late subacute T1W and Flair sequence in the right occipital lobe, and hyperintense multiple ischemic gliotic lesions in bilateral periventricular and bilateral centrum semiovale in T2A and Flair sequence. The patient was admitted to the neurology inpatient department. In the color doppler USG of the carotid artery, a thrombus narrowing the lumen by 80% was detected starting from the middle part of the left common carotid artery (CCA). Acute total occlusion was detected in the left internal carotid artery (ICA). A thrombus narrowing the lumen by 90% was detected proximal to the left external carotid artery (ECA). No cardiac thrombus was detected in her ECHO. No pathology was detected in orbital MRI. The patient, who was prescribed anticoagulant and antiaggregant treatment, was discharged from the neurology inpatient department 1 week later and called for outpatient control.

DISCUSSION

Isolated oculomotor nerve palsy is most commonly caused by vascular pathologies. Oculomotor nerve palsies due to internal carotid artery occlusion have been reported (3-5). In addition, the etiology includes diabetes mellitus and hypertension-related microvascular disease (lacunar infarcts), ischemic strokes, and aneurysms (1,2,6). Our case also had late subacute lacunar infarctions. In internal carotid artery occlusion, retinal ischemia and other neurological pathologies (e.g. ischemic stroke) may also occur together with oculomotor nerve palsy (2-4). The most likely mechanism of oculomotor nerve palsy after internal carotid artery occlusion is a temporary decrease in the circulation feeding the nerve. The blood circulation of the oculomotor nerve is provided by the anastomotic network formed by branches of the internal carotid artery, branches of the maxillary artery, small arteries from the ophthalmic artery, posterior cerebral artery, and basilar artery in the cavernous sinus. Thanks to this rich anastomosis network, oculomotor nerve palsy is rarely seen and is usually temporary (4). Pupil pathology is more common in cerebrovascular infarction or hemorrhages than microvascular ischemia. However, neurological findings such as hemiplegia, hemiparesis, and cerebellar ataxia are frequently observed in strokes (1). In our case, none of these findings were present. Aneurysms, especially posterior communicating artery aneurysms, are the most important cause of isolated oculomotor nerve palsy with pupil involvement (1). In our case, no aneurysm was detected in cranial MRI. It should not be forgotten that vascular pathologies and stroke can be detected in oculomotor nerve palsy patients who apply to the emergency department. Rarely, oculomotor nerve palsy (ptosis, pupil pathology and eye movement defect) may be the only finding of internal carotid artery occlusion.

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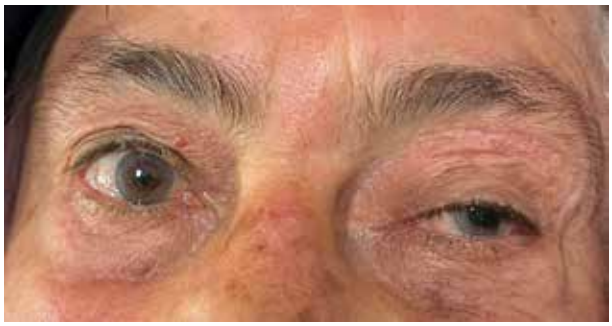

Figure 1. Ptosis and mydriasis in the left eye.

A PROSPECTIVE INVESTIGATION OF IMMUNOSUPPRESSED PATIENTS APPLIED FOR HIGH FEVER COMPLAINT

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INTRODUCTION

The diagnosis and treatment of immunosuppressed patients are delayed because of the inability to create an adequate immune response and their admission to the emergency department with atypical complaints. Rapid and appropriate management of immunosuppressed patients in emergency services with high patient density is very important. The main purpose of our study; to reveal the relationship between the examinations performed at the time of admission to the emergency department of this patient group and the patients' early diagnosis, prognosis, mortality and hospitalization status.

MATERIAL METHOD

Eighty immunosuppressed patients who were admitted to the adult emergency department with high fever between May 2019 and May 2020 were prospectively studied. While patients older than 18 years of age were included in the study, healthy individuals without fever complaints, who were not immunosuppressed and were excluded from the study. An examination form was created for immunosuppressed patients who presented with high fever and filled out for each patient.

RESULTS

In the gender analysis of 80 patients included in the study; 44 (55%) were female, 36 (45%) were male and the mean age was 58.50 ± 14.72 years. We found that there was a significant relationship between the length of stay of the patients and the C-reactive protein (CRP) and white blood cell in urinalysis (TIT WBC) values. We found that low albumin, O2 saturation, platelet (PLT) and total protein values, high lipase and procalcitonin (PCT) values were associated with mortality in our patients. We found that low albumin, total protein and systolic blood pressure, high blood urea nitrogen, lactate dehydrogenase, neutrophil and PCT levels were associated with intensive care admission in our patients. When we examine the last diagnoses of our patients according to their immunosuppression status; we found that most of the patients with liver transplantation were diagnosed with cholangitis, most of the patients with malignancy had respiratory system infection, and most of the patients with kidney transplantation had urinary tract infection.

DISCUSSION

It has been stated in the literature that fever is the most common reason for admissions to the emergency department, that this may be due to infectious and non-infectious causes, and that fever response to infection may not always be present, especially in elderly and immunosuppressed patients (1). In our study, the fever value measured in the majority of our patients who stated that they had fever was not high. We included to our study those who described the complaint of high fever due to the insufficient level of fever response in immunosuppressed patients.

It has been reported that the higher the CRP value measured at the time of admission, the longer the hospital stay, and that serial CRP measurements are useful in predicting the duration of hospitalization (2). In our work; We found that high CRP values were directly related to the length of hospital stay and the longer the CRP value measured, the longer the hospital stay.

It has been reported that PCT is a good predictor of prognosis, that serum PCT value can be used to show the severity of sepsis and to determine the mortality of sepsis, and that PCT has a good prognostic value in predicting early mortality in patients admitted to the emergency department (3). In our study, we found that there is a direct relationship between the PCT value of our patients and mortality, and the higher the PCT values of the patients, the higher the mortality rate.

Thomas et al. found that thrombocytopenia is common in patients with sepsis and is associated with increased mortality (4). In our study, we found that the number of PLTs in our patients was associated with mortality, and a decrease in the number of PLTs was associated with increased mortality.

Turtay et al. examined the final diagnoses of patients with liver transplantation at the admission to the emergency department and showed that the most common causes of admission were biliary stenosis and gastroenteritis (5). In our study, we found that liver transplant patients who applied to the emergency department with the complaint of fever were most frequently diagnosed with cholangitis, followed by urinary system infection and other abdominal system infections (peritonitis, gastroenteritis, toxic hepatitis, and portal vein thrombosis).

CONCLUSION

Immunosuppressed patients admitted to the emergency department with high fever should be taken seriously, even if they do not have high fever. In addition, appropriate examinations to be made at the time of admission to these patients are of vital importance in terms of clinical course.

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CARDIAC CONTUSION ACCOMPANYING PULMONARY CONTUSION İN ISOLATED THORACIC TRAUMA

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INTRODUCTION:

A cardiac injury can occur because of direct trauma of the fractured bones, compression between the sternum and vertebral column, opposite forces of acceleration origin, and hydraulic impact. No definitive, gold standard test for diagnosing cardiac contusion is present in emergency departments. The aim of our study was to investigate diagnostic and clinical processes performed for cardiac contusion in patients with blunt thoracic trauma.

MATERIAL METHOD:

Patients aged over 18 years who CT images of the patients in the Hospital Automation System, the cardiac enzyme levels, the periodic 4-hour follow-up ECGs in the Emergency Department, and the results of ECHO, performed at admission and when required according to the clinical status, were investigated.

RESULTS:

Sixty-five patients who had presented because of isolated blunt thoracic trauma as an outpatient or via 112 Ambulance System, in whom CT imaging and ECG were performed, and cardiac enzyme level was investigated, were included in the study. All patients were followed-up with non-invasive cardiac monitoring in the Emergency Department.

During the clinical follow-up of 23 patients, cardiac rhythm abnormalities were detected in four patients with a pulmonary contusion in whom troponin value was negative at admission, and no ECG finding was present. In the ECG taken because of arrhythmia, sinus tachycardia was present. An increased level of 4-hour high-sensitive troponin I was also identified. In two of these patients, increased echogenicity around the right ventricle and a pericardial effusion varying between 1 cm and 1.5 cm in thickness were discovered in the ECHO investigation.

Cardiac contusion was detected in 23 of the 65 patients who were included in our study; four patients died. ECG abnormalities in 23 patients were sinus tachycardia (four patients), ST-segment elevation (one patient), premature ventricular rhythm (11 patients), and supraventricular tachycardia (12 patients). We determined pericardial effusion with echocardiography in nine patients and troponin I elevation in 23 patients. In addition, troponin elevation was detected in 10 patients without a diagnosis of cardiac contusion who had a pulmonary contusion, hemothorax and/or pneumothorax at the time of hospital admission and then with normal troponin levels at 4-hour control.

DISCUSSION:

The incidence of blunt cardiac injury is about 20-76% in blunt thoracic trauma patients. Cardiac contusion was detected in 16% of cases, which were proven by autopsy studies.

Our study included 65 isolated thoracic trauma patients (3.42%) in 1897 trauma patients. We determined cardiac contusion in 35.38% of thoracic trauma patients. Our ratio of cardiac contusion is higher than in other studies.

In the literature, some algorithms are advised for blunt cardiac injury patients which include that in patients who are normotensive, in sinus rhythm, and who have normal electrocardiographic findings, no further evaluation is needed. We diagnosed four cardiac contusion patients with normal electrocardiographic and echocardiographic findings at the time of hospital admission who had troponin elevation and electrocardiographic abnormalities approximately after four hours.

CONCLUSION:

Thoracic trauma is a significant risk factor for cardiac contusion. We advise that all blunt thoracic trauma patients should be screened for cardiac contusion by continuous ECG monitoring and troponin levels at four-hour intervals for at least two times.

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COVİD-19 TANISI ALAN HASTALARIN ACİL SERVİSTEKİ KALIŞ SÜRESİNİ ETKİLEYEN FAKTÖRLER

Fatma Şahin, Ekim Sağlam Gürmen, Adnan Bilge
Manisa Celal Bayar Üniversitesi Tıp Fakültesi, Acil Tıp Anabilimdalı,

GİRİŞ:

Pandemi gibi çok yoğun hasta başvurusunun olduğu durumlarda kısa sürede, güvenilir tanı konmasını sağlayabilecek biyobelirteçler önem kazanmaktadır. COVID-19 tanısı koymada RT-PCR(Realtime Revers-Transkriptaz Polimeraz Zincir Reaksiyonu) testi güvenilir bir tanı testidir ancak istem-sonuç süresinin uzun olması nedeniyle özellikle acil servis başvurularında hızlı karar vermek için uygun olmayabilir. Bu nedenle daha hızlı sonuç elde edilebilmek için bir veya birden fazla test sonucunun birlikte değerlendirilmesi, belli kestirim değerlerinin saptanması ile hasta yatış kararının daha kısa sürede verilmesi sağlanabilir.(6)

Bu çalışmada hastanemize başvuran COVID-19 tanısı alan hastaların hematolojik, biyokimyasal, kardiyak parametrelerinin radyolojik bulgular ile ilişkilendirilip tüm bunların taburculuk ya da yatış kararı vermede ki rolü ve prognozu öngörmede ki etkisi araştırılmıştır.

MATERYAL METHOD:

COVID-19 PCR testi pozitif olan 400 hasta çalışmaya dahil edilmiştir. Hastaların demografik özellikleri, vital bulguları, laboratuvar parametreleri, görüntüleme sonuçları değerlendirilmiştir.

BULGULAR:

Hastaların PAAC sonuçları incelendiğinde; taburculuk grubunda olan 88 hastanın (%96,7) normal PAAC olduğu, yatış yapılan 8 hastanın (%33,3) multifokal konsolidasyon olduğu belirlenmiştir. Toraks BT sonuçları incelendiğinde ise; taburcu olan grupdaki 15 hastanın (%35,7) toraks BT'sinde düşük şüphe olduğu, yatış yapılan 102 hastanın (%42,3) toraks BT'sinde yüksek şüphe olduğu belirlenmiştir.

TARTIŞMA:

Literatür incelendiğinde çalışmamızla uyumlu olarak akciğer grafisinin COVID-19 tanısı konmasında duyarlılığı düşük saptanmıştır. Toraks BT bulguları ise COVID 19 hastalarının acil serviste kalma süreleri, sonlanım durumları ile anlamlı ölçüde ilişkili bulunmuştur.

Pandemi gibi hasta yoğunluğunun fazla olduğu dönemlerde acil servisteki iş yükünün azaltılması ve hastaların daha hızlı sonuçlandırılması açısından altın standart olan PCR-RT testine ek olarak radyolojik görüntülemeler ile laboratuvar bulgularını birleştirerek hastaları değerlendirmenin mümkün olduğu, ayrıca laboratuvar ve radyolojik bulguların hastalığın prognozu hakkında yol göstericiliği kanıtlanmıştır

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GLOMUS TYMPANİCUM

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ABSTRACT

The most common paraganglioma of the middle ear is called glomus tympanicum. Glomus tympanicum is the most common benign neoplasm of the middle ear. Symptoms are usually localized and often do not give clinical signs when they do not reach sufficient size. Glomus tympanicum should be considered as a rarer cause in patients presenting with tinnitus and hearing loss.

KEYWORDS: Glomus tympanicum, emergency department, benign neoplasm

INTRODUCTION

The most common paraganglioma of the middle ear is called glomus tympanicum. They are benign neoplasms of the middle ear. They usually originate from the glomus bodies on the Jacobson nerve. They can often be located on the promontorium, or they can completely fill the middle ear and extend into the eustachian or mastoid cavity (1).

As a result of this extension, they cause various symptoms. Among these, pulsatile tinnitus, hearing loss, and a feeling of fullness in the ear are common symptoms. CT is very useful for the evaluation of localization and changes in the ossicular chain in the diagnosis, and embolization, radiotherapy and surgical methods are used in the treatment (2).

CASE

A 72-year-old female patient is referred to the emergency department of our hospital and then to the Otolaryngology polyclinic with complaints of fullness and ringing in the ear. In the otoscopic examination of the patient with known DM, using oral antidiabetics and no history of operation, the right ear was observed naturally, and a pulsatile red reflective mass was observed behind the left tympanic membrane, completely filling the tympanic cavity (Figure-1).

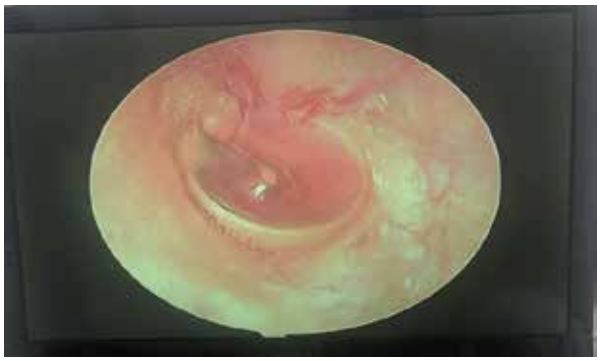

FIGURE-1: A pulsatile red-colored reflective mass that completely fills the tympanic cavity

Systemic examination was normal, fever was 36.4 degrees, TA was 132/70. Routine blood tests were normal. In pure tone audiogram, right ear airway: 48 decibel(db) bone conduction: 21db, left ear airway: 63 db bone conduction: 41 db hearing threshold levels were present. Tympanometric examination did not show, while Type A curve was observed in the left ear, Type B curve was observed in the right ear. A 7x3x3 mm mass compatible with the glomus tympanicum was reported in thin-section Temporal CT. The middle ear was entered into the patient by transcanal route under ETGA. The pulsatile mass in front of the promontorium was excised. Bleeding was controlled and the operation was terminated. No complications were observed in the perioperative and postoperative period. The histopathological examination of the mass was reported to be compatible with the glomus tympanicum. In the postoperative control audiometry of the patient, right ear airway: 46db bone conduction: 20 db, left ear airway: 49db bone conduction: 40db hearing threshold levels were observed. An improvement of 13 db was observed in the amount of gap in the left ear.

DISCUSSION

Glomus tympanicum is the most common benign neoplasm of the middle ear. Symptoms are usually localized and often do not give clinical signs when they do not reach sufficient size. Symptoms include pulsatile tinnitus, aural fullness, and conductive hearing loss. Otoscopy examination, audiogram, tympanometry, CT, MRI and angiography are very useful in diagnosis. In addition, other causes of paraganglioma and vascular malformations should be investigated in patients diagnosed with glomus tympanicum. Treatment should be decided by considering criteria such as tumor size, location, patient's age and hearing loss. Embolization and Radiotherapy are alternative treatments, and surgical methods should be used if possible (3).

CONCLUSION

Glomus tympanicum should be considered as a rarer cause in patients presenting with tinnitus and hearing loss. In the selection of the most appropriate treatment for the patient, the clinical condition of the patient should be prioritized, and high jugular bulb, abberane carotid artery localization, the patient's expectation of hearing, ossicular chain destruction and other a-v malformations should be considered in the selection of surgery (4). In the postoperative period, one should be very careful in terms of bleeding and other complication risks.

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PLATELET/LENFOSİT VE NÖTROFİL/LENFOSİT ORANLARININ AKUT BATIN TANISINDAKİ BELİRLEYECİLİĞİNİN DEĞERLENDİRİLMESİ

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GİRİŞ:

Günümüzde nötrofil lenfosit oranı (NLO), hem akut inflamasyona işaret eden nötrofil artışı, hem de fizyolojik stresi yansıtan lenfosit düşüklüğünün olumsuz etkilerini gösteren bir parametre olarak kulanılmaktadır.

Çalışmamızda acil servise karın ağrısı ile başvuran hastaların, hastanede kalış süresini kısaltma ve mortalite, morbitide oranlarının azaltılması amacıyla başvuru şikayetlerinin ciddiyetini belirleyebilmede platelet lenfosit oranı (PLO), NLO değerlerinin önemi, hastalığın ciddiyeti arasındaki ilişkisi ve akut karını göstermede WBC, PLO ve NLO'nun birbirine üstünlükleri değerlendirilmiştir.

MATERYAL METOT:

Çalışma acil servise karın ağrısı şikayetiyle başvuran ve radyolojik olarak "akut batın" tanısı konan 200 hasta ve sağlıklı 100 kontrol grubu üzerinde yapılmıştır. Hemogram parametrelerinden beyaz küre, platelet, lenfosit ve nötrofil değerleri değerlendirilmiş ve "Platelet/Lenfosit, Nötrofil/Lenfosit oranları hesaplanmıştır.

BULGULAR:

187 hastanın sarı, 13 hastanın kırmızı triyaj kodu ile başvurduğunu ve bu hastaların 87'sinin acil ameliyata alındığı saptandı. Karın ağrısı ile acil servise başvuran hastaların %83.5 oranla servis yatışı ile sonuçlandığı görüldü.

Hasta ve kontrol grubunu ayırt etmede WBC duyarlılığı %79, özgüllüğü %79, PKD düzeyi %88.3, NKD düzeyi %65.3, NLO duyarlılığı %85, özgüllüğü %83, PKD düzeyi %90.9, NKD düzeyi %73.5 ve PLO duyarlılığı %69, özgüllüğü %68, PKD düzeyi %81.2, NKD düzeyi %52.3 olarak saptanmıştır. Olguların NLO değerleri ile WBC değerleri arasında pozitif yönde 0.510 düzeyinde, PLO değerleri ile WBC değerleri arasında pozitif yönde 0.115 düzeyinde istatistiksel olarak anlamlı ilişki olduğu saptanmıştır.

TARTIŞMA:

Karın ağrısı olan hastaların büyük bir kısmı acil servislere başvurur ve tedavilerine ilk olarak acil servislerde başlanır. Acil servis iş yoğunluğunda ki artışın muayene için bekleme süresi, gelişebilecek yan etki sıklığı ve süresi, morbidite ve mortalite oranlarında artışa, acil serviste kalış zamanında uzama ve düşük sağlık bakımına neden olduğu birçok çalışmayla gösterilmiştir. Tüm bu nedenler günümüzde karın ağrısı için uygun, kolay erişilebilir ve düşük maliyetli erken teşhis de kullanılabilinecek biyokimyasal tanı testlerinin arayışını doğurmuştur. BT'de çıkabilecek kritik bir patolojiyi erken saptamaya yarayacak ve klinisyene erken dönemde yön verecek bir laboratuvar yönteminin varlığı, hem zaman hem radyasyon maruziyetinden uzaklaşma hem de maliyet açısından kazanımlar sağlayacağı aşikardır.

Yapılan çalışmalara paralel olarak çalışmamızda BT'de akut karın patolojisi olan hastalarda, olmayanlara göre NLO değerini anlamlı olarak yüksektir. NLO ve PLO değerleri ile WBC değerleri arasında pozitif yönde istatistiksel olarak anlamlı ilişki vardır.

NLO'nun cut off değerinin karın ağrısı ile acil servise başvuran hastalarda karın ağrısı ciddiyetini gösterdiğini düşünmekteyiz.

SONUÇ:

WBC, NLO ve PLO değerleri akut inflamasyonu gösteren belirteçlerden olup NLO'nun karın ağrısı ile başvuran hastalarda kritik hastaları tanımlamak, ileri görüntüleme sayısının azaltılmasını sağlamak ve primer sonlanımı öngörmede klinisyene yol göstereceğini düşünmekteyiz.

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AÇIK HAVADA NARGİLE KULLANIMI SONRASI KARBONMONOKSİT ZEHİRLENMESİ: OLGU SERİSİ

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ÖZET

Nargile, tütün tüketim şekillerinden biridir ve dünyada kullanımı hızla yaygınlaşmaktadır. Sigaradan daha az zararlı olduğu inancı bu yaygınlaşmada etkilidir. Oysaki karbonmonoksit, nikotin, katran, fenantren gibi zehirli maddeler nargilede de mevcuttur. Nargilenin tüketim şekli nedeniyle (bir kafeteryada oturup saatler süren nargile dumanının solunması) tek seferde sigaradan daha fazla toksin maruziyetine sebep olmaktadır. Bu toksinlerden biri olan karbonmonoksite saatler süren maruziyet sonrası zehirlenmeler meydana gelmektedir. Karbonmonoksit zehirlenmeleri esas olarak kapalı ortamlarda soba dumanı veya egzoz gazına maruziyet sonrası sık görülür. Bu olgu serisinde açık havada nargile içimi sonrası meydana gelen baş dönmesi, senkop, bulantı, kusma şikayetleriyle acil servisimize başvuran beş karbonmonoksit zehirlenmesi vakaları sunulmuştur.

ANAHTAR KELİMELER: Karbonmonoksit, Nargile, Senkop, Zehirlenme

ABSTRACT

Hookah is one of the forms of tobacco consumption and its use is rapidly spreading around the world. The belief that it is less harmful than smoking is effective in this spread. However, poisonous substances such as carbon monoxide, nicotine, tar and phenanthrene are also present in hookahs. Due to the way hookah is consumed (sitting in a cafeteria and inhaling the smoke of hookah for hours), it causes more toxin exposure than cigarettes at one time. Carbon monoxide poisoning is common mainly after exposure to stove smoke or exhaust gas in indoor environments. In this case series, five carbon monoxide poisoning cases who applied to our emergency department with dizziness, syncope, nausea, vomiting after outdoor hookah smoking are presented.

KEYWORDS: Carbon monoxide, Hookah, Syncope, Poisoning

GİRİŞ

Tütün ve tütün ürünleri kullanımı dünyada önemli önlenebilir bir morbidite ve mortalite nedenidir. Nargile, tütün buharının solunmadan önce sudan geçtiği bir tütün tüketim şeklidir. Nargile kullanımı, 400 yıl öncesine varan köklerini Ortadoğu ve Kuzey Afrika'dan alır [1]. Halkın nargiledeki nikotin miktarının sigaradan az olduğuna inanması ve katran, karbonmonoksit (CO), nikotin gibi zehirli maddelerin su buharından geçerken süzüldüğü inancı nedeniyle özellikle son zamanlarda tüm dünyada nargile içiciliği gençler arasında popüler hale gelmiştir. Oysaki bir saatlik nargile tüketimi sonrası solunan duman ile en az 145 mg CO (bir sigara tüketimindeki konsantrasyonun sekiz katı) ve daha fazla miktarda nikotin, katran, fenantren, krizen, floranten tüketilmiş olur [2].

Karbon içeren bileşiklerin tam yanmamasıyla CO ortaya çıkar. Karbonmonoksidin hemoglobine bağlanma yeteneği oksijenden 200-300 kat fazladır. Oksihemoglobin dissosiyasyon eğrisini sola kaydırır oluşan karboksihemoglobin nedeniyle dokulara oksijen sunumu azalır ve doku hipoksisi meydana gelir. Sinir sistemi, solunum sistemi, kardiyovasküler sistem gibi pek çok sistem bu durumdan etkilenir ve zehirlenme durumunda hastalar halsizlik, bilinç bulanıklığı, bulantı-kusma, bilinç kaybı ile başvurabilirler. CO zehirlenmesi özellikle kış aylarında kapalı ortamlarda soba yakılması, egzoz gazına maruz kalma gibi durumlarda meydana gelmektedir. Bu olgu serisinde baş dönmesi, senkop, bulantı, kusma nedeniyle yakınları tarafından acil servise getirilen beş farklı hastada, açık havada nargile içimi sonrası CO zehirlenmesi olguları sunulmuştur.

OLGU SUNUMLARI

OLGU 1

Yirmi yedi yaşında erkek hasta acil servise arkadaşları tarafından bir kafetaryada otururken bayılma ve kusma şikayetleriyle getirildi. Hastanın gelişinde vital bulguları TA: 110/72 mmHg, nabız: 88 atım/dk, oksijen saturasyonu: %98, ateş 36ºC idi. Elektrokardiyografisi (EKG) normal sinüs ritmindeydi. Hastanın bilinen ek hastalık ve ilaç kullanım öyküsü yoktu. Fizik muayenesinde bilinç açık, oryante, koopere olan hastanın diğer sistem muayeneleri de olağandı. Senkop nedenini belirlemek için hastaya biyokimya, hemogram, venöz kan gazı, hs Troponin I ve beyin bilgisayarlı tomografisi tetkikleri planlandı. Biyokimya tetkiki sonucuna göre Glukoz: 121 mg/dl, Kreatinin: 0.82 mg/dl, GGT: 14 IU/L, ALT: 29 U/L, AST: 27 U/L, Amilaz: 31 U/L, Lipaz: 23 U/L, CRP:0.1 mg/L idi. Hemogramında WBC: 10940 µL, HGB: 16.4 g/dL, HCT: %46.7 ve PLT:381.000 µL idi. Troponin I: 0.011 ng/ml idi. Venöz kan gazında pH: 7.41, sO_2: %61.4, pCO_2: 43.7 mmHg, pO_2: 20 mmHg, COHb: %33.2 ve Laktat: 2.6 mmol/L olduğu görüldü. Hastanın çekilen beyin bilgisayarlı tomografisinde patoloji saptanmadı. Venöz kan gazında karboksihemoglobinin yüksek çıkması üzerine hasta ve arkadaşlarıyla tekrar görüşüldü. Hastanın iki saat boyunca açık havada nargile içtiği öğrenildi. Hastaya rezervuarlı maske ile %100 oksijen tedavisi ve 100 cc SF içinde 10 mg Metoklopramid I.V. uygulandı. Kontrol venöz kan gazında COHb: %12.7 idi. Anestezi ve Reanimasyon uzmanı ile görüşüldü. Hastaya yoğun bakım yatışı önerildi ancak hasta kabul etmedi ve altı saatlik acil servis takibinin ardından hastaneden kendi isteği ile ayrıldı.

OLGU 2

On dokuz yaşında kadın hasta acil servise başvurudan 15-20 dakika önce bir anda ayağa kalkmayı takiben gerçekleşen bayılma şikayeti ile başvurdu. Hasta geldiğinde bilinci açık oryante koopere idi. GKS:15 olan hastanın daha önce böyle bir şikayet ile acil servise veya diğer polikliniklere başvurusu bulunmamaktaydı. Hastanın herhangi bir kronik hastalığı ve ilaç kullanım öyküsü bulunmamakta idi. Göğüs ağrısı tariflemiyordu. Hastanın gelişinde vitalleri TA: 136/82 mmHg, nabız: 70 atım/dk, oksijen saturasyonu: %100, ateş: 36,0ºC idi. Hastanın anamnezi derinleştirildiğinde yaklaşık 2-3 saat kadar açık hava bir kafeteryada nargile içtiğini öğrendik. Hastanın mukozal membranları ıslak, cilt turgoru iyi idi. Kardiyovasküler, pulmoner ve nörolojik muayenesinde herhangi bir bulgu bulunmamaktaydı. Çekilen EKG'sinde ritim sinüs ritminde olup hız 80 atım/dakika idi. Herhangi bir iskemi bulgusu veya eksen sapması bulunmamakta idi. Hastanın venöz kan gazı tetkiki sonucuna göre pH:7.37, glukoz:114 mg/dl, sO_2:%47.4, pCO_2 :45 mmHg, pO_2:22.0 mmHg, potasyum:4.1 mmol/L, sodyum: 143 mmol/L, THb:12.4, COHb: %14.2, HCO_3: 23.8 mEq/L, laktat: 1.0 mmol/L idi. Hastamızın biyokimya, hs troponin I ve hemogram tetkikleri olağan ve B-HCG testi negatif idi. Hastaya yaklaşık 6 saat rezervuarlı maske ile %100 oksijen tedavisi uygulandı. Hastanın aralıklı olarak yapılan nörolojik muayenesi normaldi. Hastanın 6 saatlik takibi sonrası alınan venöz kan gazında pH:7.36, glukoz:134 mg/dl, sO_2:%87.0, pCO_2 : 44.3 mmHg, pO_2:52.0 mmHg, potasyum:3.8 mmol/L, sodyum: 145 mmol/L, THb:11.7, COHb: %4.5, HCO_3: 23.8 mEq/L, laktat:0.8 mmol/L idi. Hastada müşhade süresince herhangi bir semptom gözlenmemesi üzerine hasta CO zehirlenmesi konusunda bilgilendirildikten sonra taburcu edildi.

OLGU 3

Yirmi üç yaşında kadın hasta acil servise başvurudan üç saat önce başlayan dört kere kusma, hareketle olan denge kaybı, kulağında çınlama, baş dönmesi ve ardından gelişen bayılma şikayeti ile başvurdu. Hasta geldiğinde bilinci açık, oryante, koopere idi. Hastanın herhangi bir kronik hastalığı ve ilaç kullanım öyküsü bulunmamakta idi. Hastanın gelişinde vitalleri TA: 90/40 mmHg, nabız: 108 atım/dk, oksijen saturasyonu: %99, ateş: 36,5□C idi. Hastanın anamnezi derinleştirildiğinde yaklaşık 3-4 saat kadar açık hava kafetaryada bulunduğunu ve nargile içtiğini öğrendik. Hastanın nörolojik ve diğer sistem muayeneleri de olağandı. Çekilen EKG'sinde ritim sinüs ritminde olup hız 96 atım/dakika idi. Hastanın venöz kan gazı tetkiki sonucuna göre pH:7.38, glukoz:121 mg/dl, sO_2:%44.6, pCO_2 :42.8 mmHg, pO_2:16.1 mmHg, potasyum: 3.6 mmol/L, sodyum: 140 mmol/L, THb:15.5, COHb: %27.4, HCO_3: 23.1 mEq/L, laktat: 2.3 mmol/L idi. Hastamızın biyokimya, hs troponin I ve hemogram tetkikleri olağan ve B-HCG testi negatif idi. Hastaya 6 saat rezervuarlı maske ile %100 oksijen tedavisi uygulandı. Hastanın aralıklı olarak yapılan nörolojik muayenesi normaldi. Hastanın 6 saatlik takibi sonrası alınan venöz kan gazında pH:7.39, glukoz:117 mg/dl, sO_2:%48.5, pCO_2 :40.4 mmHg, pO_2:24.9 mmHg, potasyum: 4.5 mmol/L, sodyum: 140 mmol/L, THb:14.6, COHb: %4.1, HCO_3: 23.0 mEq/L, laktat:1.0 mmol/L idi. Anestezi ve Reanimasyon uzmanı ile görüşüldü. Hastaya yoğun bakım yatışı önerildi ancak hasta kabul etmedi ve altı saatlik acil servis takibinin ardından hastaneden kendi isteği ile ayrıldı.

OLGU 4

Yirmi üç yaşında erkek hasta 1 saattir olan halsizlik ve kusma şikayetiyle acil servise başvurdu. Hasta geldiğinde bilinci açık, oryante, koopere idi. Hastanın herhangi bir kronik hastalığı ve ilaç kullanım öyküsü bulunmamakta idi. Göğüs ağrısı tariflemiyordu. Hastanın gelişinde vitalleri TA: 106/64 mmHg, nabız: 65 atım/dk, oksijen saturasyonu: %98, ateş: 36,7ºC idi. Hastanın anamnezi derinleştirildiğinde acil servise başvuru öncesinde 3 saat kadar açık havada nargile içtiğini öğrendik. Hastanın batın muayenesi olağan ve defans, rebound yoktu. Diğer sistem muayeneleri de olağandı. Çekilen EKG'sinde ritim sinüs ritminde olup hız 62 atım/dakika idi. Hastanın venöz kan gazı tetkiki sonucuna göre pH:7.37, glukoz:104 mg/dl, sO_2:%42.9, pCO_2 :47.5 mmHg, pO_2:18.3 mmHg, potasyum: 3.6 mmol/L, sodyum: 142 mmol/L, THb:15.5, COHb: %30.7, HCO_3: 24.7 mEq/L, laktat: 1.7 mmol/L idi. Hastamızın biyokimya, hs troponin I ve hemogram tetkikleri olağandı. Hastaya rezervuarlı maske ile %100 oksijen ve 100 cc SF içinde 10 mg Metoklopramid I.V. tedavisi uygulandı. Hastanın aralıklı olarak yapılan nörolojik muayenesi normaldi. Hastanın 6 saatlik takibi sonrası alınan venöz kan gazında pH:7.37, glukoz:124 mg/dl, sO_2:%45.6, pCO_2 :43.5 mmHg, pO_2:24 mmHg, potasyum: 4.2 mmol/L, sodyum: 148 mmol/L, THb:14.4, COHb: %13.5, HCO_3: 23.3 mEq/L, laktat:1.5 mmol/L idi. Anestezi ve Reanimasyon uzmanı ile görüşüldü. Hastaya yoğun bakım yatışı önerildi ancak hasta kabul etmedi ve altı saatlik acil servis takibinin ardından hastaneden kendi isteği ile ayrıldı.

OLGU 5

Yirmi iki yaşında kadın hasta otobüsle yolculuk yaparken başlayan baş dönmesi şikayeti ile 112 acil ambulans ekibiyle acil servise getirildi. Hasta geldiğinde bilinci açık, oryante, koopere

idi. Hastanın herhangi bir kronik hastalığı ve ilaç kullanım öyküsü bulunmamakta idi. Göğüs ağrısı tariflemiyordu. Hastanın gelişinde vitalleri TA: 100/60 mmHg, nabız: 100 atım/dk, oksijen saturasyonu: %98, ateş: 36,5°C idi. Hastanın anamnezi derinleştirildiğinde otobüse binmeden önce 2 saat kadar açık havada kafetaryada nargile içtiğini öğrendik. Hastanın nörolojik sistem muayenesi ve serebellar testleri olağandı, ataksisi yoktu. Diğer sistem muayeneleri de olağandı. Çekilen EKG'sinde ritim sinüs ritminde olup hız 103 atım/dakika idi. Hastanın venöz kan gazı tetkiki sonucuna göre pH:7.40, glukoz:103 mg/dl, sO_2:%45.5, pCO_2:37.4 mmHg, pO_2:19 mmHg, potasyum: 3.7 mmol/L, sodyum: 141 mmol/L, THb:13, COHb: %25.3, HCO_3: 22.6 mEq/L, laktat: 1.9 mmol/L idi. Hastamızın biyokimya, hs troponin I ve hemogram tetkikleri olağandı. Hastaya rezervuarlı maske ile %100 oksijen ve 500 cc SF I.V. tedavisi uygulandı. Hastanın aralıklı olarak yapılan nörolojik muayenesi normaldi. Hastanın 6 saatlik takibi sonrası alınan venöz kan gazında pH:7.38, glukoz:199 mg/dl, sO_2:%59.7, pCO_2:43.1 mmHg, pO_2:29.5 mmHg, potasyum: 3.7 mmol/L, sodyum: 142 mmol/L, THb:13.2, COHb: %8.8, HCO_3: 24.3 mEq/L, laktat:1.5 mmol/L idi. Anestezi ve Reanimasyon uzmanı ile görüşüldü. Hastaya yoğun bakım yatışı önerildi ancak hasta kabul etmedi ve altı saatlik acil servis takibinin ardından hastaneden kendi isteği ile ayrıldı.

TARTIŞMA

Karbonmonoksit inhalasyonu sonrası karbonmonoksit, alveolar membran boyunca hızla ilerler ve oksijenin 240 katı afinite ile hemoglobine bağlanır. Bu güçlü bağlanma oksijenin hemoglobinden ayrılma eğrisini sola kaydırır. Dokulara oksijen geçişi azalır. Hücresel düzeyde ise karbonmonoksitin sitokroma bağlanması mitokondrideki solonum zincirinin işlev bozukluğuna yol açar. Oluşan reaktif oksijen türleri nöronal nekroz, miyokard nekrozu ve apoptozis ile sonuçlanır [3,4]. Bu sebeple karbonmonoksit zehirlenmesi baş ağrısı, bulantı, kusma, görme bozuklukları, bilinç bulanıklığı, senkop gibi değişik bulgularla karşımıza çıkabilir. Karbonmonoksit zehirlenmesinde, karbonmonoksite maruz kalınma süresi ve COHb düzeyi, görülen semptomlardan daha önemlidir. Semptomlar ile karbonmonoksit zehirlenmesi arasında zayıf bir korelasyon bulunmaktadır [5]. Ciddi zehirlenme vakalarında yani COHb düzeyinin %25'in üzerinde olduğu durumlarda konvülsiyon, koma, status epileptikus, polinöropati vs. erken gelişen bulgular ve kognitif değişiklikler, psikoz, parkinsonizm, demans gibi geç bulgular saptanabilmektedir [6].

Karbonmonoksit zehirlenmelerinin en sık sebebi olarak ev ısıtıcıları, sıcak su ısıtıcıları, arabadan salınan egzoz dumanı sayılabilir. Nargile içimine bağlı görülen karbonmonoksit zehirlenmesi çok sık görülmemektedir. Karbonmonoksit zehirlenmeleri sıklıkla kapalı ortamlardaki maruziyet sonrası görülür. Sunduğumuz olgularımızın açık havada nargile içimiyle karbonmonoksit zehirlenmesine maruz kalmaları bu yönüyle ilginçtir. Nargile içimine bağlı karbonmonoksit zehirlenmesi spesifik olmayan bulgularla karşımıza çıkabileceği için hekimler açısından akla gelmesi zor bir tanıdır. Doğru tanıyı koyabilmek için bu ve benzeri şikayetlerle gelen hastalarda anamnez çok büyük bir önem arz etmektedir. Şüphelenilen hastalarda kanda COHb seviyesi veya karbonmonoksit ölçüm cihazıyla CO yüzdesi mutlaka ölçülmelidir. Eğer ölçülebilecek bir merkezde bulunulmuyorsa hastanın daha üst bir merkeze sevki sağlanmalıdır. Nargile içimine bağlı CO zehirlenmesi en sık Orta Doğu, Asya ve Afrika'da görülse de günümüzde Avrupa ve Amerika kıtalarına da yayılmış durumdadır [7]. Bir saatlik nargile içiminin yaklaşık bir paket sigara içmeye karşılık geldiği bilinse de bazı otörler bunun abartılı olduğunu düşünmektedir [8]. Karbonmonoksit zehirlenmeleri üzerinde yapılan bir çalışmada farklı eleme kriterleri kullanıldıktan sonra analiz edilen 265 vakanın 58'inde altta yatan sebebin nargile içimi olduğu bulunmuştur [9]. Nargile içimine bağlı karbonmonoksit zehirlenmesi olgusu 2000 yılına kadar bildirilmemiştir. Fakat günümüzde nargile içimine bağlı karbonmonoksit zehirlenmeleri, karbonmonoksit zehirlenmelerinin büyük bir bölümünü oluşturmaktadır. Maalem ve arkadaşlarının, Altuntaş ve arkadaşlarının, Koçak ve arkadaşlarının yayınladığı olgu sunumlarında da nargile içimi sonrası CO zehirlenmesi olguları sunulmuştur hatta Koçak ve arkadaşlarının olgularından biri kendisi içmediği sadece içilen ortamda bulunduğu halde zehirlenmiştir [1,10,11]. Bu olgu sunumu serisinde sunulan beş olgu da acil servise senkop, baş dönmesi, kusma, bulantı gibi spesifik olmayan şikayetlerle gelmiş olan hastalardı. Anamnez derinleştirildiğinde açık havada nargile içimi sonrası CO zehirlenmesi oldukları anlaşıldı. Acil serviste rezervuarlı maske ile oksijen tedavileri verilen hastaların dördüne yoğun bakım yatışı önerildi, bir hasta sıhhatle eve taburcu edildi.

Nargile tüketiminin zararları halka anlatılmalı, eğitimler yapılmalı, basın yayın organları, sosyal medya üzerinden halkı bu konuyla ilgili bilgilendirici kamu spotları hazırlanmalıdır. Kişi kendisi kullanıcı olmasa da sadece tütün ürünlerinin dumanına maruz kalındığı ortamlarda bulunmanın bile zehirlenmelere yol açtığı bilgisi halka verilmelidir. Baş dönmesi, bulantı, kusma, senkop gibi spesifik olmayan şikayetler ile acil servise başvuran hastalarda nargile kullanımı sorgulanmalı ve CO zehirlenmesi mutlaka akla gelmelidir.

Tüm hastalardan sözlü ve yazılı onam alındı.

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BİTKİSEL KÖKENLİ EREKTİL DİSFONKSİYON İLACI KULLANIMI SONRASI AKUT BÖBREK YETMEZLİĞİ

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GİRİŞ: Erektil disfonksiyon ülkemizde yapılan bir araştırmaya göre 40 yaş üstü erkeklerin 3'te 1inde görülen ciddi bir problem olmakla birlikte çoğu erkek bu problemi medikal yollardan çözmek yerine bitkisel çözümler aramaktadır. Bitkisel tedaviler çoğu zaman masum gibi görülse de bazı hastalarda böbrek ve karaciğer yetmezliğinden ölüme kadar giden sonuçları olmaktadır. Bu olguda bitkisel bir erektil disfonksiyon ilacı kullanan hastanın tanı ve tedavi aşamaları yer almaktadır

OLGU: 29 yaşında erkek hasta 1 haftadır vücutta kaşıntı ve halsizlik şikayeti ile acil servise başvurdu. Bilinen ek hastalığı olmayan, 10 gün önce cinsel problemleri nedeniyle takviye edici bitkisel içerikli ilaç aldığını ifade eden hastanın geliş vitalleri TA:160/100, nabız:108, ateş:36,1 olarak ölçüldü. Fizik muayenede anlamlı bulgu saptanmayan hastadan rutin kan tetkikleri istendi. Kan sonuçlarına göre kreatinin:9,7 mg/dL, üre:202 mg/dL , ürik asit:7,9 mg/dL GFR:6, Na^+:137, K^+:4,6, Ca:6,6, venöz kan gazında ise Ph:7,2 ,HCO3:11, laktat:0,5, anyon gap:19 olarak ölçüldü ve hasta metabolik asidoz tablosunda akut böbrek yetmezliği olarak değerlendirildi. Nefrolojiye konsülte edildi. Hasta acil diyalize alındı ve nefroloji servisine yatışı yapıldı.

TARTIŞMA: Günümüzde kullanımı gittikçe yaygınlaşan bitkisel ilaçlar internette yer alan bazı ticari sitelerde "bitkiler zararlı değildir", "doğal, sentetikten daha iyidir", "bitkiler hastalıkları tedavi etmek için vardır" gibi başlıklarla tanıtılmakta ve kullanımı teşvik edilmektedir. Bu açıklamaların da etkisiyle genel olarak toplumda, doğal bitkilerden elde edilen ürünlerin güvenilir olduğuna inanılmakta ve farklı sorunların tedavisi için bu ürünlerden yararlanılmaktadır. Ancak yapılan çalışmalarda, bu ürünlerin her zaman zararsız olmadığı bulunmuştur. Örneğin; bitkisel ürünlerin fazla tüketilmesi intersitisyel nefrite yol açarak, son dönem böbrek yetmezliği gelişimine neden olabilmektedir. Biz de bu olgu sunumunda halk arasında zararsız diye tabir edilen bitkisel bir ürünün sebep olduğu böbrek yetmezliği tablosundaki olguyu değerlendirdik.

ANAHTAR KELİMELER: Akut böbrek yetmezliği, Bitkisel tedavi, Erektil disfonksiyon

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ANALYSIS OF WORK ACCIDENT CASES ADMITTED TO THE EMERGENCY DEPARTMENT OF A TRAINING AND RESEARCH HOSPITAL

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INTRODUCTION: In this study, it was aimed to evaluate the social and demographic characteristics of work accident cases who applied to our emergency department within a year.

MATERIAL AND METHOD: Cases who applied to the emergency department due to work accidents between April 2021 and April 2022 were determined from the file records and evaluated retrospectively.

RESULTS: Although 33.8% of the total 2120 cases were between the ages of 20-29 and 23.6% of them were between the ages of 30-39, the number of patients between the ages of 70-79 was very low. 80.9% of the cases were male. 94.3% of the cases were treated as an outpatient, 1.9% of them were hospitalized. 3.8% of the cases left the emergency department without permission. The patients were mostly consulted to the orthopedics department (13.2%).

In the seasonal distribution of applications; It was determined that it was most common in summer (33.01%, n=700), followed by spring(25%, n=530), autumn (22.2%, n=471) and least in winter (19.7%, n=417), respectively.

When looking at the application times, it was observed that the most intense applications were made to the emergency department at 08:00-16:00 (50.7%, n=1076)

Trauma mechanism is frequently sprain (25.5%) and subsequent injury with laceration (20.3%), and the trauma area was found to be the upper extremity (41.5%) most frequently, followed by the lower extremity(28.8%). It has been determined that most of our cases come from the wood and furniture sector.

CONCLUSION: Work accident cases take a serious place in emergency applications. We think that the work accident studies in the literature and our study will contribute to the determination of the patient profile for emergency response and the prevention of work accidents.

KEYWORDS: Emergency department, demographics, work accidents. (Mesh Database)

INTRODUCTION:

Work accident is an event that occurs in the workplace or during the execution of the work, causing death or rendering bodily integrity mentally or physically disabled (1).

Today, occupational diseases and work accidents are among the most vital problems. And the first response to the casualties after a work accident is mostly done in the emergency departments. Emergency department density also constitutes an important patient group.

In Turkey, 384,262 work accidents occurred in 2020, 1231 employees lost their lives, and the total period of incapacity for work was reported as 33,492,824 days (2). The majority of the cases accessed from the records consist of patients who were brought due to injuries that were serious enough to require admission to the Emergency Department or due to legal proceedings.

In this study, we aimed to evaluate the causes of 2120 work accident cases who applied to our emergency department, the way the accident occurred, the injury sites, injury types and results, in the light of current literature.

MATERIAL-METHOD:

The study was conducted by examining the retrospective records of work accidents that applied to the emergency department between April 2021 and April 2022 in Ankara Training and Research Hospital.

2120 patients who met the inclusion criteria and whose data were fully available were included in the study.

Emergency department patient examination and follow-up files and forensic case forms were reviewed retrospectively.

Cases; in addition to demographic characteristics such as age, gender, event date and time zone (month and time), the sector where the injury occurred, the mechanism of injury (trauma, burn, electric shock, intoxication and other), trauma area (head, thorax, abdomen, extremity, spinal cord) , eye, and others) were evaluated.

Outcome status in the emergency department (discharge, hospitalization, referral, exitus) was recorded. From the data obtained, categorical measurements were summarized as numbers and percentages, and numerical measurements were summarized as mean and standard deviation (median and minimum-maximum where necessary). The data were analyzed with the SPSS16.0 package program.

RESULTS:

During the period covering the study, 2120 work accident cases who applied to the emergency department and whose records could be accessed were included in the study.

While 80.9% (n=1717) of the cases were male; 19% (n=403) were women. The ages of the cases ranged from 14 to 74 years, with a mean age of 34 ± 11.8 years. When we group the cases according to their age, as can be seen in Table 1, the highest number of cases is 33.8% (n=718) and consists of patients between the ages of 20-29. The least cases were seen between the ages of 70-79 (0.14%).

Table 1: Number of Cases by Age Groups

	Age Groups (Year)							Total
	10-19	20-29	30-39	40-49	50-59	60-69	70-79	
Male	153	564	409	342	205	42	2	1717
Female	44	154	92	78	32	2	1	403
Total	197 (%9,2)	718 (%33,8)	501 (%23,6)	420 (%19,8)	237 (%11,1)	44 (%2,07)	3 (%0,14)	2120

In our study, it was determined that patients applied mostly in the summer months (33.01%, n=700). Then, it was determined that there were work accident cases in the spring (25%, n=530), autumn (22.2%, n=471) and the least winter (19.7%, n=417) seasons, respectively. The patients most frequently applied to the emergency department between 08:00 and 16:00 (50.7%, n=1076). The distribution of patients according to the hours of admission to the emergency department is shown in Figure 1.

Figure 1. Distribution of Patients by Time of Admission to the Emergency Department

When the mechanism of the accidents was examined, it was observed that the most common (25.5%) work accident occurred with sprain, followed by work accidents with laceration (20.3%) (Table 2).

Table 2: Distribution of Work Accident Cases by Occurrence Mechanisms

Mechanism	n	%
Sprain	541	25,5
Laceration	436	20,3
Crush	315	14,6
Simple fall	276	13,2
Hit	257	12,3

Multiple Mechanism	131	6,1
Falling from high	87	4,2
Burn	26	1,4
Amputation	21	0,9
Others	30	1,4
Total	2120	100,0

When the injured body parts of a total of 2120 work accident cases are evaluated; It was observed that they most frequently presented with upper extremity (41.5%, n=877), then lower extremity (28.8%), head (9.4%), vertebra (8.5%), thorax (2.8%) and abdominal trauma (0.5%), respectively.

8.5% (n=168) of the cases presented with multiple trauma.

When we look at the sectors where patients have work accidents; it was seen that they came mostly from the wood and furniture sector (18.9%). The least frequent application was from the agriculture and livestock sector (2.8%) (Table 3).

Table 3: Distribution of Work Accidents by Sectors.

Sector	n	%
Wood And Furniture	398	18,9
Food industry	365	17,5
Machine Automotive	300	14,2
Construction Industry	239	11,3
Health sector	201	9,4
Cargo-Courier	193	9,0
Electricity Sector	75	3,3
Agriculture and Livestock	62	2,8
Others	287	13,7
Total	2120	100,0

Follow-up and treatment were completed in 74.5% (n=1571) of the patients without consultation. Among all patients, orthopedics department consultation was the highest (13.2%, n =281). The department where consultation was requested the least was general surgery (0,5%, n=7) (Figure 2).

Figure 2. Clinic Consultation Request Graph

Considering the outcomes of 2120 work accidents in the emergency department; 94.3% (n=1993) were treated as outpatients, 1.9% (n=45) were admitted to the ward, 3.8% (n=82) left the hospital without permission, none of the patients had exitus.

DISCUSSION:

Work injuries are one of the public health problems that are difficult to cope with in all developed and developing countries (3). Work accident affect individuals and families socially, medically, psychologically, and economically, as a result of which large numbers of people, especially young workers of productive age, are affected, and have serious consequences for individuals and societies (4).

When the demographic characteristics of the cases included in our study were examined, it was seen that the majority of the cases (n=1717, 80.9%) were male. In Turkey, the rate of male patients in work accidents is 87.5% in 2019 and 84.3% in 2020 (2). In our study, it is seen that the rate of male patients is similar to the rates in Turkey in 2020.

We can show that men are more involved in the working population and that they work in more dangerous and heavy jobs as the reason why male employees experience more work accidents than women.

In our study, the average age was 34 years, in accordance with the literature, and the highest number of work accidents was observed in the age range of 20-29 (33.8%). The study of Kadıoğlu et al., who reported that they were among individuals, was similar to our study in terms of age range and frequency (5). This ratio can be explained both by the fact that this age group is in the working and productive population segment, as well as the fact that people in this age group are employed in more risky and more difficult jobs due to their age.

In our study, we determined that work accidents occur most frequently in the summer months (33.01%, n=700) and between 08:00-16:00 (50.7%, n=1076). Similar to our study, Sunay et al. (6) and Satar et al. (7) also found that the frequency of work accidents increased in June, July and August. In many studies in the literature, it is seen that work accidents occur mostly between 08:00-16:00 (7-9).

We think that work accidents increase due to the increase in temperature in the summer season and the fact that the construction sector and increasing industrial production are more active, however, the fact that working hours are mainly arranged during the daytime in our country, as in the whole world, explains the reason for the occurrence of accidents during daylight hours.

Kadıoğlu et al. in their study; among the injury areas, the most common injury was the upper extremity with 46%, followed by the lower extremity with 24.5% and head trauma with 7.8%(5).

Similarly, in another domestic study, it was reported that upper extremity injuries constitute the largest group with 43.0% (10).

Our study also shows parallelism with these studies, our patients, who came with trauma to the upper extremity most frequently and then to the lower extremity, were consulted to the orthopedics clinic most frequently in correlation with these injury areas.

Due to the close location of our hospital to the furniture industry (Siteler-Ankara), we observed that the patient population from the wood and furniture industry constitutes the most frequent application. In various studies, the sectoral distribution of work accidents changes due to the location of hospitals and the industrialization orientation of cities.

According to the results of our study, when the outcomes of the Emergency Department were evaluated, it was seen that 94.3% of the patients (n=1993) were discharged. Erdemli et al. In the study (9), a discharge rate of 92.1% was observed and it is similar to our study.

In our study, we are of the opinion that the work accident patients who apply most frequently from the furniture and food sector are exposed to minor traumas that require less intervention, therefore there is less indication for hospitalization and there is no mortality.

In our study, it was observed that 3.8% of the cases (n=82) left the hospital without completing the follow-up and treatment process. We are of the opinion that concerns such as the accident investigation, the wages of the personnel in charge, court costs and job loss in the event of the case going to court have an impact on this process.

CONCLUSION:

It is seen that the number of emergency department applications after a work accident is not to be underestimated. In our study and similar studies, it was observed that work accidents in our country were mostly in the day shift, most frequently in the 20-30 age group, and mostly in the form of upper extremity injuries.

Emergency departments are clinics where the majority of patients who have had a work accident are discharged after simple medical intervention. For this reason, knowing the injury chara-

cteristics of this patient group, the hours of admission, and the sectoral field they come from will shed light on the management of the follow-up and treatment process. The data obtained in the studies will also guide occupational safety specialists and occupational physicians in their studies.

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EFFECTIVENESS OF OXYMASK® VS SIMPLE OXYGEN MASK AGAINST COPD EXACERBATION

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ABSTRACT

AIMS: In our study, it was aimed to compare the effectiveness of a diffuser mask (Oxymask®) and a simple nebulizer set oxygen mask on the blood gas values of patients with the diagnosis of chronic obstructive pulmonary disease (COPD) exacerbation who presented to the emergency department.

MATERIALS AND METHODS: Our research is a prospective, single-blind, randomized controlled study conducted in the Emergency Department of Atatürk University Medical Faculty Hospital. Our study was completed with 213 patients after the exclusion criteria were applied. Of these patients, 93 were administered breathing treatment with a diffuser mask, and 120 were given treatment with a simple nebulizer set oxygen mask.

RESULTS: After the treatment of COPD exacerbation the SO_2 and PO_2 values of the diffuser mask group were found to be significantly higher than those in the simple oxygen mask group ($p<0.05$). After the treatment, the PCO_2 values of the diffuser mask group were significantly lower than those in the simple oxygen mask group ($p<0.05$). The diffuser mask also reduced the hospitalization rate of the patients.

CONCLUSION: We suggest that a diffuser mask, which provides better oxygenation in the blood and lowers the carbon dioxide concentration in the blood to a higher extent, can be used in administering breathing treatment to COPD patients with exacerbation who present to the emergency department with dyspnea.

KEYWORDS: Chronic Obstructive Pulmonary Disease, Diffuser, Breathing Treatment, Oxymask®, Simple Oxygen Mask

EFFECTİVENESS OF OXYMASK® VS SİMPLE OXYGEN MASK AGAİNST COPD EXACERBATİON

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INTRODUCTION

Chronic Obstructive Pulmonary Disease (COPD) is a common, preventable, and treatable disease characterized by chronic respiratory symptoms and airflow restrictions in the airways and lung parenchyma, mostly caused by the significant exposure of the airways to hazardous particles and gasses and/or alveolar abnormalities (1).

There are 2 groups of risk factors for COPD, genetic risk factors (alpha-1 antitrypsin deficiency) and environmental risk factors (smoking, occupational exposure, air pollution, and infections). The most significant risk factor is active smoking (2).

COPD should be considered as a diagnosis in individuals with chronic cough, sputum production, dyspnea complaints, and/or a history of exposure to risk factors, and spirometry is required for diagnosis in these patients. FEV_1/FVC values smaller than 0.70 after bronchodilator therapy in patients with clinically relevant symptoms and exposure to harmful excitants indicated permanent airflow restriction, and therefore, the presence of COPD (1,3).

COPD exacerbation is defined as an acute increase and worsening in the symptoms of COPD that may require additional treatment (4). COPD exacerbations are usually associated with increased airway inflammation and increased mucus production (5). Exacerbations are mainly triggered by viral respiratory infections, but factors such as bacterial infections, environmental pollution and ambient temperature can also trigger or worsen this condition (6).

MATERIAL AND METHODS

Our study was approved by the Atatürk University Faculty of Medicine Clinical Research Ethics Committee (ethics committee decision number: 26.12.2019/08-11). The patients participating in this study signed an informed consent form.

This is a single-blind, randomized-controlled study conducted in the Emergency Department of Atatürk University Faculty of Medicine Hospital between 01.01.2020 and 31.05.2020. Patients with a diagnosis of COPD who presented to the Emergency Department of Atatürk University Faculty of Medicine Hospital with complaints of dyspnea and displayed signs of COPD exacerbation according to the 2020 GOLD COPD guidelines were included in this study. The study was conducted to compare the effectiveness of a diffuser mask and a simple nebulizer set oxygen mask on blood gas values in patients (7).

Patients who were older than 18 years of age, diagnosed with COPD, had an exacerbation of COPD (according to the GOLD 2020 COPD guidelines), and volunteered to participate in the study were included in the study. Patients who did not volunteer to participate in the study, patients younger than 18 years of age, pregnant patients, patients with mental deficiencies, uncooperative patients, patients with anatomical barriers to wearing masks, patients with shortness of breath after trauma, and patients with unexpected comorbidities or exitus during the study were excluded.

Two hundred and thirteen patients were divided into two groups, 93 patients treated with a diffuser mask (Oxymask®, Southmedic Inc, Canada) (Image 1, 2, 3) and 120 patients treated with a simple nebulizer set oxygen mask (nebulizer set mask®, CGR Medical) with the same pharmacological agents. Beta agonist and anticholinergic treatment as inhaler treatment (Iprasal® 0.5+2.5 mg/2.5 ml) was administered. During the treatment of COPD exacerbation, a diffuser mask was used in one group, and a simple nebulizer set oxygen mask was used in the other group. Arterial blood samples taken from the patients before and after their COPD exacerbation treatments were compared in terms of their blood gas values. Among the blood gas parameters, the values of pH, SO_2, COHb, MetHb, lactate, HCO_3, SBE, PCO_2, and PO_2 were evaluated. Additionally, the demographic characteristics of the patients and their values including vital signs, chronic diseases, hospitalization status (determined according to the GOLD 2020 COPD guidelines), type of mask used during COPD exacerbation treatment, symptom onset time, history of smoking, biomass exposure history, and whether they used an oxygen concentrator at home were recorded (Table 1).

The IBM SPSS (Statistical Package for the Social Sciences) 20.0 statistical analysis program was used to analyze the data. The data are presented with mean, standard deviation, median, minimum, maximum, percentage, and frequency values. According to the Kolmogorov-Smirnov test results, the data were found to be normally distributed. Then, the numeric variables were analyzed by paired-samples t-test, and the categorical variables were analyzed with Pearson's chi-squared test. A p-value of <0.05 was considered significant for all statistical analysis results.

RESULTS

Two hundred and sixty COPD patients who presented to the Emergency Department of Atatürk University Faculty of Medicine Hospital with complaints of dyspnea and were diagnosed with COPD exacerbation were screened as potential participants. They were divided into two groups, 130 patients treated with a simple nebulizer set oxygen mask (group 1) and 130 patients treated with a diffuser mask (group 2). For various reasons, 10 patients in group 1 and 37 patients in group 2 could not complete the study. The study was completed with 120 patients in group 1 and 93 patients in group 2, constituting a total of 213 patients.

After COPD exacerbation treatment, 22.5% of the patients in group 2 were admitted to the clinic, while 40.8% of the patients in group 1 were admitted to the clinic. The frequency of hospitalization in group 2 was significantly lower than that in group 1 (p: .005).

Having compared the parameters in the arterial blood gas analyses of the patients in groups 1 and 2, after the COPD exacerbation treatments, the SO_2 values in group 2 were found significantly higher compared to those in group 1 (p: .01), the PO_2 values in group 2 were significantly higher than those in group 1 (p: .02), and the PCO_2 values in group 2 were significantly lower compared to those in group 1 (p: .024) (Table 2).

DISCUSSION

The diffuser mask is an open oxygen mask developed in 2005 which can provide a wide range of oxygen concentrations from 24% to 90% between the flowrate values of 1 and 15+ liters per minute. It provides a very high FiO_2, especially in COPD patients with chronic hypoxemia, and it can be used safely without causing carbon dioxide retention thanks to its diffuser feature. The diffuser mask features innovative technology designed to concentrate and direct the flow of oxygen. The mushroom-shaped pin creates an organized pattern of vortices and a cloud of concentrated oxygen molecules. The triangular diffuser corrects the shape of the oxygen vortices and directs the flow to the patient's nose and mouth (8,9).

The diffuser mask is a new type of facemasks that uses a small diffuser to deliver oxygen, which condenses, and directs the oxygen towards the mouth and nose of the patient. By altering the flowrate from the oxygen device connected to the diffuser mask, the desired FiO_2 value can be adjusted. This mask provides a high oxygen concentration at a low flowrate. Additionally, the pores on the mask reduce carbon dioxide retention (10).

In a study by J. E. Paul et al. conducted with a diffuser mask on 10 healthy volunteers, FiO_2 values were measured at gradually increasing flowrates from 1.5 l/min to 30 l/min (for 90 seconds at each level) by delivering oxygen. FiO_2 increased gradually with every increase in the flowrate, but at flowrates above 15 l/min, no significant degree of FiO_2 increase was achieved. As a result, a wide range of FiO_2 values between 25% and 90% was demonstrably maintained, while preserving the open design of the diffuser mask (8).

In the literature, there are few studies on diffuser masks. In a study by K. Lamb et al. in which a non-rebreather mask and a diffuser mask were compared in a laboratory environment, a low flowrate (2 l/min) was provided to one group, and a high flowrate (15 l/min) was provided to the other group. At respiratory rates of 15/min, 20/min, and 24/min in each flow group, the percentages of decrease in the values of $etCO_2$, FIO_2, inspired CO_2 fraction, and CO_2 were compared. As a result, the diffuser mask performed significantly better in each category than the non-rebreather mask. Especially at very low flowrates with the diffuser mask, higher inspiratory oxygen levels, lower inspiratory CO_2 levels, and more efficient CO_2 clearance were achieved (11).

In a single-blind, randomized, crossover study conducted by J. M. Beecroft et al., 13 of 26 chronic oxygen-dependent patients were treated with oxygen with a venturi mask, and the remaining 13 were treated with a diffuser mask for 60 minutes. Oxygen flowrates were lower when the diffuser mask was being used, whereas inspired PO_2 values were higher, and expired PO_2 values were lower. Thus, it was demonstrated that the diffuser mask provided a higher PO_2 concentration compared to the venturi mask at a lower flowrate without causing carbon dioxide retention (9).

In a study by J. S. Philips et al., capnography masks, the Cap-ONE and diffuser mask, and the CapnoLine, which has a standard nasal cannula, were compared based on whether they differed in terms of $etCO_2$ values at various oxygen flowrates. Between the initial measurement and an oxygen flow rate of 5 l/min during hypoventilation, the diffuser mask provided a much higher $etCO_2$ reduction compared to the Cap-ONE and CapnoLine. In their study, it was demonstrated that the diffuser mask was at least as effective as the other masks in reducing $etCO_2$ values (12).

A. C. Hocagil et al. investigated the carboxyhemoglobin (COHb) lowering capabilities of a diffuser mask and a simple mask used to deliver oxygen therapy in a patient group without an indication for hyperbaric oxygen therapy in carbon monoxide poisoning cases. After their treatments, patients who received oxygen therapy with the diffuser mask had significantly lower COHb (mg/dL) levels (9.6 (5.0) vs 12.8 (6.2), p: .0203) and higher $Pa0_2$ (mmHg) levels (224.4 (56.5) vs. 183.4 (63.7)) (p: .0046) compared to those in the simple mask group (13).

M. D. İşcanlı et al. compared the effectiveness of diffuser masks and simple oxygen masks in reducing carbon dioxide levels and increasing PEF (peak expiratory flow) values in patients who presented to the emergency department with asthma and COPD attacks. It was shown to provide a good PEF value for COPD and asthma attacks (14).

In our study, after the COPD exacerbation treatments of the patients with used diffuser masks and simple nebulizer set oxygen masks, the blood gas analyses results of the patients revealed that the SO_2 values in the diffuser mask group were significantly higher than those in the simple oxygen mask group (p: .01), the PCO_2 values in the diffuser mask group were significantly lower than those in the simple oxygen mask group (p: .024), and the pO_2 values in the diffuser mask group were significantly higher than those in the simple oxygen mask group (p: .02).

In the literature review conducted for this study, it was seen that the number of studies on the use of diffuser masks in COPD patients was limited, and the patient populations of the available studies were also small. Likewise, most studies conducted with diffuser masks were those performed under simulation in a laboratory environment. Our study, on the other hand, is one of the first studies with a large population and real patients.

There may be some possible limitations in this study. The main limitation of our study is that it is single-centered. In addition, our study does not show a homogeneous distribution in terms of gender, socioeconomic level and education levels.

CONCLUSION

In our study, it was demonstrated that the diffuser mask significantly increased SO_2 and PO_2 values and significantly reduced PCO_2 values compared to the simple nebulizer set oxygen mask. It was determined that the patients who received COPD exacerbation treatment with a diffuser mask were discharged more frequently and hospitalized less frequently. Consequently, we suggest that the diffuser mask can be used as a successful adjunctive therapy method in the treatment of patients with acute exacerbation of COPD who present to the emergency department with dyspnea, considering its advantages such as high patient compliance.

Conflict of Interest: The authors declare no conflict of interest.

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COVİD-19 AŞILAMA SONRASI ACİLE SERVİSE BAŞVURAN HASTALARIN ARAŞTIRILMASI

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ÖZET

AMAÇ: COVİD-19'u kontrol altına almak adına benimsenen ''toplumsal bağışıklık'' hedefine ulaşabilmek için nüfusun büyük bölümünün aşılanması gerekir. Dolayısıyla aşılama sonrası meydana gelen yan etkilerle ilgili yapılan çalışmalar çok önemlidir. Geniş kitlelere aşılama başladığında ne tip sorunlarla karşılaşılacağı konusunda bilgi edinmek gereklidir. Ayrıca bu çalışmalar aşı karşıtlarını ikna edebilmek bilimsel veri olarak kullanılabilir (1).

YÖNTEM: COVİD-19 aşı uygulanması sonrasında acil servise 7 gün içinde başvuran hastaların şikayetleri, demografik özellikleri, laboratuvar tetkikleri, yapılan müdahale ve hastanın nasıl sonuçlandığı değerlendirildi.

BULGULAR: Aşı yerinde ağrı, şişlik, kızarıklılık ve kolda ağrı normalde beklenen etkilerdi. Çalışmamızda aşı sonrası senkop olan toplam 6 kişi vardı ve bir kişide alerjik reaksiyon gelişti. En sık görülen yan etki geriatrik olmayanlarda halsizlik, baş ağrısı, ateş ve karın ağrısı iken geriatriklerde halsizlik, başağrısı, göğüs ağrısı ve dispne idi. Ateş şikayeti geriatrik olan grupta son sırada yer alıyordu. Aşı sonrası nadir görülen semptomlar; senkop, ürtiker ve isaldi. Aşı sonrasında platelet ve CRP değerleri geriatrik olmayan grupta daha yüksek bulundu (Tablo).

SONUÇ: COVİD-19'a karşı toplumda geniş kitleler aşılanırken ortaya çıkabilecek yan etkiler konusunda hazırlıklı olmak gerekir. Çalışmamızda geriatrik kişilerde aşıya karşı vücudun verdiği yanıtın vital bulgular ve laboratuvar değerlerinde atipik karşılık bulduğunu gösterdik. Çalışmamızın sonuçları COVID-19 aşısının yan etkileri ile alakalı olarak kanıta dayalı bilimsel veri olarak kullanılabilir (2). Böylece COVID-19 aşısı hakkındaki farkındalığı artırarak halkın aşılanmaya ilgisini arttırabilir.

Tablo 1. Sonuçlar

		n (%)
Cinsiyet	Kadın	28 (42.4)
	Erkek	38 (57.6)
Yas	Ortalama	51.2 ±23.4
Geriatrik	<65	43 (65.2)
	>65	23 (34.8)
Kronik Hastalık	Hipertansiyon	20 (30.3)
	Kronik akciğer hastalığı	12 (18.2)
	Kalp Hastalığı	9 (13.6)
	Koroner arter hastalığı	14 (21.2)
	Diabetes mellitus	12 (18.2)
Sonuçlar	Taburcu	51 (77.3)
	Servis	12 (18.2)
	Yoğun bakım	2 (3)
	Death	1 (1.5)

EPİLEPTİK NÖBET SIRASINDA ÖLÇÜLEN ÇİNKO VE BAKIR DÜZEYLERİNİN DEĞERLENDİRİLMESİ

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GİRİŞ VE AMAÇ: Epileptik nöbet ile acile başvuru yapan hastalarında bulunabilecek bir çinko eksikliği, kişinin kullanmış olduğu antiepileptik ilaçların yan etkisi, düzensiz ilaç kullanımı, polifarmasi, gastrointestinal emilim bozukluğu ya da sosyoekonomik durumlardan kaynaklanan bir durum olabilir. Bu çalışmada hedefimiz eser element eksikliğinin epileptogenez ile ilişkisini saptamak, bu alanda araştırmaların geliştirilmesine katkıda bulunmaktır. Böylelikle epilepsi hastalarında meydana gelebilecek atak nöbetleri engelleme stratejileri oluşturup, epilepsi hastaların yaşam kalitesini iyileştirmektir.

GEREÇ VE YÖNTEM: Araştırmamız Bezmialem Vakıf Üniversitesi Tıp Fakültesi Hastanesi Acil servis Anabilim Dalı 02.10.2019- 01.10.2020 tarihler arası prospektif olarak yapıldı. Epileptil nöbet ile acil servise gelen 65 hasta ve aile hekimliği polikliniğine sağlık kontrolü amacı ile gelmiş, tamamen sağlıklı olup ek hastalık ve ilaç kullanım öyküsü olmayan 65 gönüllü bireyin katılımı olmak üzere toplam 130 kişinin verileri incelendi. Çalışma için iki grup oluşturuldu; Hasta gurubu: Epileptik nöbet ile gelen, Sağlıklı kontrol gurubu: Herhangi bir hastalığa sahip olmayan, ilaç kullanmayan, hastalarla aynı yaş /cinsiyette ve çalışmaya gönüllü katılan bireyler oluşturdu. Epileptik nöbet ile gelen hastalarda, epileptik nöbet esnasında veya postiktal dönem ilk 5-10 dakikada, herhangi bir antiepileptik uygulanmadan hastadan rutin kan tahlilleri alındı. Daha sonra bu kan tetkiklerinden eser elementler (Zn, Cu) analiz edildi. Diğer yandan hastaların bulguları hazırladığımız formlara kaydedildi.

BULGULAR: Çalışma Bezmialem Vakıf Üniversitesi Tıp Fakültesi Hastanesi Acil Serviste 65 epileptik nöbet geçiren hasta ve 65 sağlıklı gönüllü (SG) ile çalışma tamamlandı. Demografik özellikleri incelendiğinde nöbet gurubundaki (NG) 65 hastanın 29'u (44.61%) kadın, 36'sı (55.38%) erkektir. NG ortalama yaş 43.75±19.49 yıldı. NG serum Cu düzeyi 98.41±31.5 µg/dL iken, SG serum Cu düzeyi 108.11±19.09 µg/dL idi (p=0.02). Fokal nöbet gurubunda (FNG) (105.17±32.75 µg/dL) ve SG (108.11±19.09 µg/dL) serum Cu düzeyi, jeneralize nöbet gurubuna (JNG) (86.88±26.0 µg/dL) oranla daha yüksekti (p=0.003). NG serum Zn düzeyi 72.59±20.87 ug/dl, SG serum Zn düzeyi 96.69±10.21 ug/dl olarak saptandı (p<0.001). FNG serum Zn düzeyi (76.5±19.37 ug/dl) ve JNG serum Zn düzeyinin (65.92±22.02 ug/dl) her ikiside SG serum Zn düzeyine (96.69±10.21 ug/dl) göre istatiksel olarak anlamlı düşük gözlendi (p<0.001).

SONUÇ: Sonuç olarak Cu ve Zn elementlerinin nöbet geçirme esnasındaki seviyeleri sağlıklı guruba göre anlamlı düzeyde düşük bulundu (p=0.02, <0.001). Zn düzeyi hem FNG, hem de JNG'de SG'ye göre anlamlı seviyede düşük gözlenirken (p<0.001), Cu düzeyi sadece JNG gurubunda SG'ye göre anlamlı seviyede düşük saptandı (p=0.003). Nöbet esnasındaki bu eser element seviyeleri nöbetsiz tanılı hastalardaki seviyeler ile genel olarak benzer şekilde bulundu.

ANAHTAR KELİMELER: Epilepsi, Çinko düzeyi, Bakır düzeyi

Grup	Epilepsi (65)	Sağlıklı (65)	p-değeri
Cu	98.42±31.5	108.11±19.09	0.02 (m)
	95 (32-171)	107 (66-153)	
Zn	72.59±20.87	96.69±10.21	<0.001 (m)
	76.31 (20.04-110.9)	96.1 (73.54-128.24)	

Nöbet Tipi	Fokal (41)	Jeneralize (24)	Sağlıklı (65)	p-değeri
Cu	105.17±32.75	86.88±26.0	108.11±19.09	0.003 (k)
	97 (41-171)	87 (32-135)	107 (66-153)	
Zn	76.5±19.37	65.92±22.02	96.69±10.21	<0.001 (k)
	77.99 (34.44-110.9)	67.05 (20.04-101.49)	96.1 (73.54-128.24)	

EFFECT OF RENAL DAMAGE ON PROGNOSIS IN PATIENTS WITH ACUTE PANCREATITIS

Çiğdem HARMAN

INTRODUCTION: Acute pancreatitis (AP) is an inflammatory process associated with a high complication rate and increased risk of death. The worldwide incidence of acute pancreatitis is 100,000/34 and this rate is increasing. Acute pancreatitis is one of the most common gastrointestinal disorders leading to hospitalization in the US, costing the healthcare system $9.3 billion annually. In this study, we aim to compare the relationship between the severity of the disease and kidney damage to predict the prognosis in patients with AP.

METHOD: Patients over the age of 18 who applied to the emergency department of Bezmialem Vakif University Medical Faculty Hospital between 01.01.2019 and 31.12 2019 and were diagnosed with AP were included in the study. In our retrospective study, patients with chronic renal failure, pregnant women, those with missing data, and cancer patients were excluded. Only the first applications of recurrent applicants were accepted. The age, gender, complaint, comorbidity, etiology, complication, outcome, hemodialysis, and mortality information of the patients were recorded in the prepared forms. At the first admission to the emergency department, anamnesis, vital signs, physical examination findings, laboratory results (hemogram, urea, creatinine, albumin, calcium, aspartate aminotransferase, alanine aminotransferase, lactate dehydrogenase, amylase, lipase) and radiological imaging findings were recorded. The patients were evaluated for the diagnosis of GCS and Systemic Inflammatory Response Syndrome (SIRS). The diagnosis of AP was made by the presence of at least two of the three diagnostic criteria (abdominal pain, elevated serum lipase or amylase levels three times or more, and characteristic radiological findings). Disease severity was classified according to clinical assessment. BİSAP (Bedside Index of Severity In AP) score was used for this. Severe acute pancreatitis was defined as permanent organ failure involving one or more organs. Acute peripancreatic fluid collections, pancreatic pseudocyst, acute necrotic collection, and organized necrosis were considered as complications.

Acute kidney injury was defined according to the Acute Kidney Injury Network (AKIN) criteria. within 48 hours; 1.5-2 fold increase in serum creatinine stage 1; 2-3 fold rise stage 2; An increase of more than 3 times was classified as stage 3. In the AKIN criteria, the baseline serum creatinine value was accepted as the creatinine value just before the patient entered renal failure and was staged according to a second serum creatinine measurement within 48 hours. Acute kidney injury levels in patients with AP were compared with the data obtained. The relationship between AP and kidney failure was investigated by comparing the BİSAP score and AKIN score with the data we obtained.

Statistical analysis was performed using SPSS version 22.0 (Chicago, USA). Continuous variables were tested for normal distribution with the Kolmogorov-Smirnov test. Since the data were not normally distributed, the Mann-Whitney U test, one of the non-parametric tests, was used. Median (Q1-Q3), mean ± standard deviation, frequency, and percentage values were given as descriptive statistics. $P<0.05$ was considered statistically significant.

RESULTS: In our study, 127 patients were used, and the mean age was 51.28±14.84 years. 45.7% of the patients were male and 54.3% were female.

When the AKIN score was compared according to the hospitalization status in the Intensive Care Unit (ICU), there was no statistical difference between the two groups, $p=0.138$. When the BISAP scoring was compared according to the ICU hospitalization status, a statistical difference was found between the two groups, $p<0.001$. The BISAP score of 3 (3-4) patients who were hospitalized in the ICU was significantly higher than the median BISAP score of 2 (1-2) patients who were not hospitalized in the ICU. When the AKIN score was compared according to the development of complications, no statistical difference was observed $p=0.648$. When the BISAP score was compared according to the complication development status, a statistical difference was found, $p<0.001$. BISAP score of 2 (1-3) was found to be significantly higher in patients with complications and 1 (1-2) higher than the median BISAP score of patients without complications.

ACİLDEN İSTENİLEN DERMATOLOJİK LEZYONLARIN TELEDERMATOLOJİK YÖNTEMLE DOĞRULANMASI

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ABSTRACT

GİRİŞ

Teledermatoloji hastanın tanı, tedavi ve takibinin görsel iletişim teknolojileri kullanılarak uzaktan yöntemidir. Teledermatoloji uzun yıllardır araştırma konusu olmuş ancak güvenilirliği tam olarak açıklanamamıştır. Yapılan bazı çalışmalar acil serviste çalışan doktorların sıklıkla ürtiker, ilaç erüpsiyonu ve böcek sokmasına bağlı lezyonların ayırıcı tanısında zorlandıklarını göstermektedir. Bu çalışmada teledermatolojinin güvenirliğinin değerlendirilmesi amaçlandı.

MATERYAL VE METOD

Acilden Dermatoloji konsültasyonu istenen 28 hasta dahil edildi. Hastalar birbirini göremeyen iki doktor tarafından biri yüz yüze diğeri multimedya mesaj yoluyla değerlendirildi. Doktor 1 tarafından muayene edilen hastaya ait lezyonların fotoğraf çekimini yapılıp, hasta görselleri ve anamneziyle birlikte multimedya mesaj servisi yoluyla doktor 2'ye gönderdi ve sonrasında konulan tanılar karşılaştırıldı.

BULGULAR

Doktor 1 ve doktor 2'nin tanıları kıyaslandığında; 10 hasta ürtiker, 15 hasta böcek sokması ve 3 hasta makülopapüler ilaç reaksiyonu idi. Hastayı muayene eden ve tanı koyan doktor ile lezyonları telefondan değerlendiren doktor tanılar üzerinde toplamda %75 anlaştıkları görüldü. Ürtikerde %100 hastada anlaştılar, böcek sokmasına bağlı lezyonda % 66.6 ve ilaç erüpsiyonunda %33.3 oranında anlaşma sağlandı.

SONUÇ

Son bir yılda tüm dünyada teledermatoloji çok daha fazla önem kazanmıştır. Yaptığımız çalışma, acil servislerden sıklıkla konsültasyon istenilen ürtiker, ilaç erüpsiyonları ve böcek sokması sonrası oluşan lezyonlar ile ilgili olarak teledermatoloji yönteminin güvenle kullanabileceğini göstermiştir. Daha geniş çalışmalara ihtiyaç vardır.

OLGU SUNUMU: ACİL SERVİSTE YATAK BAŞI USG-İNFEKTİF ENDOKARDİT

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ANAHTAR KELİMELER:ateş, İnfektif endokardit,yatakbaşı usg,

ÖZET:

İnfektif endokardit, yüksek morbidite ve mortalite riski taşıyan ciddi bir enfeksiyon tablosu olmak ile beraber acil serviste tanısı nadiren konan bir hastalıktır. Klinik ve laboratuvar verilerle birlikte vejetasyonun ekokardiyografik bulgu olarak tespit edilmesi infektif endokardit tanısının doğru şekilde konmasını sağlar. Acil servislerde yatak başı ultrason kullanımın, ileri ekokardiyografi dahil olmak üzere daha fazla uygulamaya yayıldıkça, enfektif endokardit tanısı daha erken konulabilir ve erken tedavi sağlar.

Acil servise 10 gündür bacaklarda mevcut olan şişlik ve yorgunluk şikayeti ile başvuran, acil serviste yapılan yatak başı USG sinde aort üzerinde vejetasyon saptanan hastayı sunmayı amaçladık.

GİRİŞ:

İnfektif endokardit (İE), kalp ve kalp kapakçıklarının iç yüzeyini döşeyen endokardiyumun inflamasyonudur (1).Tanı ve tedavi alanında yaşanan önemli gelişmelere rağmen prognozunun kötü ve mortalitesinin yüksek olması nedeniyle ciddiyetini hâlâ korumaktadır.

Ateş, üfürüm ve periferik emboli karakteristik klinik bulgulardır, ancak bu ipuçları bazı hastalarda veya hastalığın erken döneminde mevcut olmayabilir. Duke kriterleri, ekokardiyografi ve kan kültürleri infektif endokardit tanısında ana kriterler olarak yaygın olarak kullanılmaktadır(2). Transtorasik ekokardiyografi (TTE) genellikle infektif endokarditi değerlendirmek için yapılan ilk görüntüleme çalışmasıdır. Ekokardiyografi geleneksel olarak yatan hasta değerlendirmesinin bir parçası olarak kardiyoloji tarafından yapılırken, yatak başı acil ultrason (EUS) kalp kapak vejetasyonunu göstererek acil serviste daha erken tanıya izin verebilir.

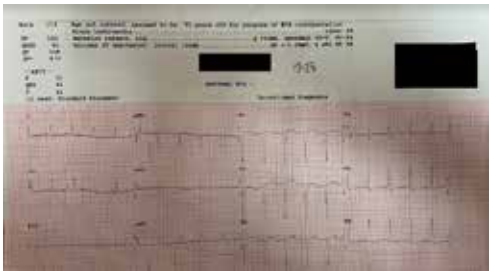
Hasta başı ultrasonda infektif endokarditi düşündüren pozitif bulgular, acil servis hekiminin acil serviste sıklıkla yapılmayan bir tanı için yön bulmasını sağlayabilir. Bu vaka raporunda, yatak başı EUS'nin doğrulanmış infektif endokarditli bir hastanın tanı, durum ve tedavisini nasıl hızlandırdığını anlatıyoruz.

OLGU SUNUMU:

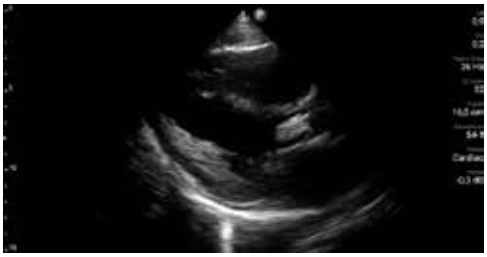
26 yaşında bilinen hastalığı olmayan erkek hasta tarafımıza 10 gündür olan ateş, bacaklarda mevcut şişlik ve yorgunluk şikayeti ile başvurmuştur. Eşlik eden ek şikayeti olmayan hastanın geliş vitallerinde ateş 36.3°C, tansiyon 119/52 mmHg, nabız 118 atım/dk ve solunum sayısı 16/dk olup yapılan fizik muayenesinde bilateral akciğer seslerinde bazallerde ral mevcuttu. Kalp sesleri doğaldı, üfürümü yoktu. Çekilen EKG'si şekil 1'de gösterilmektedir. Alınan arteriyel kan gazında pH; 7.48, pCO2; 24.3 pO2;66.9, sO2;94.9 ve HCO3; 18.2 saptandı. Laboratuvar testlerinde Hb: 9,9 g/dL, Hct 30,7% , lökosit 15,2, nötrofil 81,5%, sedimantasyon 21 mm /saat, CRP 31,90 mg/L ve troponin 208,90 ng/L idi. Bu esnada acil servisimizde yapılan yatak başı USG sinde parasternal uzun aks penceresinde aort üzerinde vejetasyon ile uyumlu görünüm saptanan hasta kardiyolojiye konsülte edilmiştir. Acil servisimizde yapılan ekokardiyografi görüntüsü şekil 2'de gösterilmektedir.Hastanın enfektif endokardit ön tanısı ile yatışı ve takibi ilgili branş tarafından düzenlenmiştir.

TARTIŞMA:

İnfektif endokarditin en önemli semptomu ateş olmak ile beraber belirti ve bulguları oldukça değişkenlik göstermektedir. Acil servislerde açıklanamayan ateşi olan her hastada İE de akla gelmelidir. Bu süreçte İE'nin doğru tanısı klinisyen görüşü, laboratuvar bulguları ve ekokardiyografiyi içeren multidisipliner bir yaklaşım gerektirir. Acil servislerde kullanım sıklığı artan yatak başı USG bu süreçte tanı konulma sürecini hızlandırdığı gibi acil servis hekimleri için yol gösterici olmaktadır.



Şekil 1



Şekil-2:Aort kapakta vejetasyon

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EŞ ZAMANLI TRAVMATİK PNÖMOPERİKARDİYUM VE PNÖMOMEDİASTİNUM

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ANAHTAR KELİMELER: pnömomediastinum,pnömoperikardiyum,travma

ÖZET

Pnömoperikardiyum, intratorasik ani gelişen basınç artışı ve alveol hasarı ile ilişkili nadir görülen bir durumdur. Genellikle kendi kendini sınırlar ancak tansiyon pnömoperikardiyum veya kardiyak tamponad gelişebileceğinden hayatı tehdit edebilmektedir. Bu olgumuzda darp sonrasında pnömoperikardiyum, subkutan amfizem ve pnömomediastinum gelişen bir hastayı sunmak istedik. Acil serviste, toraks travması olan olgularda nadir görülen bir durum olmasına rağmen unutulmamalıdır.

GİRİŞ

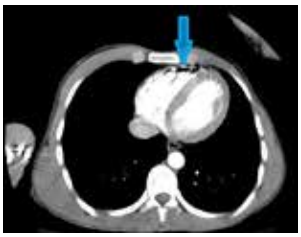
Toraks travmalarının sayısı gün geçtikçe artmaktadır ve kafa ve ekstremite travmalarından sonra üçüncü sırada gelmektedir(1). Erişkinlerde pnömoperikardiyum nadir görülen bir durum olup genellikle künt göğüs travmaları sonrası pnömotoraks veya pnömomediastinum ile birlikte görülmektedir(2).

Olguların çoğu travmatik nedenlerle olabileceği gibi, mekanik ventilasyon sırasındaki barotravma, hiperbarik tedavi, astım veya yabancı cisim gibi obstrüktif hava yolu hastalıkları yapan diğer nedenler ile de olabilmektedir. Aynı zamanda diş çekimi, tonsillektomi, trakeostomi, baş ve boyun cerrahisi sonrası ve kraniofasial travma sonrası da pnömomediastinum bildirilmiştir. Karakteristik belirti ve bulgular;göğüs ağrısı, subkutanöz amfizem, kalp seslerinin derinden gelmesi, krepitan kalp sesi, pnömotoraks, mediastinal basınç artışına ait bulgular (dispne, siyanoz, dolgun venler ve dolaşım yetmezliği) ve mediastende havanın radyolojik kanıtıdır. Potansiyel letal bir durum olması nedeni ile hızlı tanı çok önemlidir.

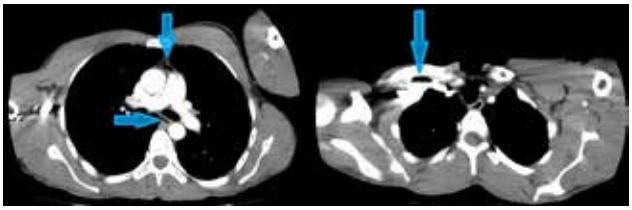
OLGU

37 yaş erkek hasta darp sonrası 112 ile acil servisimize getirildi. Hastanın vitalleri : TA:129/71 mmHg Nabız:90/dk,Ateş:36.4°C, Sao2:%99. Özgeçmişinde sigara, alkol kullanımı mevcut. Glaskov Koma Skoru:15, genel durum iyi, bilinç açık, oryante ve koopere idi. Hastanın fizik muayenesinde sağ 11.kostanın ön aksiller çizgiyle birleşim noktasında palpasyonla hassasiyet mevcuttu. Solunum sesleri olağan,ek ses duyulmadı. EKG 90/dk normal sinüs ritmiydi. Toraks BT: pnömoperikardiyum ile uyumlu perikardiyal yağ dokuda hava dansitesi izlendi (şekil-1) Mediastende pnömomediastinum ile uyumlu hava dansiteleri izlendi.(şekil-2). Ayrıca sağda boyunda klavikula posterior ve süperior komşuluğunda subkutan amfizem (şekil-3) görülmüştür. Hemotoraks ya da pnömotoraks izlenmedi. Kemik yapılarda deplase fraktür saptanmadı.

Kalp damar cerrahisi ve göğüs cerrahisine konsülte edildi.Kalp damar cerrahisi acil girişim düşünmeyip takip önerdi.Göğüs cerrahisi bölümüne takip amaçlı servis yatışı yapıldı.



şekil-1: Perikardiyal yağ dokuda hava dansitesi(mavi ok)(Pnömoperikardiyum)



Şekil-2: Mediastende hava dansiteleri **şekil-3: subkutan amfizem (mavi ok)**

(mavi ok)(Pnömomediastinum)

TARTIŞMA

Toraks travmaları, oksijenizasyonun bozulması nedeni ile diğer sistemleri de etkilemekte ve özellikle 20-40 yaş arasında travmaya bağlı ölümlerin önemli bir kısmını oluşturmaktadır (1). Pnömoperikardiyum, intratorasik basınçta ani artış ve alveol hasarı ile oluşan nadir görülen bir durumdur(2). Çoğunlukla kendini sınırlamakla birlikte nadiren tansiyon pnömoperikadiyuma ve kardiyak tamponada neden olabilir(3). Pnömoperikardiyum olgularının %37sinde tansiyon pömoperikardium geliştiği bildirilmiştir(4). Başlangıçta pnömoperikardiyum olgularında tansiyon pnömoperikardiyum oluşmasa da, maske valf ventilasyonu veya entübasyon ve mekanik ventilasyon sonucunda hava plevral boşluk veya rüptüre olmuş olan alveolden perikardiyal boşluğa geçmeye zorlanır ve bu da tansiyon pnömoperikardiyum oluşmasına neden olur [2].

Pnömoperikardiyum tanısı çok açık değildir. Pnömoperikardiyum asemptomatik olabileceği gibi göğüs ağrısı, dispne, senkop, üst kadran ağrısı gibi semptomlara da neden olabilmektedir. Fizik muayenede oskültasyonda Hamman bulgusu olarak tanımlanan her kalp atışı ile birlikte duyulan çıtırtı sesi tipiktir. Ayrıca oskültasyonda 'bruit de moulin üfürümü' (değirmen çarkı şeklinde üfürüm) ve frotman duyulabilir (7). Pnömoperikardiyum tanısı düz radyografilerde konulabilir ise de, göğüs grafilerinin perikardiyal ve kardiyak yaralanmalardaki yararlanımı sınırlıdır. Pnömotoraks, hemotoraks ve akciğer kontüzyonu gibi diğer yaralanmaları göstermede daha efektiftirler. Pnömomediastinum ve medial pnömotoraksın direkt grafilerde pnömoperikardiyumdan ayrılması güçtür(5). Bilgisayarlı Tomografi (BT), pnömoperikardiyum ve eşlik eden patolojileri değerlendirmede oldukça hassas bir görüntüleme yöntemidir(2). Bu nedenle künt göğüs travması olan her hastaya rutin toraks BT önerilmektedir(6).

Pnömoperikardiyum genellikle kendini sınırlar ve ek tedavi gerektirmez. Entübasyon ihtiyacı olan pnömoperikardiyum hastalarında profilaktik perikardiyal dekompresyon önerilse de, sadece pnömoperikardiyuma pnömotoraks eşlik ediyorsa, profilaktik dekompresyon yapılmasını, aksi halde hastaya yakın gözlemde bulunulmasını öneren çalışmalar da mevcuttur(3). Ancak paradoksal nabız, hipotansiyon, taşikardi, azalmış kalp sesleri, düşük voltaj EKG, artmış santral venöz basınç gibi bulgularda kardiyak tamponad düşünülmelidir(2). Bu durumda, hastaya acil perikardiyosentez uygulanmalı ve kesin tedavi olarak da cerrahi perikardiyal dekompresyon ve drenaj için de perikardiyal pencere girişimleri yapılmalıdır(3).

Sonuç olarak, künt göğüs travması geçiren hastalarda, acil servis doktorları, hayatı tehdit eden ve nadir görülen pnömoperikardiyum ve pnömomediastinum tanılarını akıllarında tutmalı ve tedavilerine aşina olmaları gerekir.

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In general working principles, emergency services are units that require teamwork within the scope of triage, field orientation, and examination by the relevant physician. The fact that outpatients who apply with the same complaint during the day and not giving a proper anamnesis about the patient's disease cause the patients to be directed to the wrong areas. The density of patients in green areas creates pressure on the physician, and the physician cannot spare enough time for anamnesis and examination, causing diagnostic problems. In this case, it is mentioned that the patient who applied to the emergency department with the complaint of sore throat for 2 days, was evaluated in a different area contrary to the above procedure, and after a proper anamnesis, the infarct that occurred in a vital area recovered, albeit late, without sequelae, with correct diagnosis and treatment.

KEYWORDS: Pons, Upper Respiratory Tract Complaints, Difficulty in Swallowing

A pons infarction was found in a patient who presented to the emergency department for the second time in 2 days with difficulty in swallowing.

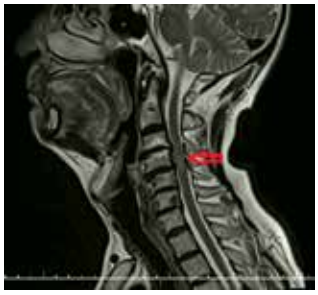
SVO ÖN TANISI İLE KARIŞAN SERVİKAL SPİNAL STENOZ OLGUSU

GİRİŞ

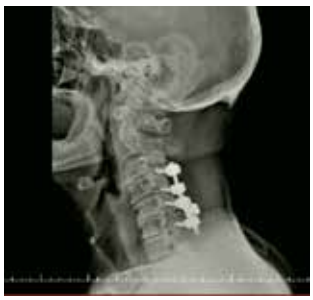
Serebrovasküler olay (SVO), iskemik ya da hemorajik nedenlere bağlı gelişen nörolojik defisit olarak tanımlanır. Tüm inmelerin %80'i iskemik, %10-20'si hemorajik tiptedir. Bu nedenle de acil servislerde görülen ileri yaştaki inmeli olgularda sıklıkla ilk olarak iskemik nedenler akla gelmektedir (1). Hastalar tamamen iyileşebileceği gibi farklı derecelerde nörolojik defisit kalabilir ve hatta ölümle bile sonuçlanabilir. Servikal spondilotik miyelopati (SSM), özellikle ileri yaşlarda görülen, servikal omurganın ilerleyici, dejeneratif bir hastalığıdır. Servikal stenoz doğumsal ya da dejeneratif değişiklikler (spondiloz, disk hernisi veya ossifiye posterior longitudinal ligaman-OPLL gibi) nedeniyle edinsel olarak gelişebilir (2). Servikal spinal stenoz genelde çoklu seviye olarak görülmekle birlikte en sık C5-6 seviyesinde stenoz görülür(3). Hafif şiddette ve defisiti olmayan hastalara medikal tedavi ve fizik tedavi uygulanabilmektedir. Fakat semptomatik olan hastaların %20-60'ı cerrahi olarak tedavi edilmedikleri durumda zamanla nörolojik kötüye gidiş göstermektedir (4).

OLGU SUNUMU

68 yaş erkek hasta acil servise sağ kol ve sağ bacakta ani gelişen kuvvet kaybı ile başvurdu. Hastanın muayenesinde bilinç açık koopere ve oryanteydi. Sağ üst ekstremite kas gücü global 2/5, sağ alt ekstremite kas gücü global 3/5 olarak tespit edildi. Hastaya beyin B.T. ve difüzyon M.R. görüntülemesi yapıldı. Hasta SVO ön tanısı ile nöroloji kliniğine yatırıldı. Medikal tedavi başlandı. Hasta beyin ve sinir cerrahi bölümüne konsülte edildi. Hastaya servikal M.R. çekildi. Hastanın C3-4 C4-5 mesafesinde ciddi spinal stenoz ve spinal kordda malazi saptandı (Resim 1). Acil olarak hastaya posterior servikal laminektomi ve stabilizasyon cerrahisi uygulandı (Resim 2). Postop 1. Gününde kas gücü üst ekstremite 3/5 ve alt ekstremite 4+/5 olarak görüldü ve hasta mobilize edildi. Postop 5. Gününde hasta fizik tedavi önerileri ile taburcu edildi.



Resim 1. Preop MR görüntüsü



Resim 2. Postop servikal grafi görüntüsü

SONUÇ

SVO oldukça sık görülen ve motor defisite yol açabilen bir hastalıktır. Acil servise unilateral veya bilateral defisit ile başvuran hastalarda en sık neden SVO olarak düşünülse de özellikle servikal spinal stenoz olabileceği akılda tutulmalıdır. Zira erken dekompresyon cerrahisi ile defisitin düzelmesi mümkündür.

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İNTRAKRANİYEL KİTLE NEDENİYLE TAKİPLİ AKUT HİDROSEFALİ OLGUSU

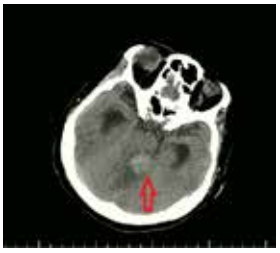
ANAHTAR KELİMELER: Hidrosefali, Ventriküloperitoneal şant, İntrakaraniyel kitle

GİRİŞ

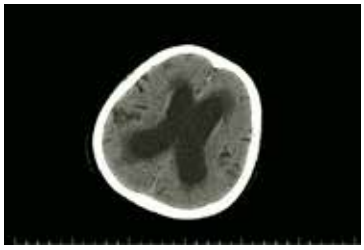
Tüm intrakraniyal tümörlerin yaklaşık % 10'u serebellopontin köşeden (SPK) köken almaktadır(1). Klinik belirtiler posteriyor fossadaki bu komşu yapıların etkilenmesine bağlı olarak genellikle otolojik ve nörolojik bulgular olarak karşımıza çıkmaktadır. Genellikle işitme kaybı, dengesizlik, tinnitus, fasiyal güçsüzlük ve baş ağrısı gibi bulgularla görülmektedir. Hidrosefali bir hastalık ya da değişik hastalık durumlarında ortaya çıkan bir bulgudur ve prevalansı %1-1,5 olarak bilinmektedir(2). Hidrosefali, beyin omurilik sıvısının (BOS) yapım, dolanım ve absorbsiyonunu bozan herhangi bir patolojide ortaya çıkar. Genellikle ventriküllerde genişleme ve BOS basıncının artması ile karakterizedir. Bazen de BOS basıncında değişiklik olmadan ventriküllerde genişleme olabilir. Ventriküloperitoneal (V/P) şant uygulaması hidrosefalinin tedavisinde halen en yaygın kullanılan tedavi şeklidir(3)

OLGU SUNUMU

75 yaş bayan hasta uyku hali ve biliç bozukluğu şikayetiyle acil servise 112 tarafından getirildi. Hastanın Glaskow koma skalasına göre puanı 8 olarak belirlendi. Hasta entübe edildi ve beyin tomografi ve beyin difüzyon mr görüntülemesi yapıldı. Hastanın 5 yıl önce serebellopontin köşe tümörü tanısı aldığı ve cerrahi tedaviyi kabul etmediği yakınından öğrenildi(Resim 1). Hastanın beyin BT de hidrosefali tespit edildi(Resim 2). Hasta GKS düşüklüğü nedeniyle acil olarak ameliyata alındı. Hastaya ventriküloperitoneal şant takıldı. Postop yoğun bakıma alınan hasta postop 4. Saatinde ekstübe edildi. Hasta postop 5. Gününde şifa ile taburcu edildi.



Resim 1. Kitle görüntüsü



Resim 2. Kitleye sekonder gelişen hidrosefali

SONUÇ

Serebellopontin köşe tümörü başta olmak üzere posterior fossa tümörleri akut hidrosefaliye neden olabilmektedir. Ani gelişen bilinç bozukluğunda akut hidrosefali akla getirilmeli ve halen ey yaygın yöntem olan ventriküloperitoneal şant cerrahisi uygulanmalıdır.

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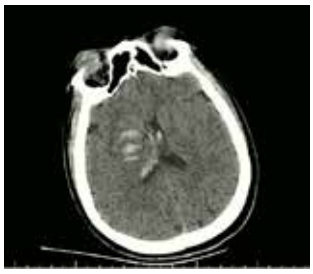
SPONTAN VENTRİKÜLER KANAMA SONRASI GELİŞEN HİDROSEFALİ: OLGU SUNUMU

GİRİŞ

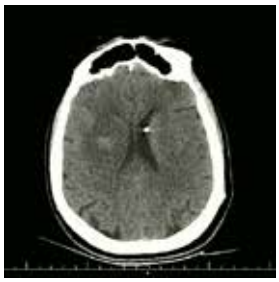
Beyin ventrikül sistemini tamamını veya bir kısmını dolduran kanamalara intra-ventriküler kanama (İVK) denir. İVK tedavisinde en yaygın uygulanan cerrahi yöntem ventriküler kateterizasyon ve drenajdır(1). Drenajla intrakraniyal basınç düşürülmektedir. İntrakraniyal basıncın düşüşü mortaliteyi azaltmaktadır. Ventrikül içerisinde biriken kan ürünleri nörolojik defisitin artmasına neden olmaktadır(2). Ventrikül içindeki kan elemanları beyin omurilik sıvısı emilimini bozarak hidrosefaliye neden olabilmektedir. Serebral hematom sonrası hidrosefali gelişimi %6-67 arasında geniş bir aralıkta olup, son yayınlarda yaklaşık %20 olarak bildirilmektedir(3). Ventrikül içi hematomlardan drenaj sonrası vetriküloperitoneal şant cerrahisi gerekebilmektedir.

OLGU SUNUMU

56 yaş kadın hasta acil servise bilinç bulanıklığı şikayeti ile başvurdu. İlk muayenesinde Glaskow koma skalası(GKS) 8 puan olarak tespit edildi. Hastaya acil beyin tomografisi ve beyin difüzyon MR çekildi (Resim 1). Hastanın parankim içi hematom ve ventrikül içi hemorajisi olduğu görüldü. Hastaya acil ekstraventriküler drenaj takıldı ve hasta postop yoğun bakımda entübe takip edildi. Takibinin 3. Gününde hasta ekstübe edildi ve GKS 15 olarak değerlendirildi. Takibinin 7. Gününde drenajda bos berraklığı sağlandığı için drenaj çekildi. Servis takibinin 12. Gününde GKS 11'e gerileyen hastaya çekilen kontrol beyin tomografisinde hidrosefali görüldü ve hastaya ventrikülöperitoneal şant takıldı (Resim 2). Hasta postop GKS 15 olarak değerlendirildi ve 3. Gün sonunda şifa ile taburcu edildi.



Resim 1. Preop beyin BT



Resim 2. Postop beyin BT

SONUÇ

Ventrikül içi hemoraji ciddi morbidite ve mortalite sebebidir. Ventrikül içi hematom olan hastalarda ilk müdahale ekstreventriküler drenaj ile yapılmaktadır. Ekstraventriküler drenaj takılması hem ventriküldeki kan ürünlerinin drene edilmesi ve hem de intrakraniyel basıncın azaltılması açısından oldukça önemlidir. Drenaj takibi sonlanan hastaların hidrosefali açısından yakın takip edilmesi gerekmektedir.

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A COMPARISON OF OPERA AND MEWS SCORES IN PATIENTS APPLYING TO THE EMERGENCY DEPARTMENT WITH DYSPNEA DURING THE COVID-19 PANDEMIC PERIOD

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SUMMARY

INTRODUCTION: During the COVID-19 pandemic, there were difficulties in diagnostic applications in patients who applied to the emergency department with dyspnea. We aimed to compare the Oxygen, Predisposing factors, Effusion, Radiology, Age (OPERA) scoring that we determined to be fast in diagnosis and treatment, with the Modified Early Warning Score (MEWS) scoring and imaging findings. We investigated the effectiveness of scoring in predicting prognosis and mortality.

METHOD: Our retrospective cross-sectional study included 271 patients who presented to a university emergency department between 07 April and 31 July 2020 with dyspnea. MEWS and OPERA scores, demographic characteristics, vital signs, serological tests and detailed findings of computed tomography (CT) of the patients included in the study were scanned. Patients were analyzed in terms of diagnosis, need for intensive care, and two-month mortality.

RESULTS: A total of 271 patients (149 (55%) women, mean age 60.6 ± 18.1 years old) who presented to the emergency department with dyspnea were included in our study. While 43 (15.9%) patients died in the last two months, 69 (25.5%) patients needed intensive care. When the value of 4 was determined as the limit for the MEWS score, 21 (14.1%) patients admitted to the intensive care unit were found to be <4, while 48 (39.3%) patients were ≥4. While 9 (6.0%) of the patients with MEWS score <4 were mortal, 34 (27.9%) patients with MEWS score ≥4 were found to be mortal. OPERA score cutoff value of 6 was calculated. While 27 patients (12.8%) were admitted to the intensive care unit with a score of <6, 52 patients (37.7%) were hospitalized with a score of ≥6. While 4 (3.0%) patients with OPERA score <6 were mortal, 39 (28.3%) patients with ≥6 scores. While the sensitivity of the MEWS score was 69.6% and specificity 63.4% in the need for intensive care, the sensitivity was 79.1% and the specificity was 61.4% in mortality. In the OPERA scoring, the sensitivity for the need for intensive care was 75.4%, the specificity was 57.4%, while the sensitivity for mortality was 90.7% and the specificity was 56.6%. All results are similar between both scores and there is no statistically significant difference (p<0.001).

CONCLUSION: While OPERA scoring is based on the patient's history and imaging, MEWS is calculated based on vital signs. However, no statistically significant difference was found in all results in terms of predicting both mortality and intensive care hospitalization in both scorings (p<0.00).

KEYWORDS; COVID-19, DYSPNEA, MORTALİTY, MEWS, OPERA

INTRODUCTION

Diagnosis and treatment of dyspnea is sometimes difficult with the presence of concurrent underlying disease, age, and morbid disease. Of the patients who applied to the emergency department with dyspnea; 16.5% had Chronic Obstructive Pulmonary Disease (COPD), 16.1% had heart failure, 8.8% had pneumonia, 5.3% had myocardial infarction, 4% had Nine of them were diagnosed with atrial fibrillation and flutter, 3.3% with malignancy, and 3.3% with pulmonary embolism (1).

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection, which is a common cause of atypical pneumonia recently, was declared a pandemic by the World Health Organization (WHO) on March 11, 2020 (2). Although the case fatality rate of Coronavirus Disease 2019 (COVID-19) was lower than that of SARS (about 10%) and MERS (about 40%), the pandemic associated with COVID-19 was much more severe worldwide. Although the disease has been defined as severe lung damage in all age groups, the virus is more likely to cause serious illness in the elderly or some high-risk people with a morbid disease. These conditions are severe pneumonia, acute respiratory distress syndrome (ARDS), and multiple organ failure. Typically, individuals affected by COVID-19 present with varying degrees of dyspnea and radiological manifestations (3,4). The time from the onset of COVID-19 to death varies between 6 and 41 days, with a median value of 14 days. The most common symptoms at the onset of COVID-19 disease are shortness of breath, malaise, fever, cough, loss of appetite, myalgia, and fatigue. Other symptoms are sputum, vomiting, headache, diarrhea, hemoptysis and lymphopenia (5,6,7). Extensive laboratory tests are helpful for patients with suspected infection. (8). The definitive diagnosis is complete genome sequencing and phylogenetic analysis on bronchoalveolar lavage fluid or combined nasal and pharyngeal swab to diagnose COVID-19 infection (9).

It is difficult to distinguish COVID-19 from other common respiratory diseases. With COVID-19, our approach to all dyspnea has changed. This study investigates OPERA, MEWS scores and imaging findings in terms of diagnosis, need for intensive care, and mortality estimation in patients admitted to the emergency department with dyspnea during the COVID-19 pandemic.

METHOD

DATA COLLECTİON AND MEASUREMENT

The study was carried out between 07.04.2020 and 31.07.2020, during the period when the COVID-19 disease was first seen in Istanbul, with the approval of the ethics committee with the decision of the Non-Interventional Clinical Research Ethics Committee of our university, dated 16.02.2021 and numbered 03/67. Patients who applied to the emergency medicine clinic of our university and complained of dyspnea R06.0 in the International Diagnostic Coding (ICD) of shortness of breath were retrospectively researched. The study was conducted with 271 patients with appropriate data from 603 patients admitted to the emergency department. The data were obtained from the hospital information management system "Nucleus" database. Included were all individuals over the age of 18. Patients under the age of 18 who did not have shortness of breath, had incomplete information in the database, did not have imaging, and were under the age of 18 were not included in the study.

Demographic characteristics of all patients such as age and gender, known chronic diseases, onset time of the complaint, vital signs (fever, respiratory rate, systolic and diastolic blood pressure, oxygen saturation), hemogram parameters, biochemical parameters, serological tests, coagulation parameters, and thorax CTs was taken were analyzed. Imaging studies were reviewed by two radiologists.

The Modified Early Warning Score (MEWS), which evaluates the systolic blood pressure, pulse, respiratory rate, fever and consciousness status of the patients, was calculated (Table 1). As a result of the Receiver Operating Characteristic (ROC) analysis applied for MEWS, the cut off value was accepted as 4. We also analyzed a separate scoring system in which the patient's oxygen saturation, predisposing factors (co-morbidities), presence of effusion, radiological findings and age were taken into account (Table 2). We named our scoring system OPERA (Oxygen, Predisposing factors, Effusion, Radiology, Age) by taking the initials of the factors in it. In this scoring, two parameters were demographic data, two parameters were radiological findings and one parameter was vital signs. Again, as a result of the ROC analysis applied for this scoring table, the cut-off value was accepted as 6.

Table 1: Modified Early Warning Score

Parameter	3	2	1	0	1	2	3
Respiratory Rate (/min)	<8		9-11	12-20		21-24	³25
Oxygen saturation (%)	£91	92-93	94-95	³96			
Body Temperature (°C)	£35.0		35.1-36.0	36.1-38.0	38.1-39	³39.1	
Systolic Blood Pressure (mmHg)	£90	91-100	101-110	111-219			³220
Pulse (/min)	£40		41-50	51-90	91-110	111-130	³131
Consciousness Level	-	-	-	Alert	-	-	VPU**

***VPU: Verbal Response (V) , Pain Response (P), Unresponsive (U)*

*(*Each parameter is evaluated over 3 points. Value range is 0-18)*

Tablo 2: Oxygen, Predisposing factors, Effusion, Radiology, Age (OPERA) score

Age		Predisposing Factors	
18-39	0	Any Predisposing Factor	0
40-64	1	Diabetes Mellitus (DM), Coronary Artery Disease (CAD), Chronic Renal Failure (1)	1
≥65	2	Concomitant Lung Disease * (2)	2
		Presence of Both Disease Groups (1 and 2)	3
Oxygen saturation (%)		Radiological Signs of Lung	
≥93	0	No Involvement	0
92-81	1	Single Lobe Involvement	1
≤80	2		
Pleural Effusion		Single Lung involvement	2
Yok	0		
Var	1	Bilateral Involvement	3

*(*Decompensated Heart Failure, COPD, Lung Malignancy, Lung Involvement of Malignancies, Pulmonary Embolism*

*** In this scoring, two parameters are demographic data, two parameters are radiological findings and one parameter is vital signs. Value range is 0-11)*

EVALUATION

We analyzed imaging findings and scoring systems in terms of their effectiveness in predicting morbidity and mortality in patients presenting to the emergency department with dyspnea. In addition, the patients' discharge status after diagnosis, service or intensive care follow-up, and mortality within two months were also evaluated. Mortality information of the patients was obtained from the Death Notification System (OBS) of the Ministry of Health of the Republic of Turkey.

STATISTICAL ANALYSIS

For the power analysis, the ministry of health is based on the number of suspected COVID-19 patients in the last 7 days. The calculated formula for the study: n= N. t^2. P. q / d^2(N-1)+ t^2. P. q P:0.50, q:0.50, t:1.96 (for alpha 0.05), d:0.05 n:761238/1982 n:383. The number of patients in our study was also determined according to this analysis.

aROC curve analysis was used to estimate the performance of the assessed scores in predicting study outcomes. Sensitivity, specificity, positive predictive value (PPV) and negative predictive value (NPV) were calculated for each score cutoff. The Youden index was used to estimate optimal thresholds for sensitivity and specificity. Comparison between areas under the ROC curve (AUROCs) was made according to the DeLong method. All statistical calculations were done using R software (version 4.0.5) (R: A language and environment for statistical computing. R Foundation for Statistical Computing, Vienna, Austria, Available online: http/www.r-project.org/). The conformity of the variables to the normal distribution was evaluated with Kolmogorov Smirnov and Shapiro Wilk tests and Q-Q plot and histogram graphs. Normally distributed continuous data were shown as mean±standard deviation, and non-normally distributed continuous data as median (interquartile range). Categorical data were presented with frequency (percentage). For categorical data, it was compared with Pearson Chi-square test when the number of observations was sufficient, and with Fisher's exact test when the number of observations was insufficient. Sensitivity, specificity, positive predictive value and negative predictive values were calculated using the 'DT ComPair' package. Sensitivity and specificity comparisons were calculated with McNemar test, while positive predictive value and negative predictive value were calculated with generalized score statistics. $p<0.05$ was considered significant.

Our study was conducted in accordance with the World Medical Association (WMA) Declaration of Helsinki 1964 (including versions 1975, 1983, 1989, 1996, 2000, 2002, 2004, 2008, 2013) and/or the World Medical Association Declaration of Hawaii.

RESULTS

603 of the patients applied to the emergency department with the complaint of shortness of breath. 332 of them were not included in the study due to lack of data. 271 patients who met the criteria were included in the study. (Figure 1). When the demographic characteristics of the 271 patients included in the study were examined, 149 (55%) were female and 122 (45%) were male. The mean age was determined as 60.6 ± 18.1 (Table 3). Chronic disease information of the patients, duration of complaints, and accompanying symptoms are given in Table 3, and laboratory findings are given in Table 4.

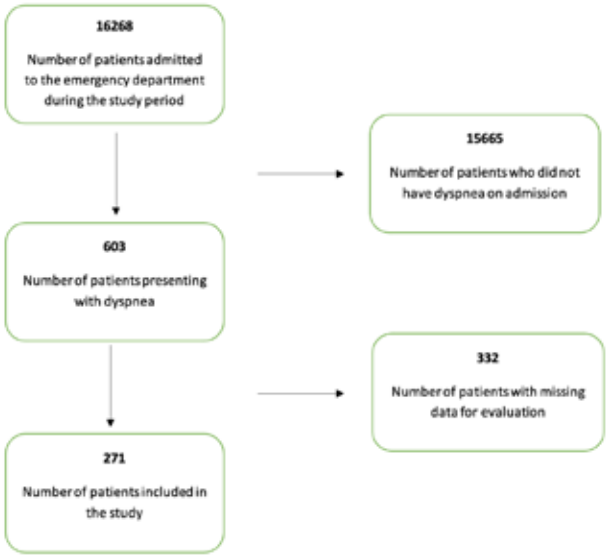

Figure 1: Patient Admission Chart

Table 3: Clinical History, Admission Symptoms, Vital Findings and Laboratory Results of the Patients of All Patients

Parameter	Total (n=271)
Age	60.6 ± 18.1
Gender	
Female	149 (55.0%)
Male	122 (45.0%)
Chronic Diseases	
Diabetes Mellitus	75 (27.7%)
Chronic Renal Failure	32 (11.8%)
Coronary Artery Disease	72 (26.6%)
Decompensated Heart Failure	44 (16.2%)
COPD	51 (18.8%)
Lung Cancer	17 (6.3%)
Metastatic Involvement in the Lung	17 (6.3%)
Other Lung Diseases	9 (3.3%)
Number of Complaint Days	
Last 2 days	188 (69.4%)
2-7 days	40 (14.8%)
>7 days	43 (15.9%)
Associated Symptoms	
Fever	21 (7.7%)
Cough	48 (17.7%)
Myalgia	26 (9.6%)
Throat Ache	7 (2.6%)
Other Symptoms	73 (26.9%)
Vital Signs	
Temperature, °C	36.3 ± 0.8
Pulse, /min	97.6 ± 21.0
Systolic Blood Pressure , mmHg	144.4 ± 31.5
Diastolic Blood Pressure, mmHg	78.5 ± 16.9
Respiratory Rate, /min	20.8 ± 4.1
Oxygen Saturation, %	93.0 ± 7.2

Table 3: Clinical History, Admission Symptoms, Vital Findings and Laboratory Results of the Patients of All Patients

Parameter	Total (n=271)
Hemoglobin, g/dL	12.3 ± 2.3
Hematocrit, %	37.4 ± 6.4
MCV, fL	86.4 ± 7.7
WBC, /µL	9.03 (7.00-11.48)
Lymphocyte, /µL	1.8 (1.1-2.5)
Platelets, /µL	259.0 (214.5-335.5)
Glucose, mg/dL	118.0 (99.0-155.5)
BUN, mg/dL	15.9 (12.2-25.7)
Creatinine, mg/dL	0.9 (0.8-1.2)
ALT, IU/L	19.0 (13.0-29.5)
AST, IU/L	19.0 (15.0-28.0)
Na, mEq/L	137.0 ± 9.4
K, mEq/L	4.3 ± 0.6
Troponin, pg/ml	5.5 (2.2-23.7)
D-Dimer, ng/ml	241.5 (145.0-517.8)
Procalcitonin, ng/ml	0.13 (0.06-0.28)
CRP, mg/L	10.3 (2.8-57.0)

CT findings of the patients were compared in our study. When the lesion distributions of 221 patients with only CT imaging were evaluated; bilateral involvement was observed in 149 (67.4%) patients, single lung involvement in 12 (5.4%) and single lobe involvement in 10 (4.5%) patients. When compared according to the types of involvement, 86 (38.9%) patients had patchy involvement, 100 (45.2%) nodular involvement, 10 (4.5%) spider web involvement. According to their density, 123 (55.7%) of the patients had ground glass, 32 (14.5%) air bronchograms, 37 (16.7%) consolidation. In addition, 19 (8.6%) patients had pleural thickening, 78 (35.3%) pleural effusion, and 95 (43.0%) mediastinal/hilar lymphadenopathy. The tomography findings of 50 (22.6%) patients were evaluated as normal (Table 5).

Table 4: Comparison of CT Lesion Distribution, Involvement Type, Density and Other Findings of the Patients

CT Findings	Number of patients (n=221*)
Bilateral Involvement	149 (67.4%)
Single Lung Involvement	12 (5.4%)
Single Lobe Involvement	10 (4.5%)
Involvement Type	
Patch Style Involvement	86 (38.9%)
Nodular Involvement	100 (45.2%)
Spider Web Involvement	10 (4.5%)
Density	
Ground Glass	123 (55.7%)
Air Bronchogram	32 (14.5%)
Consolidation	37 (16.7%)
Other Findings	
Pleural Thickening	19 (8.6%)
Pleural Effusion	78 (35.3%)
Mediastinal/Hilar Lymphadenopathy	95 (43.0%)
Normal	50 (22.6%)

** Only patients with CT imaging are included*

MEWS and OPERA scores used in our study were compared in terms of intensive care need and mortality. The median value of the MEWS score was 4, and the median value of the OPERA score was 6. 4 was accepted for the cut-off MEWS score and 6 was accepted for the OPERA score.

The vital signs of the patients at the time of admission to the emergency department were evaluated with the Modified Early Warning Score (MEWS). When the value of 4 for the MEWS score was determined as cut-off, we found a statistically significant difference between intensive care unit admissions and mortality ($p<0.001$) (Table 6).

Table 5: Comparison of MEWS Score, Intensive Care Unit Admission and Mortality Rates

MEWS Score	<4 n=149 (55%)[1]	³4 n=122 (45%)[1]	p-value
Admission to the Intensive Care Unit			
No	128 (85.9%)	74 (60.7%)	< 0.001[2]
Yes	21 (14.1%)	48 (39.3%)	
Mortality			
Discharge	140 (94.0%)	88 (72.1%)	< 0.001[2]
Exitus	9 (6.0%)	34 (27.9%)	
OPERA Score	<6 n=133 (49.1%)	³6 n=138 (50.9%)	p-value
Admission to the Intensive Care Unit			
No	116 (87.2%)	86 (62.3%)	<0.001[2]
Yes	17 (12.8%)	52 (37.7%)	
Mortality			
Discharge	129 (97.0%)	99 (71.7%)	<0.001[2]
Exitus	4 (3.0%)	39 (28.3%)	

[1] *%n*

[2] *Pearson Chi-square test*

When the MEWS and OPERA scoring systems are compared in terms of hospitalization in the intensive care unit, the sensitivity of MEWS is 69.6%, specificity 63.4%, positive predictive value (PPD) 39.3%, negative predictive value (NPD) 85.9%, while OPERA's sensitivity is 75.4%, specificity 57.4%, positive predictive value 37.7% and negative predictive value 87.2%. The difference between them is not statistically significant (p=0.371, p=0.102, p=0.585, p=0.642). When the MEWS and OPERA scoring systems are compared in terms of mortality, the sensitivity of MEWS is 79.1%, specificity 61.4%, positive predictive value 27.9% and negative predictive value 93.9%, while OPERA's sensitivity is 90.7%, specificity 56.6% positive predictive value 28.3% and negative predictive value 96.9%. The difference between them is not statistically significant (p=0.131, p=0.166, p=0.876, p=0.170) (Table 8).

Table 6: Comparison of sensitivity, specificity, positive predictive value and negative predictive value of MEWS and OPERA scores in predicting ICU admission and mortality

	Sensitivity	p-value	Specificity	p-value	PPD	p-value	NPD	p-value
Admission to the Intensive Care Unit								
MEWS	69.6	0.371[1]	63.4	0.102[1]	39.3	0.585[2]	85.9	0.642[2]
OPERA	75.4		57.4		37.7		87.2	
Mortality								
MEWS	79.1	0.131[1]	61.4	0.166[1]	27.9	0.876[2]	93.9	0.170[2]
OPERA	90.7		56.6		28.3		96.9	
[1]McNemar Test								
[2] Generalized Score Statistics								

DISCUSSION

It is challenging for clinicians to distinguish COVID-19 from other common respiratory diseases. With the pandemic, the need to determine different approaches to dyspnea was felt. In our

study, we thought that examining the MEWS and OPERA scores according to the vital signs, demographic data, and radiological findings of the patients who presented to the emergency department with dyspnea could contribute to predicting the prognosis and mortality of the patients. We analyzed scores for ICU admissions and 2-month mortality. We found that both scorings were similar and predicted 2-month mortality with a negative predictive value of over 90%.

In a study in which CT findings of 58 patients with a diagnosis of COVID-19 and positive PCR uptake were examined, ground glass density in 100% of the patients, involvement of at least 2 lobes in 93%, bilateral involvement in 91%, consolidation in 72%, LAP in %58, air bronchogram in 36%, and pleural effusion in was detected 3% (10). In another study in which 90 patients diagnosed with COVID-19 were investigated, when the CT findings of the patients were compared, ground glass density was found in 72% of the patients, involvement of at least 2 lobes in 59%, bilateral involvement in 59%, consolidation in 13%, air bronchogram in %8, LAP in 1%, and pleural effusion in 4%. (11). In our study, ground glass density was observed in 71% of PCR-positive patients, bilateral involvement in 71%, consolidation in 29%, air bronchogram in 24%, LAP in 18%, and pleural effusion in 5.9%. As with other studies, in our study, in which ground glass density was observed with bilateral involvement in COVID-19 patients, these involvements were found to be high. In our study, it was found that the PCR result was higher in the presence of pleural effusion. It can be thought that this is a finding in favor of pulmonary edema rather than viral pneumonia in the presence of pleural effusion of ground glass densities in imaging findings.

The Modified Early Warning Score (MEWS) is a simple physiological scoring system that includes vital signs. In a study investigating the ability of MEWS to identify patients at risk of poor prognosis in an intense clinical area, when the cutoff value was accepted as 5, it was found that patients with a score of 5 and above had a higher need for intensive care and mortality (12). In another study investigating the relationship between the National Early Warning Score (NEWS) and MEWS scores in the prehospital and emergency departments of the geriatric age group with mortality, the median value was found to be 4 in patients who survived for NEWS and 3 for MEWS. In patients with a mortal course, the median value of NEWS score was 7, and 4 for MEWS (13). In another study evaluating the need for intensive care and mortality of COVID-19 patients admitted to the emergency department, the median value of the MEWS score was found to be 5 in intensive care patients and 6 in patients with a mortal course (14).

In a study comparing the relationship of MEWS and NEWS scores with mortality and the need for intensive care, it was found that the MEWS cut-off value of 3 and above was accepted for the need for intensive care; according to this score, it was determined that the sensitivity was 41.2% and the specificity was 75.7% in terms of the need for intensive care. In the same study, the sensitivity of the MEWS score, which had a cut-off value of 3 in terms of mortality, was calculated as 69.3% and the specificity as 67.6% (13). Again, in a study investigating the effectiveness of the MEWS score in predicting the need for intensive care and mortality in COVID-19 patients, the cut-off value of the MEWS score was taken as 5 in terms of intensive care need; accordingly, its sensitivity was 70%, its specificity was 64.8%, NPD was 92.5%, and PPD was 25.9%. In the same study, it was observed that the cut-off value of the MEWS score was taken as 5 in terms of mortality need, and accordingly, its sensitivity was 57.7%, specificity was 61%, NPD was 94.5%, and PPD was 11.1% (14). In our study, when the MEWS and OPERA scoring systems were compared in terms of hospitalization in the intensive care unit, the sensitivity of MEWS is 69.6%, specificity 63.4%, positive predictive value (PPD) 39.3%, negative predictive value (NPD) 85.9%, while OPERA's sensitivity is 75.4%. specificity 57.4%, positive predictive value 37.7% and negative predictive value 87.2%. When the MEWS and OPERA scoring systems are compared in terms of mortality, the sensitivity of MEWS is 79.1%, specificity 61.4%, positive predictive value 27.9% negative predictive value 93.9%, while OPERA's sensitivity is 90.7%, specificity 56.6% positive predictive value 28.3% and negative predictive value 96.9%. According to these results, it was observed that OPERA was more sensitive than MEWS in terms of both intensive care need and mortality, and the negative predictive value in terms of mortality was higher in OPERA. In terms of specificity, OPERA was found to be less effective than MEWS in both cases.

As seen in our study, the MEWS scoring system is useful in obtaining information about the need for intensive care and survival by looking at the vital signs of the patients at the time of admission. However, OPERA scoring, which includes imaging findings and anamnesis, was found to be more sensitive than MEWS, although there was no significant difference. Our study seems to be of clinical importance in patients presenting with dyspnea, as both scorings accurately predict the negative predictive value above 90%, in which there will be no 2-month mortality. Again, both scoring methods are easy to do and can be applied in the emergency department.

CONCLUSION

Dyspnea affected our diagnostic approach to patients during the pandemic and increased the use of computerized lung tomography. We compared the MEWS score, which was previously thought to predict mortality and intensive care in clinically severe diseases, and the OPERA score, which includes tomographic findings, in terms of predicting 2-month mortality and hospitalization in the intensive care unit. Both MEWS and OPERA scorings were able to predict 2-month mortality similarly, with negative predictive values of 93.9% and 96.9%, respectively.

AUTHOR STATEMENT

All authors have contributed significantly to the design of the study and/or data acquisition or analysis and interpretation of data, drafting the manuscript or critically reviewing it for important intellectual content, and final approval of the version to be submitted. There is no conflict of interest between the authors.

LIMITATIONS

The deficiencies in the records of the patients included in our study and the small number of samples due to this limited our evaluations.

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TITLE: A RARE DIFFERENTIAL DIAGNOSIS TO BE REMEMBERED IN HAND ISCHEMIA: DIALYSIS ACCESS STEAL SYNDROME

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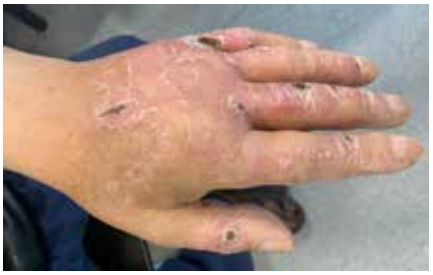
INTRODUCTION:

Embolism, vasculitis, and peripheral arterial disease are considered in patients presenting to the emergency department with hand ischemia. The other critical condition to remember is "dialysis access steal syndrome" (DASS). DASS is defined as distal hypoperfusion resulting in extremity-threatening ischemia (1). It is observed as a complication of arteriovenous fistula (AVF) in hemodialysis-dependent chronic renal failure patients. Even if the arterial pulses are palpable, hand ischemia can be observed. In this presentation, we aimed to present a case with high-output AVF, which results in DASS.

CASE PRESENTATİON:

A 65-year-old male patient was admitted to the emergency department with complaints of pain, pallor, and ulceration on his left hand and fingers (Figure 1). The patient was hemodialysis dependent and had AVF on his left arm. Physical examination revealed an incision of previous AVF surgery in the antecubital region and dialysis puncture sites on the left arm. Brachial, radial, and ulnar pulses were palpable. When compression was applied to the AVF, it was observed that capillary refill time improved, and temporary symptomatic relief was observed.

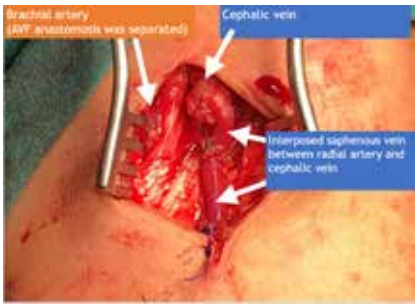
Figure 1: Pallor and ulceration on his left hand and fingers.



Duplex ultrasonography revealed that the arterial vasculature was normal in brachial, radial, and ulnar arteries and no significant stenosis was observed. The flow rate of the brachiocephalic AVF was found to be 1500 mL/min (high output). The patient was consulted by a cardiovascular surgeon.

The patient underwent an urgent operation by the cardiovascular surgeon. The AVF anastomosis between the patient's brachial artery and the cephalic vein was separated. A 4 cm saphenous vein graft was interposed between the cephalic vein and the radial artery (Figure 2). Thus, both ischemic symptoms in the extremities were relieved, and a normal-flow functioning radiocephalic AVF was achieved.

Figure 2: Surgical correction of the hand ischemia by revision using distal inflow technique.



The hand was rewarmed postoperatively, and the ischemic symptoms improved. The patient has remained symptom-free at the end of his 3-month clinical follow-up period, and the ulcerations regressed. The patient has had hemodialysis sessions successfully since the intervention.

DISCUSSION:

Differential diagnosis of hand ischemia includes rheumatological diseases such as scleroderma and Behçet's disease, Raynaud's phenomenon, distal embolization due to atrial fibrillation, peripheral artery disease, vasculitis, and Buerger's disease (2-4). In addition, thrombophilia, trauma, and iatrogenic injuries are other causes of hand ischemia (5,6).

Detailed anamnesis and physical examination are of great importance in making the diagnosis.

The patient's chronic renal failure and dialysis dependency constitute the most critical point in the anamnesis. Questioning the symptoms are also important. In DASS, symptoms are usually exacerbated during dialysis (7).

Table 1: Dialysis access steal syndrome classification

	Symptom	Management
Stage 1	Asymptomatic, Retrograde diastolic filling	Follow up
Stage 2	Pain on exercise or dialysis	Follow up, Surgical intervention if symptoms are severe
Stage 3	Pain on rest	Surgical intervention
Stage 4	Tissue loss; Ulceration, necrosis, gangrene	Surgical intervention, Amputation

In Stage 4 DASS, ulceration, necrosis, and gangrene (which indicates tissue loss) are observed (Table 1) (8). In this case, it is necessary to improve the extremity ischemia with surgical intervention (if possible). The relevant limb (phalanx, finger, or hand) may undergo amputation in irreversible tissue loss. Many surgical approaches can be considered in DASS cases (9). Banding of the AVF, distal revascularization with interval ligation, proximalization of the arterial inflow, and revision using distal inflow (RUDI) are alternative treatment options. In our patient, the RUDI procedure was successfully performed, and the patient has been successfully receiving hemodialysis sessions. In addition, the patient's pain and ischemic symptoms improved.

In conclusion, DASS should be considered in the differential diagnosis of patients with hand ischemia. Detailed anamnesis and physical examination are the first and most essential methods to make a diagnosis. It is possible to both preserve hemodialysis access with AVF and correct limb ischemia in DASS patients.

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SERTRALIN INDUCED ACUTE DYSTONIA

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Movement disorders characterized by intermittent muscle contractions that usually cause repetitive abnormal movements, abnormal posture, or both at the same time are defined as dystonia (1). Acquired causes include the use of certain drugs. These drugs include antiepiletics, antipsychotics, and dopamine agonists(2). During psychiatric treatments, acute dystonia occurs more frequently with typical antipsychotics(3). In this study, an adult case who presented to the emergency department with acute dystonia associated with sertraline use is presented.

CASE: A 25-year-old male patient who have been using sertraline 50 mg daily 2 weeks ago with the diagnosis of major depression, applied to the emergency department due to intermittent involuntary contractions in the left half of the neck and face, which had been present for 3 hours without any other side effects during this period. His vital signs were unremarkable and blood chemistry was normal. A diagnosis of acute dystonia was made with physical examination based on the history and drugs used. A dose of 25 mg of biperiden lactate was administered intramuscularly. Oral 2 mg biperiden lactate, 3 times a day for following 3 days was also given as maintenance therapy. Sertraline was discontinued. A specialist referral was recommended for a new treatment for major depression. Information was given about advanced conditions such as respiratory problems, where acute dystonia exacerbated and became life-threatening. The patient was discharged.

DISCUSSION: In this case report, sertraline-associated acute dystonia developed in an adult patient who did not use any other drugs have dopaminergic effects. It has been determined that there is dysfunction in the basal ganglia and in etiology, it is known that antipsychotics mainly cause acute dystonia(4). Rarely, antidepressants have also been found to be associated with this adverse effect(5). This is explained by the hypothesis that inhibitory effects on dopaminergic pathways occur with serotonin in the striatum(6). Oral use of anticholinergics is known as the first treatment approach(7). In this case, the patient was discharged with oral maintenance therapy after a dose of intramuscular anticholinergic administration. Emergency department clinicians and psychiatrists should keep in mind that acute dystonia may also develop due to the use of sertraline, which is traditionally better tolerated and has fewer side effects(8). It should be known that anticholinergics are effective in treatment and should be kept in emergency rooms. In resistant cases to oral anticholinergics, local botulinum toxin can be applied. Botulinum toxins blocks acetylcholine by a transient effect at the presynaptic junction of muscle and have no systemic effects(8).

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A RARE CASE: ABDOMINAL COMPARTMENT SYNDROME

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INTRODUCTION:

Abdominal compartment syndrome is a clinical syndrome associated with progressively developing intra-abdominal organ dysfunction due to increased intra-abdominal pressure.[1] It develops with pathological increase in intra-abdominal pressure for more than 6 hours and end organ damage.[2]

A case of abdominal compartment syndrome is presented in the patient who applied with the complaints of abdominal pain, abdominal distention.

CASE REPORT:

A 51-year-old female patient presented to the emergency department with complaints of widespread abdominal pain, abdominal distension that had been increasing in the last few days. In her medical history, it was found that she had been diagnosed with adeno carcinoma of unknown primary one year ago. He has no history of smoking and alcohol use. The patient is moderate, conscious and cooperative, and vital signs blood pressure: 122/84 mmHg, heart rate: 104 beats/min, oxygen saturation in room air: 94%, fever: 36.7 °C was. In his physical examination distenuated appearance due to acid in the abdomen, diffuse tenderness and bowel sounds were markedly decreased, and there was +2 pitting edema in the bilateral lower extremities. No gross pathology was detected in other system examinations. In laboratory parameters, Crp:124 mg/L (0-5), Alb:27 g/L (35-52), ALP:141 U/L (30-120), GGT:47 U/L (1-38), amylase: 272 U/L (28-100), lipase: 408 U/L (13-66), Lac: 4.8 mmol/L (0.5-1.6) and other laboratory results were normal. In contrast-enhanced computed tomography of the abdomen; the rectum was slightly distended, the colonic loops were dilated, and air-fluid levels and ileus image were observed. Abdominal compartment syndrome was considered as a preliminary diagnosis because the abdomen was excessively tense and sensitive and newly developed secondary organ dysfunction, and bladder pressure was measured with a bladder catheter. Abdominal compartment syndrome was diagnosed due to intraabdominal pressure of 28 mm Hg (Normal <12 mmHg) and organ dysfunction (pancreatitis, ileus) in transurethral bladder pressure measurement.

Paracentesis was performed to the patient for the determination of differential diagnoses and decompression. Approximately 6,000 cc of fluid was drained in a controlled manner.. The patient, whose complaints regressed after paracentesis, was discharged on the 6th day of the follow-up.

CONCLUSION: In suspected critical patients, transurethral bladder pressure measurement should be performed. Although non-operative approaches are beneficial in patients with stable general status and mild complaints, decompressive laparotomy should not be delayed for patients who do not have adequate abdominal perfusion pressure and who develop organ failure resistant to medical therapy.[3]

KEY WORDS: Abdominal compartman syndrome, abdominal pain

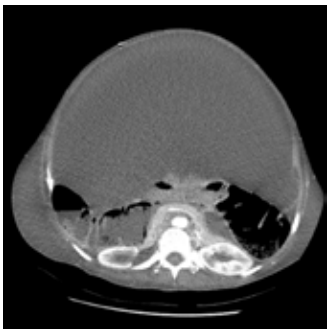

Image 1: Contrasted Upper Abdominal CT: Diffuse ascites, distant colon loops and air fluid level

Image 2: Transurethral bladder pressure measurement

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FORECASTING CORONARY HEART DISEASE ON THE BASIS OF DEMOGRAPHIC/CLINICAL CHARACTERISTICS WITH ENSEMBLE LEARNING APPROACH

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INTRODUCTION

The leading cause of death in the world is coronary heart disease (CHD). Ischemic heart disease and coronary artery disease are two terms frequently used to describe CHD. Fatty deposits in the coronary arteries obstruct or interrupt blood flow to the heart, resulting in coronary heart disease. The walls of coronary arteries may develop fatty deposits over time, creating wrinkles. Fatty deposits are referred to as atheroma, and the process is referred to as atherosclerosis. Regularly smoking and consuming large amounts of alcohol are two aspects of lifestyle that contribute to atherosclerosis. Excessive cholesterol, hypertension, and diabetes are the three main causes of CHD (1, 2). Angina (chest pain) and shortness of breath are the two signs of coronary heart disease that occur most frequently.

Artificial intelligence (AI) is being utilized more and more frequently in the field of medicine to diagnose a variety of illnesses, including cancer, diabetes, and heart disease. The phrase "artificial intelligence" (AI) is a general one that covers analytical algorithms that iteratively learn from data, enabling computers to find hidden insights without being explicitly told where to look. In cases when conventional statistical methods fall short, these are a set of operations that include terms like machine learning, cognitive learning, deep learning, and reinforcement learning-based methods for integrating and analyzing complex biological and healthcare data (3).

A collection of conditions known as cardiovascular diseases can greatly benefit from proactive care, prevention, and prediction, and thus from AI techniques. A variety of AI algorithms will be needed to comprehend the complex individual risk factors, behavioral variables, and treatment pathways predictive of illness outcomes in particular patient cohorts and to design early therapeutic treatments (4).

The aim of this study is to classify and predict coronary artery disease with Random Forest, one of the ensemble learning methods.

MATERIAL AND METHOD

The full heart disease dataset utilized in this investigation was retrieved from the IEEEDataPort database at https://ieee-dataport.org/open-access/heart-disease-dataset#files (5). In this respect, the demographic/clinical characteristics of the individuals with/without CHD were evaluated for forecasting purposes. The SMOTE method was first applied to the dataset. The dataset is then split into 80% for training and 20% for testing. The RF algorithm was used for the classification task. The RF model was evaluated with Accuracy, Specificity, Sensitivity, and F1 score. All the modeling and calculations were performed via R programming language (6).

RESULTS

In the dataset, there were 281 (23.6%) female and 909 (76.4%) male individuals. Males were 54±9 years old on average and females 53±10 years old.

The performance measures of the RF model in the test set are given in Table 1. The values of Accuracy, Specificity, Sensitivity, and F1-score criteria obtained from the RF model were calculated as 0.92, 0.95, 0.88, and 0.91 respectively.

Table I. Performance Metrics for RF Model

Metrics	Value
Accuracy	0.92
Specificity	0.95
Sensitivity	0.88
F1-score	0.91

DISCUSSION

The long-term preservation of human life is aided by early diagnosis of anomalies. This procedure was discovered through the assessment of the first healthcare data on heart illness. The raw data can be processed using machine learning algorithms to create a fresh and original recommendation for heart disease. The prognosis of heart disease is one of the most challenging and important medical problems. Early diagnosis allows for the management of the mortality rate and the implementation of preventive measures (7, 8).

In this study, a model for heart disease prediction with the help of machine learning is proposed. For this purpose, an RF machine learning algorithm was built for forecasting CHD on the basis of the demographic/clinical characteristics of the individuals under question. The results showed that the RF algorithm made quite good predictions for heart disease. The values of Accuracy, Specificity, Sensitivity, and F1-score criteria obtained from the RF model were calculated as 0.92, 0.95, 0.88, and 0.91, respectively.

CONCLUSION

In conclusion, our study induces that the RF approach, one of the ensemble learning algorithms, is effective at predicting CHD. Therefore, the suggested RF algorithm may be utilized for forecasting other diseases.

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THE EFFICACY OF INTERSPHINCTERIC SILICONE IMPLANTS FOR THE IMPROVEMENT OF FAECAL INCONTINENCE

INTRODUCTION

The aim of this study was to assess the efficacy of intersphincteric performed silicone implant (SI) for patients with faecal incontinence.

METHOD

Retrospective study of 8 consecutively included patients (4 male–4 female); median age 52 years(range: 46–69 years) with faecal incontinence. The SI was injected under spinal anaesthesia with antibiotic cover prior to the process. All patients had anorectal manometry, endoanal ultrasonography and responded to Cleveland Clinic fecal incontinence score (CCFIS) score before and 6 months postoperatively. Finally follow-up, the continence status were re-evaluated.

RESULTS,

The mean follow-up was 12.1 months (range:9–15 months). The Wexner Continence Score was significantly reduced short term from 10.2 to 8.0(P= 0.12) and long term to 8.9 (P= 0.06). The long-term effect on liquid stool incontinence continued to improve significantly (P< 0.01). of 6 patients (25%) reported major improvement in Wexner Continence Score at the time of final follow-up. Anorectal manometry was not affected except for the maximum tolerable rectal volume, which was significantly reduced(P< 0.05). The SF-36 short-form questionnaire showed no significant improvement in quality of life after treatment with SI

CONCLUSIONS

Treatment with intersphincteric injectionof SI can provide an improvement in anal continence. On the other hand , the healing is mainly limited to soiling.

KEYWORDS

invasive procedure, intersphincteric injections, sılıcone

INTRODUCTION

Faecal incontinence (FI) has been a sad condition with a range of different aetiologies.The treatment of FI remains a challenge. Simillis et al.showed different treatments for FI [1, 2]. Injectable bulking agents have been used since 1993 with the aim of strengthening the anal canal [3]. Since then, autologous fat [4,5], and various implants used and finally a silicone biomaterial (SI) have been injected [6–9].Passive soiling is mainly lead by an internal sphincter trauma [8]. Injection of dextranomer in stabilized hyaluronic acid (NASHA Dx,Q-Med AB), into the intersphincteric plane has been shown to be superior to sham treatment and associated with a decreased number of incontinence episodes [10]. Injection into the submucosal layer has advantages in terms of simplicity and immediate visual feedback. To date, no study has evaluated NASHA Dx in this location and the aim of this study was to analyze the short- and long-term efficacy and safety of NASHA Dx injected into the intersphincteric location The aim of this study was to evaluate the efficacy of

MATERIALS AND METHODS

STUDY DESIGN

This was a retrospective, single center study with a short- (12 months) follow- up. The inclusion criteria were: FI with at least 2 episodes/ week; symptom duration of at least 1 year, and failure of conservative therapy including at least two of the following therapies: . Further inclusion criteria were: age 18–80, written informed consent, availability for follow-up and expectance of full compliance with the protocol. Exclusion criteria were: active inflammatory bowel disease, total external sphincter defect at ultrasound and clinical examination, bleeding diathesis or anticoagulant therapy, rectal prolapse or intussusception, active anal sepsis, anorectal implants, recent anorectal surgery (within 1 year), rectal anastomosis, pregnancy, postpartum (1 year or less), mental disorder, immunodeficiency, pelvic irradiation, chronic pelvic pain, chronic anal fissure and symptoms consistent with outlet obstruction. Patients were recruited from to the Department of Surgery, for treatment of FI in march 2019-september 2021. Before treatment, all participants underwent a clinical examination such as anal manometry and endoanal ultrasound [11].

The implant procedure was performed as a daily case process, under a short caudal anaesthesia. All patients received perioperative antibiotics (cefuroxim 3 g +metronidazole 1 g), followed by a 3-day course of ciprofloxacin (500 mg * 2) and metronidazole (500 mg * 3) postoperatively. All patients were placed in the lithotomy position. The injections were performed under aseptic conditions. The needle entered the skin with a safe distance to the anal margin and was guided trans-sphincterically into the intersphincteric space by an anally placed digit. Three injections of 2.5 ml of SI (NASHA TM gel)were injected at the 3, 6, 9 and 12 o'clock positions in patients. It has been Conformitè Europëenne [European Conformity; (CE)] approved since 2006 and United States Food and Drug Administration (FDA) approved since 2010 under the trademark Solesta® for the treatment of FI. The patients were observed for a couple of hours postoperatively to exclude early complications before they were discharged with laxatives and aforementioned antibiotics.

STATISTICAL ANALYSIS

The Wilcoxon matched pair test was used to assess paired differences for numeric variables and McNemar's test for paired differences in proportions. SPSS software 24 , version was used for statistical analyses. A *p*-value below 0.05 was interpreted as statistically significant.

RESULTS

PATIENTS

Total of 8 patients with a median CCFIS of 14 (range 12–17) were included, 4 women and 4 man with a median age of 52.0 (range 42–69) years. The median number of incontinence episodes for soiling decreased from 19.5 (range 6–27) at baseline to 8 (range 2–23) at 12 months ($p = 0.05$). 1 patient was completely continent at 12 months, A total of 7/8 (87.5%) were responders at 12 months.

SIDE EFFECTS

Pain during injection was described as mild in 2 cases, moderate in 1 and the remaining 5 felt no pain. A moderate anal ache lasting 2–4 weeks after injection was reported in 2 patients. In another patient a slight fever, a mild phlegmon and induration were treated successfully with oral antibiotics. In all cases the pain subsided and no patient experienced pain at 3 months or later. No side effects were reported at 12 months .

DISCUSSION

To our knowledge, this is a novel study of results after intersphincteric SI injection and furthermore with a unique short- term follow up. The difference of our research looked like previous studies implanting NASHA Dx in the submucosal layer, however we aimed to apply this implant to the intersphincteric plane [10].

Intersphincteric implants create a different anatomical situation compared with submucosal deposits. The volüme expansion is different when using intersphincteric injection, creating a smoother constriction. Submucosal SI implants might slide in loose connective tissue planes [11].The The injection procedure is more complicated, requiring analgesia, and is more difficult than submucosal injections.

Many authors will discuss that bulking therapy is primarily indicated for improvement in internal anal sphincter deficiency, [12, 13]. Some authors haveseen the same effect after submucosal injections while others have seen no effect on anal pressure after bulking therapy[14,15]. These findings possibly indicate augmentation of both the internal and external sphincter. The intersphincteric location and the larger volume might cause the increase in squeeze pressure. The reduction in CCFIS and positive self-reported outcomes are compatible with the findings of La Torre et al.[16]. There are several challenges in evaluating and comparing bulking treatment for FI., as previously stated, FI is a symptom with various e etiologies [12-15].

Previous studies using injectable agents for the treatment of faecal incontinence have shown mixed results. Kumar et al. [17] found a marked improvement in symptoms in 11 of 17 patients after 8 months' followup. Tjandra et al. [7] found that further improvement occurred up to 12 months after injection in patients who had injection performed with guidance by anal endosonography.

There are some limitations in our study are its small size and the absence of a clinical examination at the long term follow- up. Our findings show that general coping strategies seem to play an important role in persistently lowering the CCFIS over time. According to our study, we suggest that SI may be considered in selected patients where treatments have failed before offering more complicated surgery due to considering its major effect in a few unpredictable cases, even with severe incontinence.

CONCLUSIONS

This study suggests that SI as an intersphincteric implant results in a definite improvement of incontinence symptoms with moderate side effects in the short term. We trust that intersphincteric injection can be a part of a FI approach,. It can İmprove the symptoms of FI , without any complicating surgery types.

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GEBELİKTE METAKLOPRAMİDE BAĞLI AKUT DİSTONİ

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ÖZET

Metoklopramid, dopamin reseptör antagonisti olup, antiemetik olarak sık kullanılan bir ilaçtır. En önemli yan etkileri, tardif diskinezi, parkinsonizm, akatizi, malign nöroleptik sendrom ve akut distonik reaksiyon gibi ekstrapiramidal semptomlar gelişebilmesidir. Hastalar menenjit, ensefalit, hipokalsemi, nöbet ve tetanoz gibi yanlış tanılar alabilmektedir. Akut distoni ile acil servise başvuran hastalarda, sık kullanılan bir antiemetik olan metoklopramidin yan etkisinin olabileceği unutulmamalı ve bu durumda, hastalarda mutlaka ilaç kullanım öyküsü sorgulanmalıdır. Bu olguda, acil polikliniğine uygun dozda metoklopramid kullanmakta iken akut distonik reaksiyon gelişmesi nedeniyle başvuran 26 yaşındaki bir gebe hasta sunulmuştur.

GİRİŞ

Distoni, istem dışı, aralıklı ya da sürekli kas kasılmalarının neden olduğu döndürücü ve tekrarlayıcı hareketler veya anormal postürle karakterize nörolojik bir tablodur (1).Akut distonik reaksiyon, özellikle yüz, boyun ve sırt kaslarında kontraksiyonlar, opistotonus, tortikolis, okulojirik kriz, dizartri ve trismus ile kendini gösterir (2). En sık karşılaşılan akut distonik reaksiyon tipi, ilaçlara bağlı gelişen tiptir. Çok sayıda ilaç (antipsikotikler, antiemetikler, antihistaminikler, dekonjestanlar, ekspektoranlar) tedavi dozlarında bile distonik reaksiyonlara neden olabilir(3). Acil bir durumdur. Tanı bulguların ani başlaması, hızlı ilerleme göstermesi ve ilaç kullanım öyküsünün sorgulanması ile konulur. Antiemetik ilaçlardan akut distonik reaksiyona yol açan metoklopramiddir (4). En sık gastroözofageal reflünün tedavisinde, kemoterapi alan hastalarda ve gastrointestinal sistem enfeksiyonlarında karşılaşılan bulantı ve kusmalarda antiemetik olarak kullanılan bir ilaçtır. En önemli yan etkilerinden biri de ekstrapiramidal sisteme ait bir hareket bozukluğu olan ve dopamin reseptör antagonizmasına bağlı olarak gelişen akut distonik reaksiyondur(5).Bu makalede, acil servise terapötik dozda metoklopramid tedavisi alırken akut distonik reaksiyonların alt tipi olan tortikolis ile başvuran bir gebe olgu sunulmuştur.

VAKA

26 yaş kadın hasta 8 hafta 3 günlük gebe hasta. Boynunda engel olamadığı kasılma şikayeti ile getirildi. Özgeçmişinde bilinen hastalık öyküsü yok. Bilinen alerjisi yok. Gebeliğe bağlı bulantısı oluyormuş son zamanlarda. Hiperemezis nedeniyle 3*1 metoklopramid tablet kullanmakta olan hasta en son başvurusundan 1 saat önce 1 tablet 10 mg metoklopramid almış. Yaklaşık 1 saat sonra gelişen boyunda engel olamadığı kasılma şikayeti ile acil servise geldi. Boyun sağa extansiyone izlendi. Vitalleri TA:110/80 mmHg, SPO2:98, ateş:36,7 °C, nb:88/dk Nörolojik muayenesinde bilinç açık, oryante koopere IR direkt indirekt +/+, pupiller izokorik, göz hareketleri her yöne serbest, kraniyal sinirlerde kayda değer özellik yok, 4 ekstremite kas güçleri tam, serebellar testler doğal, duyu kusuru yok, tendon refleksleri simetrik canlı idi. Baş sağa deviye, servikal kaslarda akut distonik reaksiyon mevcut. Çalışılan kan tahlillerinde anormal değer yoktu. Hastada metoklopramide bağlı akut distonik reaksiyon düşünüldü. Akut distonide biperiden hızlı seçenek ilaç olduğu, FDA kaynaklarına göre biperidenin gebelik kategorisi C olduğu, olası fetal yan etkilerinin kesin olarak dışlanamaması anlamına geldiği bilinmektedir ve hastaya olası fetal yan etkiler anlatıldı. Yazılı onamı kendi el yazısı ile alındıktan sonra 5 mg biperiden intramuskuler uygulandı. Hastanın şikayetleri 30 dakika içinde geriledi. Kontrol vitalleri ve nörolojik muayenesi normal olan hasta yaklaşık 6 saat takip edildikten sonra önerilerle taburcu edildi.

TARTIŞMA

Metoklopramid, santral ve periferik etkili bir antiemetiktir. Prokinetik bir ajan olup mide boşalmasını hızlandırmaktadır. Diğer bir etkisi dopamin reseptör antagonisti olarak bulantı ve kusma şikayetlerinin giderilmesidir. Ekstrapiramidal sisteme ait hareket bozuklukları gibi yan etkiler oluşturabilmektedir. Bu etkilerini dopamin reseptörünü bloke ederek gösterir(6). Metoklopramid'in en sık görülen yan etkileri uyuşukluk, ağız kuruluğu, kabızlık, ishal, halsizlik ve ciltte alerjik döküntülerdir(7). Oluşan hareket bozuklukları arasında parkinsonizm, tardif diskinezi, distonik reaksiyonlar (opistotonus, tortikolis, okülojirik kriz, dizartri, trismus, vb.) ve nöroleptik malign sendrom sayılabilir (9,10). Bizim olgumuzda tortikolis mevcut idi. Gelişen akut distonik reaksiyonun metoklopramide bağlı olarak gelişip gelişmediği akla gelmediği sürece tanı koymak güç olabilir. Akut distoni, ensefalit, menenjit, konversiyon, hipokalsemi, nöbet ve tetanoz gibi hastalıklarla karışabilmektedir(3). Hastanın bilincinin açık, koopere ve oryante olması, ateşinin olmaması, semptomların ani başlayıp ilerlememesi, laboratuar tetkiklerinin normal olması, biperiden tedavisine hızlı yanıt vermesi ve daha önce tamamen sağlıklı olması nedeniyle distoni yapabilecek diğer nedenler dışlanmıştır. Akut distonik reaksiyonların tedavisinde difenhidramin (1 mg/kg oral, intravenöz veya intramüsküler), biperiden (5 mg) ve prometazin (25-50 mg) kullanılmaktadır (11,12).

Bizim olgumuzda da biperiden 5 mg intramüsküler olarak kullanıldı ve yaklaşık 30 dakika içinde semptomlarda gerileme olup 6 saatlik gözlem sonrası şifa ile taburcu edildi.

SONUÇ

Antiemetik olarak sık kullanılan metoklopramid, tedavi dozlarında dahi yan etki olarak ciddi akut distonik reaksiyona neden olabilmektedir. Dolayısıyla acil servise akut distonik reaksiyon nedeni ile gelen her hastada mutlaka ilaç öyküsü sorgulanmalı ve eşlik eden diğer nörolojik bulgular açısından dikkatlice fizik muayene yapılmalıdır. Dikkatli bir nörolojik muayenenin yanı sıra tanıya ulaşmada metoklopramid ve benzeri tüm ilaçların yan etkilerinin hatırlanmalı ve öyküde ilaç kullanımının mutlaka sorgulanması gereklidir.

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HİPERTANSİYON BAĞLI ALVEOLAR HEMORAJİ

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GİRİŞ: Alveoler, kapiller harabiyete bağlı difüz alveoller kanama ile karakterize bir grup hastalıktır. Daha nadir olarak arteriol ve venüllerin hasarına bağlı olarak da oluşur. Pulmoner hemoraji izole olabileceği gibi ekstrapulmoner bir hastalıkla da ilişlkili de olabilir(1.2). Alveoler boşlluklar içine oluşan yaygın kanama sonucu dispne, hemoptizi, anemi ve akciğer grafisinde bilateral alveoler konsolidasyonlara yol açar. Alveoler septa harabiyeti immün mekanizmalara, toksik ajanlara maruziyete bağlı olabileceği gibi, sebebi bilinmeyedebilir .

Difüz alveoler hemorajide hemoptizi, dispne, ateş, anemi; solunum sistemi muayenesinde difüz raller ve alveoloarteryel oksijen gradyentinde artma görülebilir. Hemoptizi hafif veya masif, aralıklı ya da devamlı olabilir. Difüz alveoler hemorajinin non immün sebepleri arasında infeksiyonlar, hemostatik bozukluklar, venöz pulmoner hipertansiyon, toksik ajanlar, üremi sayılabilir (3).

VAKA:49 yaşında erkek hasta hemoptizi ve burundan kanama şikayetinden dolayı acil servise başvurdu. Özgeçmişinde hipertansiyon dışında hastalığı yok. 1 haftadan beri antihipertansif ilacını kendi kararıyla kesmiş. Fizik muayenede Tansiyon :206/103 mmHG Nabız: 111/dk Ateş:36.7 Saturasyon:93. Solunum sistemi muayenesinde sağ akciğerde yaygın ralleri mevcuttu. Diğer sistemik muayeneleri doğaldı. . Laboratuvar incelemesinde Hemoglobin (Hb): 13,7 g/dL, Trombosit: 261000 10^3/uL INR: 1,08 olarak saptandı. Biyokimyasalöbelirteçlerde patolojik değerler saptanmadı. Kontrol kan değerlerinde anlamlı değişme saptanmadı.Radyolojik görüntülemede sağ akciğerde yaygın yamalı buzlu cam dansiteleri izlenmiş, görünüm alveolar hemarojiyi düşündürdü. (Resim1). Hastanın tansiyon regülasyonu sağlandı, kanamaya yönelik tedavi başlandı. Göğüs hastalıklarına danışılan hasta servise yatış verildi. Takiplerinde tansiyon regülasyonu yapıldığı, sonrasında akciğer bulgularının düzeldiği görüldü (Resim 2).

SONUÇ: Acil sevise başvuran hemoptizi hastalarında kardiyak ve pulmoner hadiseler dışında hipertansiyondan da kaynaklanabileceği unutulmamalıdır. Tansiyon regülasyonuyla kanamanın durduğu ve radyolojik görüntünün düzelebileceği görülmüştür.

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PROKSİMAL FALANKS MALUNION ERİŞKİN HASTALARDA AÇIK REDÜKSİYON İNTERNAL FİKSASYON İLE AÇIK REDÜKSİYON K-TELİ UYGULAMASI KARŞILAŞTIRILMASI

AMAÇ: Çalışmada, açık redüksiyon ve Kirschner teli (K-teli) ile açık redüksiyon ve internal fiksasyon uyguladığımız proksimal falanks malunıon erişkin hastaların fonksiyonel ve radyolojik sonuçlarının karşılaştırılması amaçlandı.

YÖNTEM: Aralık 2020 ile Mayıs 2022 tarihleri arasında 19 proksimal falanks malunıon erişkin hasta (11 bayan, 8 erkek), iki ayrı gruba ayrılarak retrospektif olarak değerlendirildi. 1.gruba (10 hasta) açık redüksiyon ve internal fiksasyon (mini plak-vida seti) ve 2.gruba (9 hasta) açık redüksiyon ve K teli uygulandı. Hastaların ortalama yaşı 37 (20-54) ve ortalama takip süresi 11 (10-12) aydı. Fonksiyonel sonuçlar total aktif eklem hareket açıklığı (TAEHA) skalasına göre değerlendirildi. Gruplarda kırık hattında kaynama açısından ve işe dönüş zamanı açısından karşılaştırma yapıldı. Analiz Statistical Package for the Social Sciences (SPSS) ve Friedman's p korelasyon testine göre yapıldı. $p<0.05$ olması anlamlı kabul edildi.

BULGULAR: TAEHA skalasına göre 14 hasta mükemmel ve 5 hastada iyi sonuç elde edildi. Fonksiyonel açıdan anlamlı fark saptanmadı ($p>0.05$). Her 2 grupta radyolojik açıdan tam kaynama elde edildi. İşe dönüş zamanı açısından 1.grup anlamlı bulundu ($p=0.03$). Enfeksiyon,redüksiyon kaybı ve kaynamama gibi komplikasyonlar görülmedi.

ÇIKARIMLAR: Proksimal falanks malunıon erişkin hastalarda 2 ayrı tedavi yöntemi ile tatmin edici fonksiyonel ve radyolojik sonuçlar elde edilmesine rağmen, açık redüksiyon ve internal fiksasyon uygulanan hastalarda işe dönüş açısından daha anlamlı olduğu görülmektedir.

ANAHTAR KELİMELER: Proksimal falanks kırığı, malunıon, Kirschner teli, açık redüksiyon, internal fiksasyon

EL DORSALİNDE NADİR GÖRÜLEN KİTLE VE/VEYA GANGLİON BENZERİ AĞRI NEDENİ: KARPOMETAKARPAL BOSS

AMAÇ: El dorsalinde kitleler ve/veya ganglion kistleri, acil servislerde, ortopedi ve el cerrahisi polikliniklerinde sık rastlanan lezyonlar olarak karşımıza çıkmaktadır. Çalışmamızda, bu lezyonlara benzeyip, çok sık atlanan ve ağrı nedeni olarak karşımıza çıkan karpometakarpal (KMK) boss vakasının cerrahi tedavisi sonucu amaçlandı.

YÖNTEM: 20 yaşında bayan hasta. Uzun zamandır sol el dorsalinde kitle ve ağrı şikayeti ile çeşitli hastanelere başvurma öyküsü mevcut. Çeşitli hastanelerde, yapılan tetkik ve tedavi sonucunda konservatif tedavi uygulanmış ama hastanın şikayetleri devam etmiş. Hastanın yapılan fizik muayene, x-ray, bilgisayarlı tomografi (BT) ve manyetik rezonans görüntüleme (MRG) sonucunda KMK boss tanısı konulup cerrahi planlanmıştır. Hastaya cerrahi olarak KMK boss traşlanması ameliyatı gerçekleştirilmiştir. Ameliyat sonrası hastanın postoperatif 1.günde ağrılarının çoğunun azaldığı saptanmıştır. Olgu ortalama 1 yıl takip edildi.

BULGULAR: Hasta; 1.hafta, 3.hafta, 6.hafta, 3.ay, 6.ay ve 1 yıllık poliklinik kontrolü şeklinde değerlendirildi. Hastanın ameliyat sırasında çekilen skopi görüntüleri ve ameliyat sonrası çekilen x-ray grafilerinde KMK boss'un olmadığı teyit edildi. Hastanın son kontrollerinde ağrılarının tamamen kalmadığı saptandı. Hasta, ameliyattan mennun kaldığını söyledi

ÇIKARIM: El dorsalinde görülen kitle ve/veya ganglion benzeri lezyonlara çok benzeyip, çok sık atlanan ve şiddetli ağrı nedeni olan KMK boss'a yapılacak cerrahi tedavi akılda bulundurulmalıdır.

ANAHTAR KELİMELER: Ağrı, cerrahi tedavi, karpometakarpal boss

A RARE CASE OF MILD ENCEPHALITIS/ENCEPHALOPATHY WITH REVERSIBLE SPLENIAL LESION

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ABSTRACT

AIM: Mild encephalitis/encephalopathy with reversible splenial lesion (MERS) is a rare clinico-radiological condition characterized by the magnetic resonance imaging finding of a reversible lesion in the corpus callosum. With this case report, we aimed to the key clinical and radiological features of MERS in an adult patient were highlighted.

CASE REPORT: An 18-year-old female patient, who was diagnosed with migraine about 2 weeks ago, applied to the emergency department with headache and confusion in the morning. The patient, whose blood pressure was 100/70 mmHg, heart rate was 60 beats/min and body temperature was 36°C, was lethargic, responsive to verbal stimuli and had neck stiffness. Wbc: 17,38 10^3/uL, Plt: 284 10^3/uL were found in blood test results and other blood parameters were normal. As a result of lumbar puncture, CSF pressure was 50 cmH_2O, leukocyte:30/mm3 in direct view, WBC: 0.047 10^3/µL, mononuclear leukocytes: 100%, polymorphonuclear leukocytes: 0% in cell count. Brain MRI showed diffuse hyperintensity increase in the corpus callosum splenium and diffusion restriction in diffusion-weighted imaging and ADC mapping. The patient was admitted to the Neurology intensive care unit with the diagnosis of MERS. The patient was discharged after 9 days of hospitalization.

CONCLUSION: MERS is a rare syndrome. MERS should be kept in mind in patients with neurological symptoms such as headache and disturbance of consciousness. After diagnosis, full recovery can be achieved with appropriate treatment.

KEY WORDS: Corpus callosum, headache, Mild encephalitis/encephalopathy with reversible splenial lesion

INTRODUCTION

Mild encephalitis/encephalopathy with reversible splenial lesion (MERS) is a rare clinico-radiological condition characterized by the magnetic resonance imaging (MRI) finding of a reversible lesion in the corpus callosum (1). It is typically characterized by a prodromal illness consisting of fever, cough, vomiting or diarrhoea, followed 1-7 days later by encephalopathy. Common neurological symptoms include behavioural change, altered consciousness and seizures. The underlying pathogenesis of MERS is unknown (2). With this case report, we aimed to the key clinical and radiological features of MERS in an adult patient were highlighted. In this case report, the presence of this syndrome will be presented as a diagnosis to be considered in a patient presenting with acute encephalopathy.

CASE REPORT

An 18-year-old female patient admitted to the emergency department with headache and confusion in the morning. About 2 weeks ago, the patient, who applied to an external center due to the same symptoms, was diagnosed with migraine and the medication was started. During physical examination; the patient was lethargic, responding to verbal stimuli, neck stiffness was present, other system and neurological examinations were normal. Wbc: 17,38 10^3/uL, Plt: 284 10^3/uL were found in blood test results and other blood parameters were normal. As a result of lumbar puncture, CSF pressure was 50 cmH_2O, leukocyte:30/mm3 in direct view, WBC: 0.047 10^3/µL, mononuclear leukocytes: 100%, polymorphonuclear leukocytes: 0% in cell count. Brain MRI showed diffuse hyperintensity increase in the corpus callosum splenium (SCC) and diffusion restriction in diffusion-weighted imaging and ADC mapping (Figure 1). The patient was admitted to the Neurology intensive care unit with the diagnosis of MERS. The patient was discharged after 9 days of hospitalization.

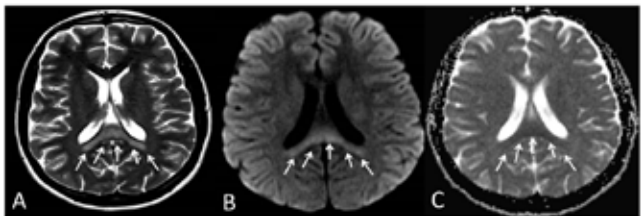

Figure 1: *18-year-old female patient. Axial T2-weighted (A) brain MRI shows diffuse hyperintensity increase in the corpus callosum splenium and diffusion restriction in diffusion-weighted imaging (B) and ADC mapping (C).*

DISCUSSION

Many cases of child-onset MERS with various causes have been reported but adult-onset MERS is relatively rare. The common neurological manifestations of MERS in adult are headache and disturbance of consciousness. However, disturbance of consciousness and seizures are the most common neurological symptoms in children (1,3). Similar to the study, the patient's symptoms resolved rapidly followed by complete neurological recovery (4).

MERS is a rare syndrome with unclear pathogenesis. In a study conducted, WBC elevation in the CSF was found in most of the patients, and in some cases, hyponatremia was found. However, they reported that hyponatremia may be a possible cause of MERS (1). In our case, the patient has elevated WBC in the CSF, but we did not detect hyponatremia.

In any patient with encephalopathy and white matter lesions, acute disseminated encephalomyelitis (ADEM) should be considered in the main differential diagnosis. In ADEM, MRI typically shows the corpus callosum lesions asymmetrical, contrast-enhancing, extend to the white matter and spinal cord (5). In our case brain MRI showed an isolated abnormal signal in the SCC with no contrast enhancement.

CONCLUSION

MERS is a rare syndrome. MERS should be kept in mind in patients with neurological symptoms such as headache and disturbance of consciousness. After diagnosis, full recovery can be achieved with appropriate treatment

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OLGU SUNUMU : KUSMADAN AKUT LENFOBLASTİK LÖSEMİYE

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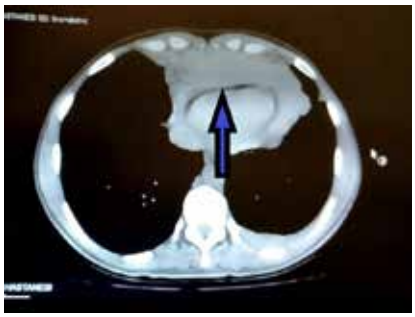
ANAHTAR KELİMELER : Bulantı, lösemi, kitle, kusma

GİRİŞ

Akut lenfoblastik lösemi (ALL), kemik iliği, kan ve ekstramedüller bölgelerdeki lenfoid progenitör hücrelerin malign transformasyonu ve proliferasyonudur. ALL'nin %80'i çocuklarda ortaya çıkarken, yetişkinlerde ortaya çıktığında yıkıcı bir hastalığı temsil eder[1]. Tedavi edilmeyen ALL, birkaç ay içinde ölümle sonuçlanır[2]. Başvuru anında, semptomlar belirsiz olma eğilimindedir ve konstitüsyonel şikayetler görülür[3]. Bu sebeple ALL tanısı acil servis gibi yoğun branşlarda atlanabilmektedir. Bu vakamızı acilde nadir görülen bir olgu olduğu için sunduk.

OLGU SUNUMU

33 yaşında erkek hasta kliniğimize bulantı kusma ile başvurdu. Glaskow koma skoru: 15, genel durum iyi, bilinci açık, koopere, oryante idi. Hastanın vitallerinde TA:127/78 mmHg, nabız:96/dk, SaO2:%99, ateş:36.8 °C idi. Özgeçmişinde bilinen hastalık öyküsü olmayan hastanın 3 gündür boğaz ağrısı için antibiyotik aldığı öğrenildi. Fizik muayenesinde solunum sesleri olağan, ek ses duyulmadı. Batın muayenesinde periumblikal hassasiyet saptandı. Hasta izlemde ek şikayet olarak yatarken daha zor nefes aldığını oturunca rahatladığını belirtti. Çekilen PA AC grafisinde sol hemitoraksta plevral efüzyon saptandı. Laboratuvar tahlilllerinde; WBC : 125 700 mm^3, HGB : 12.7 g/dL, PLT :29 000 mm^3, LY# : 111 400 mm^3, LDH : 2855 U/L, AST : 125 IU/L, ALT : 73 IU/L. İleri görüntüleme için çekilen toraks BT'de anterior mediastinal düzeyde, epikardiyal yağlı planları infiltre etmiş, kalınlığı 3.5 cm'ye varan nodüler kitlesel yer kaplayıcı oluşum izlendi (Şekil 1). Bu noktada ön tanılarımız artık hematolojik maligniteler, özellikle de lösemi ve lenfomaydı. Kardiyoloji ve dahiliyeye konsülte edilen hasta ileri tetkik ve değerlendirme için hematoloji servisi olan bir hastaneye sevk edildi. Hasta ALL tanısı aldı.



Şekil 1. Toraks BT'de kitle görüntüsü

TARTIŞMA

ALL'nin klinik belirtilerinin çoğu, kemik iliği, periferik kan ve ekstramedüller bölgelerde malign, kötü farklılaşmış lenfoid hücrelerin birikimini yansıtır. Prezentasyon, yapısal semptomlar ve kemik iliği yetmezliği belirtilerinin (anemi, trombositopeni, lökopeni) bir kombinasyonu ile spesifik olmayabilir. Yaygın semptomlar arasında 'B semptomları' (ateş, kilo kaybı, gece terlemeleri), kolay kanama veya morarma, yorgunluk, nefes darlığı ve enfeksiyon bulunur. Ekstramedüller bölgelerin tutulumu sıklıkla meydana gelir ve hastaların %20'sinde lenfadenopati, splenomegali veya hepatomegali'ye neden olabilir. T -hücreli ALL aynı zamanda mediastinal bir kitle ile de ortaya çıkabilir[4]. ABD'de, yılda yaklaşık 6000 B-ALL ve T-ALL vakası teşhis edilir ve bu, 100.000'de yaklaşık 1.7'lik bir yıllık insidans oranına tekabül eder[5]. Sonuç olarak, acil servise üst solunum yolu enfeksiyonu ya da gastroenterit benzeri semptomlar ile gelen hastalarda da nadir tanılar akılda tutulmalı, hekim şüpheli yaklaşmalı ve ileri tetkikleri ihmal etmemelidir.

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A FACTOR THAT CAN AFFECT THE PROGNOSIS OF COVID-19: SPONTANEOUS PNEUMOMEDIASTINUM

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INTRODUCTION

Pneumomediastinum is the presence of air or a different gas in the mediastinum. Pneumomediastinum can be evaluated under two headings: spontaneous (SPM) or traumatic. Trauma-induced pneumomediastinum can occur by blunt or penetrating trauma to the chest wall or iatrogenically. Spontaneous pneumomediastinum is rare in young people[1] and usually resolves without intervention. An underlying trigger is present in 40% to 60% of cases[2]. Spontaneous pneumomediastinum is most commonly associated with asthma. It is more common to see in young men. Esophageal perforation should be considered in the differential diagnosis, and if there is clinical suspicion, a contrast esophagogram should be performed[3]. Patients usually describe stabbing chest pain and shortness of breath as symptoms. The presence of subcutaneous emphysema on physical examination supports the diagnosis. Chest radiography may be sufficient in the radiological diagnosis, but thorax CT is more sensitive in diagnosis[2]. Its management is clinical monitoring, analgesia, and oxygen support. Surgery may be considered in cases of tracheobronchial compression[4]. Here, we presented to the emergency department with complaints of chest pain, shortness of breath, and cough. We will discuss a case with Covid-19 pneumonia accompanied by spontaneous pneumomediastinum in the thorax computed tomography.

CASE REPORT:

A 16-year-old male patient presented to the emergency department with complaints of chest pain, shortness of breath, and cough. In the physical examination, wheezing and minimal subcutaneous emphysema was detected in the lung. No abnormality was observed in the other physical examinations. Arrival vital signs: blood pressure: 150/70 mmHg pulse: 126 beats/min spo2: 90 fever: 36.5°C degrees, respiratory rate: 18 breaths/min. The patient's ECG was consistent with sinus tachycardia, and no additional pathology was observed. In his history, it was learned that he used medication for asthma when he was nine years old but later quit, had another known disease, was not a regular medication, and had not received any trauma to his chest. Laboratory values: leukocytes(WBC):19.62 10^3/mm3 (4-10) CRP:5 (0-0.5) Blood Gas: ph:7.32 pco2:60.3 mmHg HCO3:23.8 mEql/L and no other abnormal value was observed. Focal ground glass densities were observed in both lungs on thorax CT. Findings were evaluated as Covid-19 pneumonia. Free air density in the accompanying mediastinum was seen in thorax tomography (Figures 1,2,3,4). The patient was evaluated for spontaneous pneumomediastinum and Covid-19 infection. No invasive or non-invasive mechanical ventilation support was required for Covid-19. The mask was followed with oxygen. The pediatric surgeon did not consider emergency surgery for pneumomediastinum; the patient was kept under clinical follow-up. Analgesia and oxygen support were provided. He was admitted to the pediatric health and diseases service due to Covid-19 pneumonia.

DISCUSSION:

Spontaneous pneumomediastinum is a rare complication of viral pneumonia[5]. Reported cases have been reported in severe acute respiratory syndrome (SARS) virus infections, influenza, and bacterial pneumonia, with rare strains in immunosuppressed patients[5]. Pneumomediastinum associated with Covid-19 has been reported very rarely[6]. When the literature was examined, it was seen that spontaneous pneumomediastinum cases associated with Covid-19 were among adults. In our case, unlike the literature, our case is a 16-year-old male adolescent. In our case, the main etiology focused on explaining the mechanism of pneumomediastinum is alveolar damage due to viral pneumonia. Intraalveolar pressure due to alveolar damage (such as the valsalva maneuver caused by coughing) causes alveolar rupture. Air leaks from the ruptured alveoli into the mediastinum[8]. Although it was not associated with a severe course of Covid-19 pneumonia in our report of patients with spontaneous pneumomediastinum, it is still unclear to what extent this applies to other patients with Covid-19 infection. Therefore, further research and case reports are needed to evaluate whether spontaneous pneumomediastinum is an indicator of disease severity in Covid-19 pneumonia.

CONCLUSION:

Spontaneous pneumomediastinum is a rare condition we may encounter in Covid-19 patients. Since it is a factor that may aggravate the prognosis, it should not be forgotten that the cases should be evaluated in terms of pneumomediastinum when examining chest X-rays and thorax tomography. These patients should be kept under close follow-up and hospitalized.

KEYWORDS: Pneumomediastinum, Covid-19, Pneumonia, Cough

FIGURES

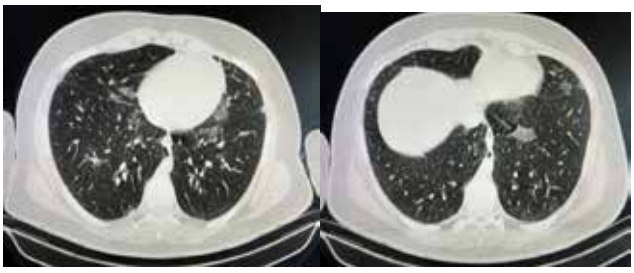

FIGURE 1,2:FOCAL FROSTED GLASS DENSITY ASSOCIATED WITH COVID-19

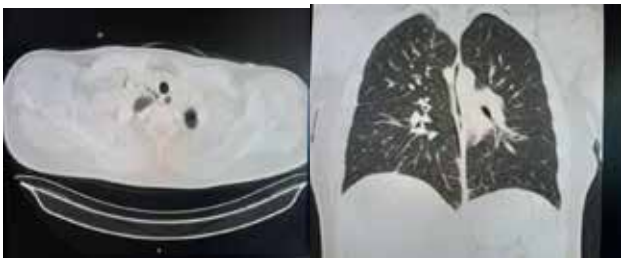

FIGURE 3,4: FREE AIR DENSITY OBSERVED IN SPONTANEOUS PNEUMOMEDIASTINUM

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METAMFETAMİN KULLANIMININ ACİL BAKISIYLA CİLT ÜZERİNDEKİ ETKİLERİ

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ANAHTAR KELİMELER: irritan kontakt dermatit ,meth akarları, , metamfetamin

ÖZET

Metamfetamin, bir kişinin sağlığına ve görünümüne önemli ölçüde zarar verebilecek güçlü ve bağımlılık yapan bir psikomotor uyarıcıdır. Enjeksiyon, tüttürme, yeme, içme koklama gibi çeşitli kullanım metotları bulunmaktadır.[1] Metamfetaminin acil, kardiyak, nörolojik etkileri olduğu gibi özellikle uzun vadede görünüşü etkileyen dental ve dermatolojik etkileri de bulunmaktadır. Metamfetamin kullanımı cilt kan akımını azaltıp cilt bariyerine hasar verir. Ek olarak meth akarları denilen böcek içerikli dokunsal halüsinasyonlardan kaçınma içgüdüsü ile yoğun bir şekilde kaşınma ve yüzü toparlama içgüdüsü yüzünden oluşan yaralar görülmektedir.[2] Bu olgu sunumunda metamfetamin kullanımı sonucunda oluşabilecek cilt lezyonlarına dikkat çekmeyi amaçladık.

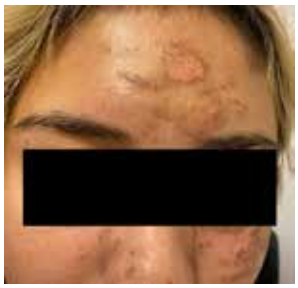
OLGU

16 yaşında kadın hasta, bilinen ITP tanısı mevcut. Acil servisimize 4 gün önce sol göz kapağı altındaki sivilceyi sıktıktan sonra sol göz kapağının üstünde ve etrafında giderek artan şişlik ve göz çevresinde oluşan yaralar ile tarafımıza başvurdu. Sol gözde 1 gün önce başlayan ve giderek artan bulanık görmesi mevcuttu. 11 aydan beri haftada 2-3 kez tüttürme yöntemi ile metamfetamin kullandığı öğrenildi. ITP için Revolade kullanıyor. Vitalleri stabildi.Yapılan inspeksiyonda yüzde alın bölgesinde sol yanında yaklaşık 5 cm alanda üzeri krutlu yer yer erode olan lezyonlar(resim 1) her iki göz kapağında sol göz kapağında daha fazla olacak şekilde yer yer krutlu,erode alan(resim 2) ve burun sol yanında sol gözün açık bölgeye uzanan yaklaşık 10 cm alanda yer yer krutlarla kaplı erode alan(resim 3) mevcuttu. Diğer fizik muayeneleri olağandı. Hastanın alınan kanlarında CRP:13.20 wbc:11.2*10^3 mikrolitre hb:8.4 g/dL plt:163*10^3 mikrolitre şeklindeydi. Hastanın yapılan görüntülemeleri olağandı.Göz hastalıklarına ve dermatolojiye konsülte edildi. Göz hastalıkları tarafından travmatik epitel defekti düşünüldü.

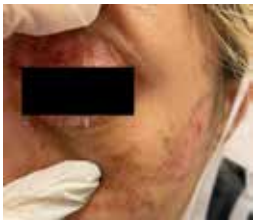
Moksifloksasin hcl 6*1 suni gözyaşı 24*1 lubrikant 3*1 Basitrasin 2500 U.I.

Neomisin Sülfat 25 mg pomad reçete edildi. Poliklinik kontrol önerildi. Dermatoloji tarafından irritan kontakt dermatit ve kimyasal yanık olabileceği düşünüldü ayrıntılı muayene için poliklinik kontrol önerildi.

Yanak ve alın bölgesine %2 sodyum fusidat 2*1 fito krem 2*1 uygulanması ve göz çevresi için Basitrasin 2500 U.I. ,Neomisin Sülfat 25 mg pomad düşünüldü.1000 cc SF ile göz yıkaması yapılan hasta aciller anlatılarak öneriler ile taburcu edildi.



Yüzde alın bölgesinde sol yanında yaklaşık 5 cm alanda üzeri krutlu yer yer erode olan lezyonlar (resim 1)



Sol göz kapağında daha fazla olacak şekilde yer yer krutlu, erode alan (resim 2)

Sol yanak bölgesinde sol gözün açık bölgesine uzanan yaklaşık 10 cm alanda yer yer krutlarla kaplı erode alan (resim 3)

SONUÇ

Metamfetamin kullanımı hayati risklere sebebiyet vereceği gibi kozmetik komplikasyonlara da sebep olabilir. Deride görülen bulgular her zaman patogonomonik olmamakla beraber diğer nedenler ekarte edildikten sonra dermatologların ve acil tıp uzmanlarının bu tür olgularda olası ilaç bağımlılığından şüphelenmeleri erken tanı konulmasını sağlayarak uygun tedavinin planlanmasında yol gösterici olacaktır.[3] Bu olgumuzda metamfetamin kullanan bir hastanın cildinde oluşan lezyonlara dikkat çekmek istedik.

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THE ROLE OF HYPNOSIS IN A PATIENT WHO DOES NOT WANT TO GIVE BLOOD SAMPLES IN THE EMERGENCY: A CASE REPORT

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INTRODUCTION

In this case report; We aimed to present the patient who applied to the emergency department, who did not want to be tested due to fear of giving blood sample, but was discharged after blood sample was taken comfortably with hypnosis application.

CASE

A forty six-year-old female patient was admitted to the emergency department with complaints of headache and fatigue. She stated that these complaints were occasional, but this time her complaints did not go away for a few weeks. It was learned that the patient avoided going to the hospital because of the fear of giving blood samples for years. She had no known disease or drug use in her personal history. Physical examination was normal. Blood tests were requested from the patient, but the patient stated that she did not want to give blood sample. Despite our insistence, she refused to give a blood sample. Although her relatives tried to persuade the patient, she showed serious resistance. The patient accepted our offer to take blood under hypnosis and stated that he would try to give blood with this method. Thereupon, the patient was taken to a suitable environment and stretcher in the emergency room. It was stated that for the hypnotic intervention, firstly, a safe field study will be conducted on the patient based on representation systems (visual, auditory, kinesthetic) in which she will feel peaceful, happy and safe. Preliminary information about this intervention was given. The hypnosis session was initiated with an eye fixation technique and breathing exercises based on standard procedures. For the patient whose eyes were closed, recommendations were made according to the representation systems, and the stages of induction and relaxation were deepened. Then, while safe field work was being done on the patient, on the other hand, a healthcare worker opened a vascular access to the patient and took the patient's blood samples. After the blood sample collection was completed, the safe field study was finished to the patient. The patient was awakened after deep breathing exercises. During this hypnosis session, which lasts about 15 minutes, the patient; she gave samples for blood tests very comfortably and happily. The patient, who stated her happiness after the procedure, continued her next procedures in a relaxed way.

DISCUSSION

Hypnotherapy is a complementary intervention. It is used for therapeutic purposes in situations involving certain emotional, psychological or physical problems (1). It has almost no side effects and is an inexpensive method unlike commonly applied drug treatments (2).

Hypnosis has been used in medicine for about 250 years. Still, emergency clinicians rarely use it in emergency rooms or prehospital settings. The limited number of clinical studies and case reports suggest that hypnosis may be effective in a wide variety of conditions in emergency medical care. It can be used to provide analgesia and sedation, to reduce fear and anxiety, to increase cooperation in procedures in children, and to facilitate the diagnosis and treatment of acute psychiatric conditions (3).

Hypnosis is a valuable technique in the management of patients who fear medical treatment. Hypnosis leads to stronger concentration, more focused attention, better acceptance and more effective to be suggestions. In the case of medical phobia, it has been shown in the literature that hypnotherapy can reduce pain and fear (4).

In our case, she was a patient who avoided going to the hospital due to the fear of giving blood samples for years, but was admitted to the emergency room because her condition became serious. The hypnosis application, which was applied for a very short time, was successful in reducing this anxiety of the patient. The patient continued the other procedures comfortably and left the emergency room happily.

Consequently, hypnosis application is a method that can be used by emergency doctors according to the needs of patients who are fear of giving blood samples.

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AN ACUTE STROKE CASE AFTER MARIJUANA AND AMPHETAMINE USE, A CASE REPORT

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KEYWORDS: Marijuana, amphetamine, stroke, case report, cerebrovascular disease

INTRODUCTION

Hashish or marijuana is the most widely used psychoactive substance worldwide after alcohol and tobacco(1) .They are produced from the plant known as cannabinoid, which has varieties more than 60 and its most widely known form is 8-9 tetra hydrocannibinoids(2). Tetrahydrocannibiol spreads rapidly in the body and interacts with its receptors especially in the brain, heart and blood vessels.(3) The excepted effects of marijuana are euphoria, self-confidence and relaxation, and because it is non addictionary it is perceieved as safe amoung young people. However, increasing publications all over the World Show that cannabis is a serious risk factor for cerebrovascular events.(4)

Amphetamine acts as a weak neurotransmitter like adrenaline and dopamine and is used to create euphoria. It has longer duration of action than other similar psychoactive substances.(5) It has been shown that amphetamine use, like cannabis, is associated with both ischemic and hemoragic cerebrovasculer events. (6)

In this case, we aimed to describe a young male patient who applied to the emergency department with acute ishemic cerebrovascular disease after combined use of cannabis and amphetamine.

CASE REPORT

A 25 year old male patient was brought to the emergency room by his relatives with a statement of falling on the ground at home. Relatives stated that the patient could not stand and walk. The patient's vital signs were stable on arrival. In the patient's neurological evamination; he was conscious, had limited orientation and cooperation, had total aphasia and hemiplegia in the right lower and upper extremities, the sole skin reflex was found to be extentor and the neurological examinations of his left extremities were found to be normal. In his other sytstem examinations there was no pathology detected. It was learned that the patient did not have any known comorbidity and had a history of substance use. After the physical examination, urine drug test, computerized brain tomography (CBT), CBT angiography and routine laboratory test were requested from the patient. In the examinations made; no pathology was detected in the patient's laboratory, CBT and CBT angiography images were normal. It was observed that there were amphetamine, opiate and cannabis positivity in the urine drug test. Diffusion magnetic resonance (MR) imaging was requested from the patient, who was aphasic and right hemiplegic in the follow up, with a preliminary diagnosis of acute cerebrovascular disease. In MR imaging; acute diffusion restriction in the left temporal region followed. The patient was consulted to neurology. The patient was diagnosed with acute ischemic cerebrovascular accident secondary to marijuana use and peroral 300 mg ecopirin was started. Hospitalization of the patient was planned for follow-up and treatment.

DISCUSSION

Stroke is less common in young adults than in the older age group. The underlying causes are similarly different. Abuse of addictive substances is also a rare cause. Today, the use of addictive illegal substances is increasing in young people. There are three main mechanism for the effects of cannabis on the brain: vasospasm, vasculitis and hypotension with secondary impairment in autoregulation of cerebral blood flow. (7) Vasospasm has been suggested as a mechanism for stroke, which is generally presumed to be related to cannabis, as in our case and normal CCT angiography supports vasospasm and may explain the early occurrence of complaints.

There is an increasing number of studies in the literatüre that cannabis causes stroke. The risk of acute stroke was found to be %41 higher in cannabis users between the ages of 18-49 compared to non-users in a multicenter study made by Desai and his friends in 2019.(8) Our case is also in this age range, which supports this study. In 2004, Geller T and his friends reported 3 cerebellar infarcts after marijuana use. (2) In our case, the infarct was in the temporal lobe, and there are case reports in the literature involving different parts of the brain. In the case published by Inal and his friends in 2014, temporal lobe infarction was observed, which supports our case. (4)

Due to the euphoric effect and high addiction potential of amphetamine, it's use is increasing. Although there are frequant case reports with hemorrhagic stroke, cases of ischemic stroke after amphetamine use have also been published. (2,9,10,11) Vasospasm can also be the cause of these strokes. (9) In a study conducted by Damian G Zuloaga and his friends in 2016 by giving methamphetamine on mice, it was observed that infarction occured in the middle cerebral artery(MCA), especially in male mice. Although not in the middle cerebral artery, infarction was also observed after amphetamine use in our case. (10) Again in 1999, the incidence of stroke after methamphetamine use published by Jose A Perez, Edward L Arsura, and Stephen Strategos also supports the fact that young patients had a sroke after amphetamine use, although not as young as in our case.(11)

CONCLUSION

Young patients should be screened for a history of substance abuse and toxicology, especially when there is no other obvious cause for stroke. İt should be kept in mind that chronic use of cannabis may have serious respiratory, cardiac and central nervous system effects.

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ANALYSIS OF PATIENTS EVALUATED WITH A PREDIAGNOSIS OF CHEST PAIN BY THE 112 EMERGENCY CALL CENTER

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INTRODUCTION

Chest pain is the most important symptom suggestive of atherosclerotic heart disease. Because of the high morbidity and mortality risks of patients with this complaint, they should be examined with further investigations. It should be known that chest pain can be the cause of different diseases and its differential diagnosis should be done well. For this reason, calls made due to chest pain warn both 112 health personnel and hospital health workers to act more carefully and quickly. In this study, it was aimed to perform clinical and diagnostic analysis of patients prediagnosed with chest pain.

METHOD

Patients aged 18 years and older who were evaluated with chest pain by the 112 Emergency Call Center in July 2022, were included in the retrospective study. The patients were examined in terms of age, gender, diagnosis made in the hospital, clinic hospitalized, admission to the intensive care unit, angiography application and their final status. IBM SPSS Statistics for Windows, Version 22.0 software package was used to evaluate the data obtained from the patients. Mean ± standard deviations were used for continuous variables and percentages were used for categorical variables.

RESULTS

The data of 92 patients referred to Mengücek Gazi Training and Research Hospital with chest pain by Erzincan 112 Emergency Call Center in July 2022 were analyzed.Forty (43.5%) of the patients were male, 52 (56.5%) were female, mean age was 61.28 ± 18.10 (min 18, max 94).In MGEAH; 56 patients (60.9%) were treated with the diagnosis of chest pain, 2 patients (2.2%) Arrest, 10 (10.9%) atherosclerotic heart disease, 4 (4.3%) palpitations, 2 patients (2.2%) Atrial fibrillation, 1 patient (1.1%) pneumonia, 1 patient (1.1%) pleural effusion, 2 patients (2.2%) CHF + AC edema, 2 patients (2.2%)) abdominal pain diarrhea, 1 patient (1.1%) syncope, 1 (1.1%) lower extremity arterial embolism and thrombosis, 5 (5.4%) dyspnea, 1 (1.1%) COVID, 1 patient (1.1%) was diagnosed with cystitis and 1 patient (1.1%) with general pain diagnosis.

Of the patients, 68 (73.9%) were treated in outpatient treatment, 13 (14.1%) were in the cardiology service, 2 (2.2%) were in the anesthesia intensive care unit, 4 (4.3%) were in the coronary intensive care unit, 2 (2.2%) in the cardiovascular surgery service, 1 (1.1%) in internal medicine service, 1 (1.1%) in chest diseases service, 1 (1.1%) in general surgery followed up. 20 (21.7%) of these patients were treated in the intensive care unit during their hospitalization. Coronary angiography was performed in 10 patients (10.9%), and coronary angiography was planned for 3 patients (3.3%) but the patients refused. Of the patients, 77 (83.7%) were discharged, 5 (5.4%) died, and 10 (10.9%) were considered as follow-up patients.

CONCLUSION

This study is a reminder that chest pain is an important finding of atherosclerotic heart disease and other diseases should be considered in the differential diagnosis

KEYWORDS: atherosclerotic heart disease, chest pain, emergency call center

PRONE POSITION IN INTUBATED COVID-19 PATIENTS

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KEYWORDS: endotracheal intubation, prone position, SARS-CoV-2, COVID-19

OBJECTIVE:

The number of hospitalized patients has grown due to the coronavirus disease 2019 (COVID-19) pandemic, particularly those with respiratory problems. Prone positioning improves survival in moderate-to-severe acute respiratory distress syndrome (ARDS) unrelated to the novel coronavirus disease (COVID-19). The effectiveness of the prone position in patients who are not intubated with COVID-19 is also well established. However, there is lack of randomized trials and the paucity of research on the effectiveness of the prone position for intubated patients. The aim of this study is to assess the prone position effects among intubated COVID-19 patients on survival to hospital discharge and need of tracheostomy.

METHODS:

A systematic review of PubMed, Scopus, Web of Science and Cochrane electronic databases was conducted from inception to September 2022. This study was conducted in accordance with Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. Using a random-effects model, the odds ratios of survival to hospital discharge (SHD) and needed of tracheostomy across study arms was compared by calculating a summary relative risk with 95% confidence intervals. The results of individual studies were also summarized qualitatively.

RESULTS:

Three studies meet inclusion criteria and were included in this meta-analysis. Survival to hospital discharge (SHD) among patients treated with and without prone position was reported by two trials. Pooled analysis showed that SHD in intubated COVID-19 patients treated with prone position was 59.0%, compared to 74.1% for patients treated without prone position (OR = 0.61; 95%CI: 0.47 to 0.77; p<0.001). Polled analysis showed that among patients with and without prone position tracheostomy ratio varied and amounted to 17.4% vs. 12.0%, respectively (OR = 0.87; 95%CI: 0.05 to 16.36; p=0.93; Figure 2).

CONCLUSIONS:

In intubated COVID-19 patients, due to our meta-analysis prone position is ineffective, drastically lowers survival to hospital discharge, and raises the ratio of tracheostomies. To clearly evaluate the usefulness of the prone position among COVID-19 patients, randomized research on this issue are required.

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BACAKLARIM TUTMUYOR!!

GİRİŞ

Spinal kord oldukça karmaşık bir kemik bağ yapısı ve hareket sistemi çerçevesinde, yaşamsal önem ve fonksiyonları olan bir omurilik segmentini korumaktadır. Spinal kord travması motor fonksiyon, duyu, refleks aktivite, mesane bağırsak kontrolünde kayıp ile sonuçlanır ve acil servise sıklıkla trafik kazası, darp, düşme gibi nedenlerle başvuran hastalarda görülür.

VAKA

40 yaş kadın hasta araç içi trafik kazası sebebiyle kol ve bacaklarda kuvvet kaybı şikayeti ile acil servise başvurdu. Hastanın vitalleri doğal, fizik muayenesinde quadriplejik (sol üst extremite 1/5, alt ekstemiteler bilateral 1/5), derin tendon refleksleri bilateral arefleksi, anal sfinkter tonusu yoktu. Yapılan görüntülemelerinde C4-5 dislokasyon saptandı. Nöroşurirji tarafından acil yapılan operasyon sonrası alt ekstremite kuvvet kaybı 2/5, sol üst extremite kuvvet 3/5 saptanmış olup rehabilitasyon sürecine başlanmıştır.

SONUÇ

Olası omurga yaralanması olan hastanın acil serviste değerlendirilmesi esnasında yaralanma mekanizması ile ilgili doğru bir anamnez alınmalı ve orta hat omurga ağrısı, parestezi, işlev kaybı veya diğer nörolojik semptomlar değerlendirilmelidir.

DAL KAYDI DÜŞTÜM HOCAM!

GİRİŞ

Pelvis yürüme ve oturma sırasında gözdenin ve üst ekstremitelerin yükünü alt extremiteye aktaran önemli bir iskelet yapısıdır. Aynı zamanda önemli vasküler, nöral, genitoüriner yapılar ile gastrointestinal sistemin bir bölümü pelvis içerisindedir. Pelvis kırıkları genellikle yüksek enerjili yaralanmalar sonucu oluşur. Pelvis kırıkları minimal ayrılmış kırıklardan; ölüm riski yaratan pelvis içi kanamaya sebep olan tamamen ayrılmış pelvis halka yaralanmalarına kadar geniş bir yelpaze ile karşımıza çıkabilir.

VAKA

70 yaşında erkek bilinen KML tanısı olan hasta, 2 metre yükseklikteki ağaçtan düşme sonrası kalça ağrısı şikayeti ile acil servise getirildi. Vitalleri normal, yapılan muayenesinde sağ kalçada hassasiyet saptandı. Nörovasküler muayenesi doğaldı. Yapılan görüntülemelerinde sağ asetabulum, sağ iliak kanat, sağ pubik kolda fraktür, sağ üreter trasesinde retroperitoneal alanda hemoraji saptandı. Ortopedi ile konsulte edilen hasta, kanama takibi ve operasyon için Ortopedi Yoğun Bakım Ünitesine yatırıldı. Ortopedi tarafından opere edilen hasta şifa ile taburcu edildi.

SONUÇ

Acil serviste multitravmalı bir hasta değerlendirilirken hastayı getiren ekibin verdiği bilgiler, yaralanma etyolojisi, yaralanma mekanizması, hastanın klinik durumu ve fizik muayeneye bakılarak pelvis travmasından şüphelenilebilir. Birincil muayenede kanama ve yaşamı tehdit eden yaralanmalar ekarte edildikten sonra fizik muyenede pelvise odaklanılır. Pelviste hematom, dermaabrazyon, ekstremite uzunluk eşitsizliği, anormal pelvis iç ve dış rotasyon deformitesi varlığı araştırılır. Eşlik eden yaralanmalara dikkat edilmeli, vakamızda olduğu gibi pelvis içi organ, sinir ve damar yaralanmaları unutulmamalıdır.

GÖĞSÜM PATLAYACAK GİBİ AĞRIYOR

GİRİŞ

Pnomotoraks, viseral ve parietal plevra arasındaki potansiyel boşluğa serbest hava girmesi ile oluşur. Primer pnomotoraks, blinen akciğer hastalığı olmaksızın spontan veya travmatik olarak meydana gelir. sekonder pnomotoraks, altta yatan akciğer hastalığı olanlarda meydana gelir.

VAKA

21 yaş erkek hasta, sigara içerken aniden başlayan göğüs ağrısı ile başvurdu. Vitalleri doğaldı. Fizik muayenede sağ akciğerde solunum sesi alınamadı. Hastanın yapılan görüntülemelerinde sağ ac de volüm kaybı saptandı. Spontan pnömötoraks tanısı ile göğüs cerrahiye konsulte edildi. Göğüs cerrahi tarafından tüp torakostomi ile serviste takip edilen hasta şifa ile taburcu edildi.

SONUÇ

Acil servise batıcı vasıflı omuz veya göğüs ağrısı ile başvuran genç erkek hastalarda özellikle sigara içme öyküsü ve uzun boy fenotipi mevcutsa ilk düşünülmesi gereken tanı spontan pnomotorakstır. Bu hastalar çoğunlukla hemodinamik parametre bozukluğu olmadan sadece ağrı şikayeti ile başvururlar. Bu hastalarda en önemli ipucu fizik muayenede akciğer seslerinin alınamamasıdır. Bu yüzden hastaların ayrıntılı fizik muayenesi yapılmalıdır.

NE KONUŞTUĞU ANLAŞILMIYOR HOCAM!

GİRİŞ

Temporomandibuler eklem (TME), temporal kemik ve mandibula kondili arasındaki bikondiler tip eklemdir. Başın tek hareketli eklemidir. TME'nin çıkığı nöromuskuler fonksiyondaki dengesizlikten ya da yapısal eksiklikten kaynaklanır. En yaygın olanı anterior çıkıktır. TME çıkıkları tek yada çift taraflı olabilir. Çift taraflı TME çıkığı nadir görülmektedir. Bu vakada incelemek istediğimiz iki taraflı TME çıkığıdır.

VAKA

80 yaşında kadın hasta, yakınları tarafından sabahtan beri olan konuşma bozukluğu ile acil servise getirildi. Hastanın çene hareketlerinde kısıtlılık olduğu ve eliyle çenesi tutarak ağrısı olduğunu ifade ettiği fark edildi. Hastanın vitalleri ve nörolojik muayenesi doğaldı. Hastanın yapılan görüntülemelerinde iki taraflı temporomandibuler eklem dislokasyonu saptandı. Acil serviste sedasyon eşliğinde redükte edildi. Elastik bandaj uygulanarak taburcu edildi.

SONUÇ

Öyküde aşırı esneme, gülme, kusma, nöbet esnasında ağzın zorla açılması, diş çekimi gibi ağız açıklığının arttığı durumların olması TME çıkığı hakkında bize ipucu verebilir. Ayrıca acil servise ani başlayan ağzını kapatamama ve çene ağrısı şikayeti ile başvuran hastalarda TEM dislokasyon tanısı mutlaka akılda tutulmalıdır.

BACAĞIMI KESECEKLER!

GİRİŞ

Travma hastaları, acil servis başvurularının önemli bir kısmını oluşturmaktadır. Travma vakaları içinde de ayak yaralanmaları acil serviste yaygın olarak görülen bir durumdur. Ayrıca ayak bileği ekleminin hareketliliği göz önüne alındığında ayak bileği yaralanmaları yaygın bir şikayettir ve sıklıkla atlanır. Acil servise yapılan tüm başvuruların %4ünü temsil ederler. Ayak bileği travmalarına tarsal kemik travmalarıda eşlik edebilir. Tarsal kemikler arasında da en sık kalkaneus kırığı görülür. Biz de bu vakamızda ayak bileğiyle birlikte kalkaneus açık fraktürünü sunmayı amaçladık.

VAKA

10 yaşında çocuk hasta, çim biçme makinesine ayağını kaptırma şikayeti ile acil servise 112 tarafından getirildi. Hastanın vitalleri doğal, fizik muayenesinde sol ayak bileği lateral yüzde aktif kanamalı açık yarası vardı. İlk müdahelenin ardından yapılan görüntülemede sol fibula distal fraktürü, lateral malleol fraktürü, kalkaneus fraktürü mevcuttu. Ortopedi tarafından opere edilen hasta, alçı ile takip edilmek üzere ortopedi servisinden taburcu edildi.

SONUÇ

Açık ayak bileği kırıklarında en önemli prognostik faktör yaralanmadaki enerji miktarı ve ilgili yumuşak doku hasarının miktarıdır. Açık kırıklar hızlı cerrahi tedavi gerektirir. Ortopedisti beklerken yara bölgesini salinle yıkamak, tetanoz profilaksisisi ve antibiyoterapi yapmak, yaralanma bölgesine atel uygulamak gerekir. Ayrıca bu yaralanmalarda vasküler patolojiler ekarte edilmelidir.

ÖLÜMLÜ BOĞA SALDIRISI

Talha Karahan [1], Levent Şahin [1]
1Kafkas Üniversitesi Tıp Fakültesi, Acil Tıp AD, Kars, Türkiye

ÖZET

Nüfusun çoğunun şehirlerde yaşamasına rağmen hayvan saldırıları sonucu birçok yaralanma ve ölüm meydana gelmektedir. Bu yaralanmalar genellikle boğa, at veya büyük köpeklerin saldırısı sonucu vücuda yüksek enerjili bir travma uygulayıp ciddi yaralanmalara hatta ölümlere neden olabilmektedir. Meslekleri veya geçim kaynakları büyükbaş hayvanları ile olan kişiler büyük risk altındadır. Bu çalışmamızda boğa saldırısı sonrası kafa travması olup hayatını kaybeden bir olguyu ele aldık. 13 yaşındaki erkek hasta boğa yaralanması sonrasında 112 ile acil servise getirildi. Hastanın gelişinde genel durumu kötü, GKS 6, pupiller anizokorik idi. Hasta entübe edilip tomografileri çekildi. Çekilen beyin tomografisinde generalize beyin ödemi ve SAK vardı. Beyin cerrahiye konsulte edilen hasta ameliyata alındı. Hasta ameliyat sonrası yoğun bakıma çıkarıldı. Yatışının 4. gününde tedavilere yanıt vermeyen hasta ex kabul edildi. Hayvancılıkla uğraşma zorunda kalan birçok insan kendisi ya da yakınlarının ölümüne neden olabilecek hayvanlarla yakın temas halindedir. Boğa saldırıları gibi yüksek enerjili travmalar sonrasında mortalitenin yüksek olabileceği akıldan çıkarılmamalıdır. Böylesi büyük hayvanlarla daha profosyonel erişkinlerin koruyucu ekipmanlarla ilgilenmesi daha uygundur.

ANAHTAR KELİMELER: Boğa saldırısı, beyin ödemi, yaralanma, hayvancılık

GİRİŞ

Şehirleşmenin giderek artmasına rağmen dünyanın her yerinde hayvan saldırıları sonucu birçok yaralanma ve ölüm meydana gelmektedir. Tüm yaralanmalar arasında oranları fazla olmamasına rağmen, ciddi olma eğilimindedirler (1). Bu yaralanmalar genellikle boğa, at, domuz veya büyük köpeklerin saldırısı sonucu vücuda yüksek enerjili bir travma uygulayabilir ve muhtemelen ciddi yaralanma veya ölümle sonuçlanabilir. Bu yaralanmalar için en büyük risk altındaki kişiler, meslekleri veya geçim kaynakları büyükbaş hayvanları içeren kişilerdir (2). Boğaların neden olduğu yaralanma ve ölümler, Türkiye'nin tarım ve hayvancılığın yaygın olduğu bölgelerinde daha sık görülebilmektedir. Ülkemiz Kars ili de büyükbaş hayvan yetiştiriciliğinde başı çekmektedir. Bu çalışmamızda boğa saldırısı sonrası kafa travması olup hayatını kaybeden bir olguyu ele aldık.

OLGU

13 yaşındaki erkek hasta boğa yaralanması sonrasında 112 ile acil servise getirildi. Hasta yakınından aldığımız anamnezde boğanın zincirini eline dolayan hastayı yaklaşık 100 metre sürüklediğini öğrendik. Hastanın gelişinde genel durumu kötü tansiyon arteryal 60/40, nabız 120, gks 6, pupiller anizokorik vücudunun çeşitleri yerlerinde abrazyonları mevcuttu. Hasta entübe edilip tomografileri çekildi. Çekilen beyin tomografisinde generalize beyin ödemi ve sak kontuzyonları vardı. Beyin cerrahiye konsulte edilen hasta inotroplarla ameliyata alındı. Hasta ameliyat sonrası yoğun bakıma çıkarıldı. Yatışının 4. gününde tedavilere yanıt vermeyen hasta ex kabul edildi.

TARTIŞMA

Hayvanlardan kaynaklanan yaralanmalar, toplumun sosyokültürel ve sosyoekonomik özelliklerinin yanı sıra çevrenin ekolojik yapısı ile de ilgilidir. Çiftçiler, veterinerler, kasaplar ve hayvanat bahçeleri ve sirklerdeki işçiler dahil olmak üzere hayvanlarla çalışan kişilerin tümü risk altındadır (3). Amerika Birleşik Devletleri'ndeki bu tip hayvanların neden olduğu yaralanmalar sebebiyle her sene yaklaşık 40 kişinin öldüğü bildirilmektedir (4). Hayvan saldırılarında daha çok travmanın darbe, tekme, ısırma gibi doğrudan etkisi ile yaşamı tehdit edebilir. Hayvanlarla ile alakalı ciddi yaralanmaların boğa, at veya domuz gibi büyük hayvanlardan kaynaklandığı bildirilmiştir. Bu hayvanların boyutları ve hızları sebebiyle, motorlu taşıt kazalarının ortaya çıkardığına benzer kuvvetler yaratır (5).

Özellikle erkekler ve yaşlıların hayvanlarla ilgili yaralanma ve ölüm riskinin yüksek olduğunu gösterilmiştir (6). Olgumuzun bunun aksine 13 yaşında olması dikkat çekmektedir. Nogalski ve ark. (2) nın yaptığı çalışmada 2001-2004 yılları arasında hayvanların neden olduğu 1872 yaralanma vakasının 98'inin (%5,2) boğa saldırılarından kaynaklandığını ve bu yaralanmaların 92'sinin (%93,9) kırsal alanlarda meydana geldiğini bildirmiştir. Bizim olgumuz da Kars'ın kırsal bir kesiminde gerçekleşmiştir. Hayvancılıkla uğraşma zorunda kalan birçok insan kendisi ya da yakınlarının ölümüne neden olabilecek hayvanlarla yakın ve sık temas halindedir.

SONUÇ

Boğa tepmesi gibi yüksek enerjili travmalar sonrasında mortalitenin yüksek olabileceği akıldan çıkarılmamalıdır. Böylesi büyük cüsseli hayvanlarla daha profosyonel erişkinlerin koruyucu ekipmanlarla ilgilenmesi daha uygundur.

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ACOUSTIC NEURINOM WITH PERCENT PAIN

İNTRODUCTİON:

Cerebellopontine corner tumors (acoustic neuroma) constitute 8-10% of all intracranial tumors. It is the most common intracranial benign tumor. Acoustic neuromas arising from the superior vestibular branch of the 8th cranial nerve are the most common intracranial schwannomas in adults. 80% of posterior cranial fossa tumors are acoustic neuromas. cranial nerves pass. Clinically, the patient presents with various symptoms due to the compression of 5,6,7,8,9,10,11,12 nerves. Unilateral hearing loss and tinnitus are the most common symptoms. Some advanced acoustic neuromas, there are examination findings such as decreased sensitivity in the middle part of the face or hypoesthesia and/or paresthesias on the face, and inability to obtain a corneal reflex due to compression on the 5th and 7th nerves. Because of the involvement of the 6th nerve, diplopia, swallowing disorders, hoarseness, ataxia, and headache and vomiting due to increased pressure in the brain can be seen. Computed brain tomography (CT) and brain magnetic resonance imaging (MRI) with contrast are used for diagnosis. In the treatment, radiotherapy and surgical treatment are used according to the clinical condition of the patient.

CASE:

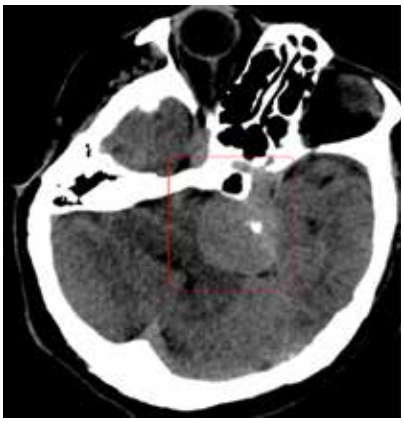
A 62-year-old female patient was admitted to our emergency department with the complaint of pain in the right half of her face. In medikal history it was learned that the patient did not have any additional disease. The pain on his face started 3 days ago, and carbamazepine was started with the diagnosis of trigeminal neuralgia in an external center. In the examination of the patient, his vital signs were stable, and he hasn't got pathological sign. In the patient's brain CT, an image of a 38x39 millimeter mass with calcification was detected in the skull base at the level of the prepontine distance, with an extraaxial location pressing the pons on the left. In the contrast-enhanced brain MRI of the patient (figure 1, 2), Acoustic neuroma? mass? reported as. The patient was transferred to the neurosurgery clinic for further examination and treatment.

CONCLUSION:

Acoustic neuromas are the most common intracranial tumors in clinical practice. While it is most commonly encountered with hearing loss and tinnitus, it may also present with trigeminal neuralgia semptom due to trigeminal nerve compression, as in our case.

KEYWORD: Akustik Nörinom, Headache, Trigeminal neuralgia, Facial pain

FİGURE:



Figüre:1

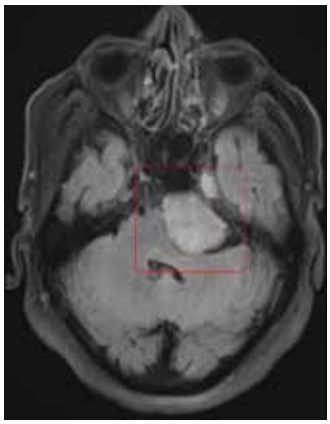


Figure:2

PREDIAGNOSE: CEREBROVASCULAR EVENT, DIAGNOSIS:FEMUR FRACTURE

İNTRODUCTİON:

Spontaneous hip fractures are frequently observed, especially in elderly patients. The incidence of hip fracture is increasing due to the increasing life expectancy of the elderly population in the world. Older adults have weaker bone and are more likely to fall due to diminished balance, medication side effects, and difficulty maneuvering around environmental hazards. Initial care of the patient with a hip fracture includes primarily of providing adequate analgesia and consulting an orthopedic surgeon. Intravenous opioids provide faster relief, but intramuscular or oral medications may be used. If resources are available, regional nerve blocks are highly effective at reducing pain and minimizing the sedation and other potential complications caused by opioids.

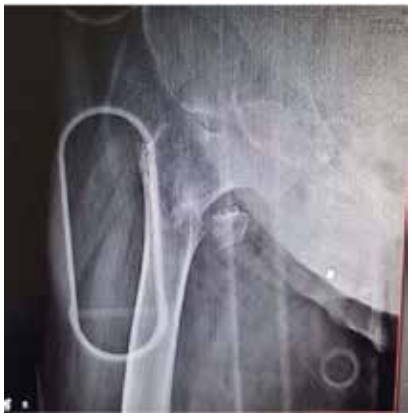
CASE:

An 80-year-old female patient was admitted to emergency department from an external center with a preliminary diagnosis of cerebrovascular event. She had Dm HT and osteoporosis diseases. The patient had a complaint of limitation of movement in her left leg and inability to walk. There was no acute pathological sign in the other neurological examination of the patient. There was tenderness in the left hip. There was no heat difference and diameter difference in lower extremity. The patient's complaints started suddenly when she woke up yesterday. The patient's pelvis and femur radiography were taken. A left femoral neck fracture was found in the graphy of the patient(figure:1). The patient, who was consulted to the orthopedic clinic, was hospitalized by the orthopedics clinic for operation.

CONCLUSION: Even if trauma is not identified in the anamnesis, non-traumatic fractures can be seen in elderly patients. Pathological fractures may occur due to weak bone structures. Pelvic examination should be performed in elderly patients, especially for spontaneous hip fractures.

KEYWORD:svo, femur fracture, pathologıcal fracture,emergency

FİGÜRE



Figüre:1

TWIN PREGNANCY IN GAUCHER DISEASE CASE REPORT

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INTRODUCTION

Gaucher disease is a lipid storage disease that develops as a result of a mutation in the beta glucocerebrosidase gene and causes autosomal recessive inheritance. As a result of the decrease in enzyme activity as a result of mutation, glucocerebrobroside accumulates in macrophages in the reticuloendothelial system. Patients often present with hepatosplenomegaly, anemia, thrombocytopenia, and bone pain. Here, we aimed to present the results of twin pregnancy and healthy delivery in a patient who had menstrual irregularity and anemia, thrombocytopenia and organomegaly regressed after enzyme replacement therapy.

CASE

A female patient with menstrual irregularity, occasional bone pain and nosebleeds since she was a young girl, applied to the hematology, orthopedics and physical therapy outpatient clinics many times and a definitive diagnosis could not be made. Later, the patient, who applied to the internal medicine outpatient clinic due to abdominal pain, was referred to the gastroenterology polyclinic when the spleen and liver size were detected in the examinations performed. Other causes of organomegaly were evaluated with ultrasound, CT and MR, and no obvious cause was found. Dry blood drops for organomegaly and pancytopenia were sent abroad for examination and the result was Gaucher's disease.

After starting appropriate enzyme replacement therapy (ERT), when the patient came to the controls every three months, it was seen that there were improvements in the values. As of the sixth month, increases in hemoglobin and thrombocyte values began to occur, and it was observed that bone pains also decreased. After the ninth month of treatment, she started to menstruate. At the end of the first year, menstruation became regular. In the obstetrics clinic where the patient was followed, pregnancy was detected in the 18th month of treatment and it was seen that the pregnancy was twins. After pregnancy, the dose of enzyme replacement therapy, which was previously given as 10-20mg/kg, was first increased to 30mg/kg, and after the third month of treatment, the ERT dose was increased to 60mg/kg. With this dose of treatment, laboratory values and examination values of the baby continued within normal measurements. The pregnancy, which continued without any problems with a multidisciplinary approach until 36 weeks 5 of the pregnancy, was delivered by cesarean section/sexio and there were two healthy babies.

RESULTS

As seen in our case, healthy pregnancy and healthy babies can be born in Gaucher patients with successful enzyme replacement therapy and multidisciplinary close follow-up and treatment. More studies are needed on this subject.

KEY WORDS: Gaucher disease, Enzyme replacement therapy, hepatomegaly, splenomegaly, anemia, thrombocytopenia, bone pain.

THE DISEASE HAS NO AGE !!! A RARE INVAGINATION IN ADULTS

İNTRODUCTİON:

Intussusception is an important cause of rectal bleeding and intestinal obstruction in infants and children. It is most common in infants aged 3-24 months. In most of the cases, the ileum has entered the colon. Ileoileal and colocolic intussusceptions are also observed. It is more common in boys than girls. There is no obvious etiological factor in classical intussusception and this type of intussusception is called idiopathic intussusception. Classical cardinal signs and symptoms; vomiting, abdominal pain, rectal bleeding, lethargy, and palpation of an abdominal mass. There are gas-liquid levels that can be seen in any bowel obstruction on direct abdominal X-ray. The collection of intestinal loops in the middle of the abdomen and the decrease in the amount of gas in the right lower quadrant are radiological findings that can be interpreted in favor of intussusception.

CASE:

A fifty-year-old female patient with no known systemic disease aditted to emergency department. She had abdominal pain for the two days and she was vomiting in the last two hours. She has no pathological finding in her vitals and physical examination. There was no abnormal value in the blood tests taken. Abdominal X-ray was taken. Abdominal ultrasound was performed because the patient's clinic did not relieve despite the treatments. Abdominal tomography was performed because there was no acute organ pathology in the abdominal ultrasound. Abdominal tomography had an appearance compatible with colocolic invagination (figüre 1). The patient was consulted to the General Surgery Clinic. The patient was hospitalized. The patient who was operated discharged with full recovery.

CONCLUSION:

Although some diseases are seen in childhood, we should keep in mind that they can be seen in advanced ages. We should do the necessary examinations and imaging to explain the symptoms.

KEYWORD: CONSTIPATION, INGAGINATION, ADULT, STOMACH ACHE

FİGURE:

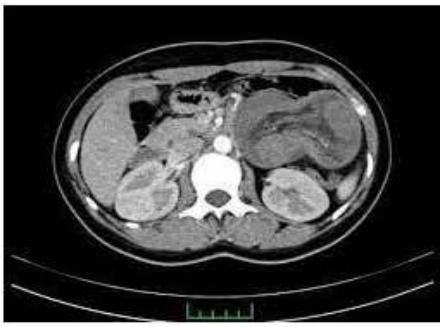


Figure:1

GROIN PAIN AND RUPTURE

İNTRODUCTİON:

An abdominal aorta with a maximal diameter is > 3.0 cm is named anevrizmatic dilatation for adult patients. The initial management of the patient with symptomatic (non-ruptured) or ruptured abdominal aort anevrizması (AAA) is changed by the hemodynamic status. Hemodynamically unstable patients who are candidates for repair are generally transferred directly from the emergency department to the operating room. Most patients with symptomatic (non-ruptured) AAA are hemodynamically stable. But theese patients should be admitted to the hospital to investigate the symptoms cause of AAA. Ruptured AAA is nearly always fatal. In spite of significant advances in intensive care unit management and surgical techniques, mortality following repair of ruptured AAA remains high.

CASE:

A 50-year-old male patient admitted to the emergency department with inguinal pain lasting 1 week. The same patient had repeated admissions to the emergency department with the same complaints before. When the patient's vitals were taken, her blood pressure could not be measured when he came, and his pulse could not be taken in both legs in the physical examination of the patient, AAA diagnosis was thought for this signs. The general condition of the patient was poor, glaskow coma score (GKS) was around 8. The patient was taken to the resuscitation room. He was intubated because his GCS score was low. After the patient was intubated, fluid support was started. Computed tomography angiography was performed after the patient was stabilized hemodynamically. Aneurysm rupture in the abdominal aorta was observed in the patient (Figure :1). cardiovascular surgery consultation was immediately asked for the patient . The patient was taken to emergency operation by cardiovascular surgery. The patient died in operation room.

CONCLUSION:

Dissection or rupture should be kept in mind in the emergency department in patients presenting with groin pain, back pain, and abdominal pain..

Among our preliminary diagnosis, patients with urolithiasis must have supportive laboratory or imaging. There may be different reasons behind the groin pain.

KEYWORD: aortıc dıssectıon, groin pain.emergency, aortıc aneurysm

FİGURE:

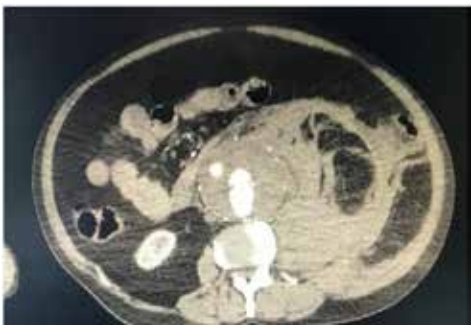


Figure:1

ROASTED FRONT ARM

İNTRODUCTİON:

Despite major advances in the management of burn injury patients, systemic complications and wound-specific complications are common. In burn patients, the burn lesion and lungs are the most common sites of infection that develop Multiple Organ Dysfunction Sydrome (MODS). The management of a patient with a severe burn injury is a long-term process that addresses the systemic, psychological and social consequences of the injury as well as the local burn injury.

CASE :

A 33-year-old female patient fell next to the tandoor after syncope and her left arm was burned while her arm remained on the tandoor. The unconscious patient was intubated by 112 and brought to the emergency room. On physical examination, there were 3rd degree burns on the left forearm and 2nd and 3rd degree burns on the left arm (figüre:1). Radial and ulnar pulses could not be taken in the left upper extremity of the patient. The patient's left arm was pale and yellow. In the angiography, there was no blood stream under the elbow of the left arm.There was no fracture in the patient's bone structures. It was decided to amputate the arm. The patient was taken for emergency surgery. The patient died after 3 days in the anesthesia intensive care

CONCLUSION:

Rapid intervention is required in the emergency department in patients with severe burns. It should not be forgotten that there will be many systemic complications in burn patients.

KEYWORD: burn, sepsıs, emergency

FİGURE:

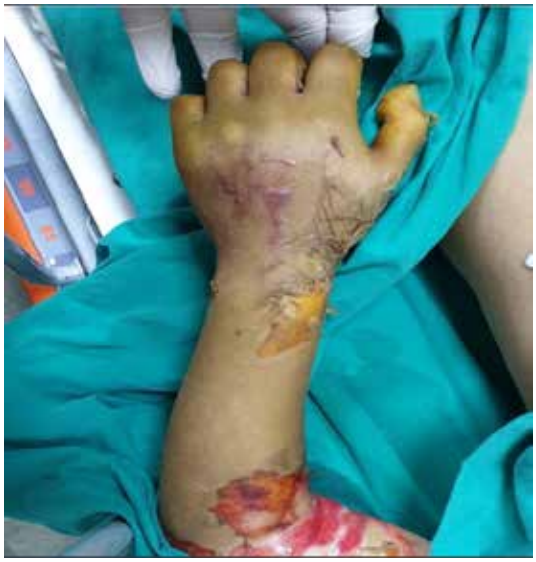


Figure:1

FRACTUR AND DISLOCATION OF THE SHOULDER AFTER EPILEPSY ATTACK

İNTRODUCTION:

Proximal humeral fractures account for 4 to 5 percent of all fractures. Proximal humeral fractures occur most commonly in older adults. The majority of both proximal and midshaft humeral fractures are nondislocation and can be treated conservatively .Management and treatment of patients with fracture-dislocation of the shoulder joint are more complicated. Less often, these fractures occur from a direct trauma or severe muscle contractions (eg, epilepsy attack). Anterior or posterior dislocations of the humeral head can occur in association with proximal humeral fractures.

CASE:

A 48-year-old male patient admitted to the emergency department after having a epilepsy attack. There was no known disease except epilepsy. The patient's vitals were stable in postictal state. It was learned that the patient had known epilepsy and had irregular drug use. It was learned in the medical history of the patient that he fell on his left shoulder while having a A 48-ye-ar-old male patient admitted to the emergency department after having a epilepsy attack. On physical examination, the patient had tenderness in the left shoulder. Left shoulder radiographs of the patient were done. Fracture-dislocation of the left shoulder was detected in the patient (figure:1). The patient's epileptic It was learned in the medical history of the patient that he fell on his left shoulder while having a A 48-year-old male patient admitted to the emergency department after having a epilepsy attack recurred, so the patient was loaded with appropriate dose of phenytoin. Then he was admitted to the orthopedic clinic for surgical intervention.

CONCLUSION:

Secondary injuries are common in patients with epileptic. It was learned in the medical history of the patient that he fell on his left shoulder while having a A 48-year-old male patient admitted to the emergency department after having a epilepsy attack as a result of direct trauma or severe muscular contractions. Therefore, patients after epilepsy should also be evaluated in terms of trauma.

KEYWORD: epilepsi, humerus fracture, emergency,

FİGURE:

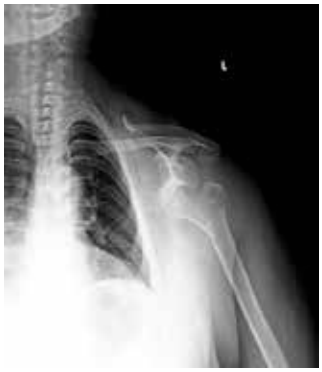


Figure:1

CONSTIPATION AND PING-PONG BALL.....

İNTRODUCTİON:

Constipation is a common complaint that may be due to a variety of causes.

Appropriate management requires an evaluation for secondary etiologies, such as systemic disorders and drugs. When secondary causes are eliminated, idiopathic constipation may be associated with normal or slow colonic transit, defecation dysfunction. In the emergency department management, after secondary causes are investigated, dietary and, if necessary, medical recommendations are made to the patients.

CASE:

A 40-year-old male patient with no known chronic disease was admitted to the emergency department with the complaint of constipation. In medical history, It was learned that the patient had not defecated for three days. The patient's vital signs were normal . There was severe tenderness on abdominal examination. When medical history is examined in detail he tried to expand the anal area with the ping-pong ball in for defecation. No palpable foreign body was found in the rectal examination of the patient. A ping-pong ball, was seen on the X-ray of the patient(figure:1). patient''s hemogram, biochemistry, blood gas were examine. No pathology was found in the patient's analysis. Abdominal contrast-enhanced computer tomograpy was performed to exclude the diagnosis of perforation, since the patient's creatinine value was within normal limits. Abdominal tomography did not detect any perforation or acute pathology, except for a foreign body. The patient was consulted to the general surgery . He was admitted to the general surgery emergency room for colonoscopy.

CONCLUSION:

The presence of a rectal foreign body is a situation that the patient may have difficulty in explaining in the emergency room. For this reason, the emergency physician should evaluate the medical history in detail during the patient evaluation.

KEYWORD:constıpatıon, stomach ache, emergency, foreıgn object

FİGURE:

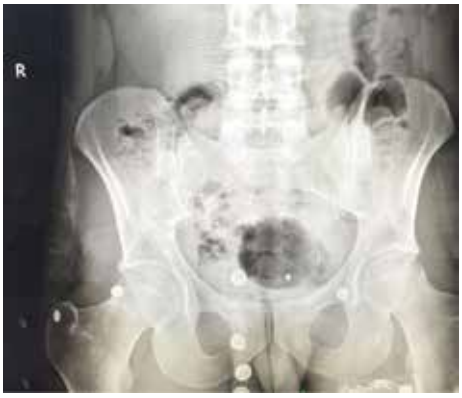


Figure:1

POST COVID-19 SEREBROVASKÜLER DISEASE

İNTRODUCTİON:

Patients with coronavirus disease 2019 (COVID-19) may have a number of complex and varied coagulation abnormalities . theese coagulation abnormalities situation creates a hypercoagulability that raising questions about appropriate evaluations and interventions to prevent or treat thrombosis. The predominant coagulation abnormalities in patients with COVID-19 have increased risk of venous thrombosis. Most patients with ischemic stroke associated with COVID-19 are older patients with increased risk of vascular thromboembolism.

CASE:

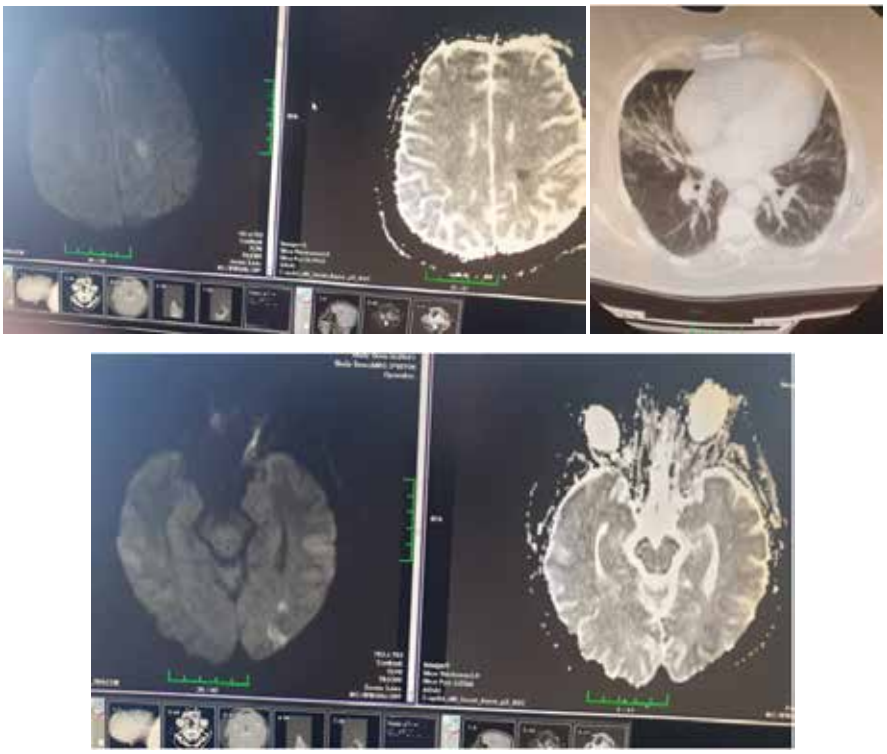
A 46-year-old female patient applied to the emergency department with complaints of numbness in her right arm for 2 days. She had decreased strength (3/5) examination on the right side. Patent's Babinski sign were bilateral negative. The other examinations of the patient were normal. There were rales in the baselines of lung. The blood pressure was 135/ 95 mmHg. Patient's saturation was %89. patient's heart rate was 98/ minute. ECG was in sinus rhythm. The patient has a known DM and a history of COVİD-19 infection (2 months ago). The blood tests were taken from the patient. the blood tets were normal. Cerebrovascular event was considered for the patient primarily. There was a hypodense area on brain computed tomography next to the left ventricle. Magnetic resonance imaging was performed because of the hypodense field observed in computed tomography. Hypointense areas were seen on diffusion magnetic resonance imaging.The patient who had acute ischemic infarcts in the Magnetic resonance imaging (figure:1,2) was consulted to neurology. The patient was hospitalized were neurology with the diagnosis of post COVID cerebrovascular event.

CONCLUSION:

COVID-19 disease is thought to increase the incidence of coagulation disorder disease. This case was shared because it supports this idea.

KEYWORD:covıd-19, serebrovasküler disease, emergency, weakness

FİGURE:



Figüre :1,2,3

ELBOW DISLOCATIONS

İNTRODUCTİON:

THE ELBOW CONSISTS OF THREE INTERRELATED JOINTS AND THESE HAVE STABILIZING LIGAMENTS.

The medial and lateral epicondyle and olecranon process of the humerus are easily palpable bony points The physical examination of the elbow includes observation for ecchymosis, swelling, muscular atrophy, and wounds in the skin that may indicate an open fracture or entry point for infection. neurovascular status of patients with obvious deformity should evaluatie immediately. Theese patients must follow with appropriate analgesia, immobilization as indicated by degree of deformity, and imaging. Posterior elbow dislocations account for approximately 5 percent of all elbow injuries in children. but 64 percent of theese patients have associated fractures, typically a proximal radial fracture through the physis. The peak incidence occurs at 12 years of age.

CASE :

A 45-year-old male patient admitted to emergeny department with the complaint of inability to move his right arm and pain after fell on the elbow.

in the physically examination there was limitation of movement and tenderness in the right arm elbow. In the patient's examination, there was deformity in the right elbow. The patient's pulses were pulsatile. Anteroposterior and lateral radiographs of the right elbow were done to evaluate the tenderness of the right elbow of the patient. Radioulnar elbow dislocation was detected in the radiograph of the patient (Figure:1). Sedoanalgesia was given the patient . The patient's elbow was brought to the hemiflexion position. The radius and ulna of the patient's were replaced by applying anterior traction. Pulse control was performed after reduction. Pain and deformity in the elbow improved after reduction. the patient's arm was fixed with a splint. After giving the necessary information to the patient, the patient was discharged with the recommendation of orthopedic outpatient control

CONCLUSION: elbow posterior dislocations are rare dislocations. The risk of complications is very high. Management in emergency departments should be done with careful, repetitive examinations.

KEYWORD: Elbow Dısplacement, Trauma, Emergency

FİGURE:

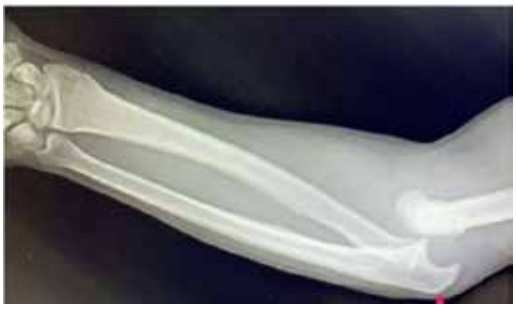


Figure :1

A MASTOCYTOSIS PATIENT WITH A SUDDEN EMERGENCE OF FLUSHING ATTACKS

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INTRODUCTION: Due to many different factors ranging from epileptic seizures to congenital heart diseases, sudden color changes may occur in the skin during neonatal and infancy. In this article, we report a case of a 3-month-old boy who presented to the pediatric emergency department with flushing attacks.

CASE: A 3-month-old male patient was admitted to the pediatric emergency department with a sudden onset of blushing and bruising. It was learned that the patient's flushing attacks occurred for the first time at 5 weeks of age, the whole body flushed, the patient became hypersensitive, her movements improved, this took about 35 minutes to recover spontaneously, the second and third episodes occurred at the same time as 12 hours apart from the day before the application. During the patient's first attack, it was learned that the bloating of the brown spot on the upper right side of the abdomen from birth had erupted during the attack, and the patient was hospitalized and followed up following the attack. There was no other feature in the patient's own and family history. On physical examination, a 5 □ 4 lesion with irregular margins and a 1 mm bulb was detected on the right upper quadrant of the abdomen. The other systemic examination was normal. Laboratory tests were normal. Electrocardiography and echocardiography showed no pathological findings. The patient was consulted to the Department of Dermatology and a punch biopsy was performed considering mastocytosis. uniform mast cell infiltration showed diffuse diffusion. Serum tryptase level and peripheral smear evaluation were normal. The family was informed about feeding. Antihistaminic treatment was started and followed.

CONCLUSION: Mastocytosis is a rare neoplasm of mast cells with abnormal proliferation in tissues such as bone marrow, skin, lymph nodes, spleen, gastrointestinal tract. There are systemic and cutaneous forms, such as systemic form of cytopenia, acid formation, malabsorption, organomegaly, osteolysis and malignant transfection, while these risks are very low in cutaneous form. Symptoms and symptoms in patients are mostly due to sudden mast cell degranulation in the tissues, resulting in sudden flushing, fainting, hypotension, tachycardia, wheezing, diarrhea, and severe forms of cardiovascular collapse. In particular, agents that trigger mast cell degranulation should be identified and avoided. Mastocytosis should be kept in mind in the differential diagnosis if it is rare in infants with sudden flushing attacks, skin examination should be done in detail, pathological diagnosis should be made in suspected cases and treatment will be life saving

KEYWORDS:, Flushing, Mastocytosis, Pediatric Emergency, Seizure

NADİR GÖRÜLEN BİR OLGU: NEKROTİZAN FASİİT

Emre İslam, Funda Aydın, Melih Yüksel, Mehmet Oğuzhan Ay, Umut Ocak, Halil Kaya, Zülfi Engindeniz

GİRİŞ:

Deri ve yumuşak doku enfeksiyonları acil servise sık başvuru nedenlerinden biridir. Acil serviste görülen yumuşak doku enfeksiyonlarının çoğu basit apseler ve selülit olmasına rağmen; nekrotizan fasiit, piyomiyozit, klostridial miyonekroz ve Fournier kangrenin de dahil olduğu nekrotizan yumuşak doku enfeksiyonları (NYDE) yaygın doku yıkımı ve septik şok tablosu görülebilir. Etkilenen bireyler tipik olarak 50-60 yaşlarındadır. Bu enfeksiyonlar sonucu uzuv kaybı oranı %15,9'dur. Mortalite oranı %20-35 ile

%70 arasında değişmektedir. Septik şok veya toksik şok sendromu gelişen hastalarda mortalite daha yüksektir. Erken tanı ve tedavi sonuçları iyileştirebilir, ancak erken zamanda spesifik olmayan fizik muayene bulguları , laboratuvar ve görüntüleme sonuçları nedeniyle tanı koymak zor olabilir. NYDE'ler tanındıktan sonra agresif resüsitasyon, geniş spektrumlu antibiyotikler ve acil cerrahi müdahale gerekir.[1]

Biz de acil servisimze sağ kolda ağrı ve yara ile başvuran ve nekrotizan fasit ön tanısıyla debride edilen hastamızı sunmayı planladık.

OLGU:

64 y erkek hasta, bilinen diyabetes mellitus hastalığı mevcut. Acile sağ kolda dorsalde 3 gündür olan ve hızlı büyüyen nekrotik yara ve iç yüzde 20 gündür olan 2x2 cm derin nekroze olmayan yara ile başvurdu(Resim 1). Fizik muayenede yara nekretoik görünümde ve yara üzerinde minimal ısı artışı, krepitasyon mevcut.

Periferik nabızları açık. Hastanın ek enfeksiyon odağı yok. Vitallerinde TA:105/75 PUKŞ:255 alındı.

Hastaya acilde geniş spektrumlu antibiyotik ve hidrasyon verildi. Laboratuvar testlerinde WBC:31 bin (29 bin nötrofil hakimiyeti+) ve crp:315 geldi. Hasta anteriordaki derin yarası için ortopediye, dorsaldeki yara için nekrotizan fasiit ön tanısıyla enfeksiyon ve plastik cerrahiye danışıldı. Ortopedi acil girişim düşünmedi. Plastik cerrahi acil debridman planladı(Resim 2).

Hasta debridman sonrası enfeksiyon bölümüne yatıp antibiyoterapi olarak linezolid 2x600 mg iv, tazocin 3x4.5 gr iv başlanması planlandı.

SONUÇ:

Nekrotizan Fasiit'in (NF) erken tanısı ve müdahalesi, mortaliteyi ve amputasyon oranını azaltır. Ne yazık ki, erken tanı koyabilmek oldukça zordur. Yakın zamanda yapılan bir çalışma, NF tanısının, hastaların neredeyse dörtte üçünde erken dönemde konamadığını göstermiştir. Bu nedenle acil servise gelen diyabetli hastalardaki yumuşak doku enfeksiyonlarında ayırıcı tanıda nekrotizan fasit akla getirilmeli ve yaklaşımın cerrahi olabileceği göz önünde bulundurulmalıdır.[2]

KAYNAK:

[1]Stevens D, Eron L. In the clinic. Cellulitis and softtissue infections. Ann Intern Med. 2009;150(1):ITC11 .[2] Vayvada, H., Demirdöver, C., Menderes, A., & Karaca, C. Necrotizing fasciitis: diagnosis, treatment and review of the literature. ULUSAL TRAVMA VE ACIL CERRAHI DERGISI-TURKISH JOURNAL OF TRAUMA & EMERGENCY SURGERY, 201218(6).

RETROSPECTIVE EVALUATION OF PATIENTS PRESENTING TO THE EMERGENCY DEPARTMENT DUE TO AN OCCUPATIONAL ACCIDENT

INTRODUCTION:

According to the International Labor Organization (ILO), occupational accident; It is defined as any unexpected and unplanned event that results in the injury, illness or death of one or more employees, including any work-related act of violence. Accidents at work; It also covers the injuries of employees in travel, transportation or traffic accidents while continuing the work given by the employer, at or outside the workplace. Occupational accidents have recently constituted an important part of forensic reports kept in emergency services due to reasons such as not giving enough importance to workplace safety, taking the necessary precautions insufficiently or not being taken at all. In this study, it was aimed to examine the reasons for admission, clinical findings and diagnoses of patients who came to the emergency department of our hospital due to work accident.

METHOD:

To work; Between 1 June 2018 and 30 May 2019, 1156 patients who applied to Aksaray University Training and Research Hospital Emergency Medicine Department as a result of work accident were included. Patients; Gender, age, injury site, injury mechanism, bone fracture, morbidity and mortality were evaluated. Results were recorded retrospectively.

RESULTS:

A total of 1156 patients were included in the study. The mean age of the patients was 32.15±9.2 years and most of them were male (n:1015, 87.8%). The most frequently injured anatomical region was the upper extremity (n:614, 53.1%). Head-neck injuries (n:303, 26.2%) were in the second rank, while lower extremity injuries (n:156, 13.5%) were in the third rank. Trunk injuries (thorax, abdomen, pelvis, dorsolumbar) were seen least frequently (n:83, 7.2%). When the patients were classified according to the mechanism of injury, the most common stab wound (n: 376, 32.5%), the second most common fall (n: 194, 16.8%) was observed (Table 1). When the patients were classified according to the lesion types, soft tissue traumas (n:321, 27.8%) were the most common, and superficial incision-laceration (n=221, 19.1%) was the second most common (Table 2). Bone fracture occurred in 133 patients (11.5%). The most common bone fractures were seen in the upper extremities (n:84, 63%), of which 83% (n:70) were found in the fingers. Bone fractures were observed in the lower extremities with the second frequency (n:30, 22.6%). More than one bone fracture was detected in 22 patients (16.5%). It was observed that 13.8% (n: 160) of the patients were hospitalized, 1.4% (n: 16) died in the emergency department, and 0.6% (n: 7) died in the intensive care unit.

DISCUSSION:

As a result of our study, the majority of the cases who had occupational accidents were male, the accidents were frequently seen in the age range of 25-35 years, the most common injury mechanism was sharp object injury followed by falls. Following this, superficial incision- laceration is observed, the most injured body area is the single upper extremities, the injuries are concentrated in the fingers of the upper extremities, the most bone fractures occur in the upper extremities and especially the fingers, more than half of the cases are discharged after their treatment in the emergency service, as a result of work accident. It was observed that the majority of those who lost their lives were due to falling from a height. Occupational accidents are an important problem affecting the lives of individuals and families, mostly affecting young adults, resulting in deterioration of health, temporary or permanent loss of work force, economic losses and loss of life. It is important to examine work accidents at the regional level in order to prevent work accidents and reduce the losses due to work accidents. There is a need for more comprehensive studies in which the working conditions before the accident and the losses after the accident are examined together.

KEYWORDS: occupational accident; mortality; trauma

EPIPLOIC APPENDAGITIS: RARE CAUSE REASON

INTRODUCTION: Fat extensions that run parallel to the tenia koli along the colon are called epiploic appendages. Torsion, hemorrhagic infarction or thrombosis of the inflammation of the epiploic appendages reveals the epiploic appendicitis. In the studies conducted, its incidence was found to be 8.8 per 1 million. It was first described anatomically by Vesallius in 1543, and the term epiploic appendicitis was first used in 1956 by Lynn et al. Symptoms and symptoms of epiploic appendicitis may differ depending on the location of the epiploic appendicitis. While cecum and emerging colon are imitating acute appendicitis with pain in the right lower quadrant in cases with localization, the left colon and sigmoid colon are imitating acute diverticulitis with pain in the lower left quadrant in patients with localization. In the diagnosis, examination of the abdominopelvic region by ultrasound and computed tomography can be performed. The diagnostic value of computed tomography is higher, making it easier to diagnose with the detection of visceral peritoneum thickening. Although epiploic appendicitis forms an acute abdomen, it appears as a condition that limits itself, decreases with conservative treatment and does not require surgical treatment. For this reason, it is extremely important to diagnose and protect the patient from unnecessary invasive procedures. In this study, 3 cases who were admitted to the emergency department and diagnosed with epiploic appendicitis were presented.

CASE REPORT

CASE 1: A 58-year-old male patient was admitted to the emergency department with the complaints of abdominal pain and nausea that started suddenly 7-8 hours ago in the left lower abdomen. He stated that there was a persistent pain in the form of patient pain, especially increased with motion. In vital signs, blood pressure was measured at 120/75 mmHg, Pulse: 69 / min, fever 36.4 ° C. In his physical examination; Although sensitivity was observed in the left lower quadrant of the abdomen, no defenses and rebounds were observed. Other system examination findings were evaluated naturally. Apart from the height of CRP (8 mg / dl; reference: 0-5 mg / dl), other laboratory findings were found within the range of normal limits. Leukocyte count was 11300 / mm3 in the complete blood count. After the patient's complaints continued, computed tomography with intravenous contrast was performed. The patient, whose tomography was evaluated, showed heterogeneity and contamination in the rectosigmoid colon in the left lower quadrant, and was compatible with epiploic appendicitis. The patient was recommended to be admitted to the general surgery service. The patient did not accept and signed and left the hospital.

CASE 2: A 37-year-old male patient was admitted to the emergency room with complaints of pain, anorexia, chills, and tremors in the lower left part of the abdomen that started the morning before. The patient stated that there was a persistent pain in the form of blunt and pain intensity increased especially in the last two hours. In vital signs, blood pressure was 132/86 mmHg, Pulse: 88 / min, fever 36.9 ° C. On physical examination, tenderness was observed in the left lower quadrant of the abdomen, and no defenses and rebounds were observed. In the laboratory findings of the patient, the number of leukocytes was 9800 / mm3. Other laboratory findings were observed naturally. The patient continued to have intravenous contrast-enhanced abdominal tomography as the pain persisted. In tomography; In the left lower quadrant, a compatible appearance with epiploic appendicitis was detected in the colon junction from the sigmoid colon-pattern. The patient was admitted to the general surgery service for conservative treatment.

CASE 3: A 21-year-old woman presented to the emergency room with complaints of pain, nausea and vomiting in the lower right abdomen. The patient described abdominal pain, which started in the evening the day before, was initially blunt, but continued as a sharp pain in the blade with time. In vital signs, blood pressure was measured as 100/80 mmHg, Pulse: 82 / min, fever 36.5 ° C. In the physical examination of the patient; There was tenderness in the lower right quadrant of the abdomen, and no defenses or rebounds were detected. In blood tests; CRP and leukocyte values were observed within normal limits. After the patient's symptoms continued, computed tomography with intravenous contrast was performed. In the imaging done; In the resultant colon-cecum junction, pollution was observed in the surrounding mesenteric adipose tissue and it was evaluated to be compatible with the diagnoses of epiploic appendicitis and diverticulitis. The patient was hospitalized in the general surgery service.

DISCUSSION: The diagnosis of epiploic appendicitis should be kept in mind in cases where the physical examination and laboratory tests are suspected in patients with lower quadrant abdominal pain. It is extremely important to distinguish itself from acute abdominal causes that require surgical intervention, as it creates a self-limiting disease with conservative treatment.

AYIN DÖNGÜSÜ VE MEVSİMLERİN EPİLEPTİK NÖBET İLE İLİŞKİSİ

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ÖZET:

GİRİŞ: Epilepsili hastalarda nöbetleri hızlandıran faktörler iyi belgelenmiştir ve bunlar arasında uyku yoksunluğu, alkol alımı ve parlak ışıklar sayılabilir. Çalışmamızda acil servise epileptik nöbet ile başvuran hastaların ayın hallerine, mevsimlere ve günlük hava sıcaklığına göre değişkenlik gösterip göstermediğine araştırmaktır.

YÖNTEM: Çalışma retrospektif olarak 1 yıllık süre içinde acil servise epileptik nöbet ile başvuran hastalar dahil edildi. Provake edilen hastalar, (kafa travması, intrakranial kanama gibi…), gebe, 18 yaşından küçük hastalar çalışma dışı bırakıldı. Hastaların yaş, cinsiyet, acil servise başvuru tarihi ve saati kaydedildi. Ayın farklı evrelerinin ve mevsimlerin bu hastalar üzerindeki etkileri araştırılacaktır.

BULGU: Çalışmamıza kabul edilme kriterlerini taşıyan 176 erkek 79 kadın olmak üzere 255 hasta dahil edildi. Hastaların büyük çoğunluğu (%67.1)18-44 yaş aralığındaydı. Ayın halleri ile başvuru sıklığına baktığımız zaman en çok hastanın dolunay (%27.5) döneminde başvurduğunu tespit ettik. Ancak istatiksel olarak anlamlı değidir (p>0,005). En sık başvuru kış aylarında olduğu görüldü (%30.2). Hastaların büyük çoğunluğunun (%41.2) daha önceden epilepitik ilaç kullanmadığı tespit edildi. Laboratuar değerlerinde PH: 7,31(std: 0,11), laktat 4,59 (Std: 4.12) olduğu görüldü.

SONUÇ: Ayın hallerinin, hava sıcaklığının ve mevsimlerin, epileptik nöbet gelişme sıklığını etkilemediği görülmüştür.

ANAHTAR KELİMELER: Ay Döngüsü, Epileptik Nöbet, Mevsim

GİRİŞ

Ayın halleri ve nöropsikiyatrik durumlar arasındaki ilişki her toplumun merak konusu olmuştur. Epilepsili hastalarda nöbetleri hızlandıran faktörler iyi belgelenmiştir ve bunlar arasında uyku yoksunluğu, alkol alımı ve parlak ışıklar sayılabilir. Bazı hastalar nöbetlerinin öngörülebilir şekilde dolunay tarafından tetiklendiğini veya kötüleştiğini iddia ediyor. Çalışmamızda acil servise epileptik nöbet ile başvuran hastaların ayın hallerine, mevsimlere ve günlük hava sıcaklığına göre değişkenlik gösterip göstermediğine araştırmaktır(1).

METOD

Çalışma retrospektif olarak 1 yıllık süre içinde acil servise epileptik nöbet ile başvuran hastalar dahil edildi. Provake edilen hastalar, (kafa travması, intrakranial kanama gibi…), gebe, 18 yaşından küçük hastalar çalışma dışı bırakıldı. Hastaların yaş, cinsiyet, acil servise başvuru tarihi ve saati kaydedildi. Bu tarihler ve saatler kullanılarak, hastanın acil servise hangi ayın döngüsünde başvurduğu internet programı (www.timeanddate.com) aracılığıyla belirlenecek ve bunların farklı evrelerinin ve mevsimlerin bu hastalar üzerindeki etkileri araştırılacaktır. Tüm veriler Medcalc® Statistical Software for Windows (version v12.7.0.0; Medcalc) programı kullanılarak analiz edilmiştir.

BULGULAR

Çalışmamıza kabul edilme kriterlerini taşıyan 176 erkek 79 kadın olmak üzere 255 hasta dahil edildi. Hastaların büyük çoğunluğu (%67.1) 18-44 yaş aralığındaydı. Ayın halleri ile başvuru sıklığına baktığımız zaman en çok hastanın dolunay (%27.5) döneminde başvurduğunu tespit ettik. En sık başvuru kış aylarında olduğu görüldü (%30.2). Hastaların büyük çoğunluğunun (%41.2) daha önceden epilepitik ilaç kullanmadığı tespit edildi (Tablo 1).

	n	%
Cinsiyet		
Erkek	176	69
Kedın	79	31
Yaş		
18-44	171	67.1
45-65	60	23.5
65 yaş üstü	24	9.4
Yeni ay	60	23,5
İlk dördün	62	24,3
dolunay	70	27,5
son dördün	63	24,7
İlkbahar	55	21,6
Yaz	57	22,4
Sonbahar	66	25,9
Kış	77	30,2
İlaç kullanımı		
Yok	105	41,2
Tekli	96	37,6
çoklu	54	21.2

Tablo 1: Hastaların demografik özellikleri, ayın halleri ve mevsimlere göre başvuru sayısı

Laboratuar değerlerinde PH: 7,31(std: 0,11), laktat 4,59 (Std: 4.12), glukoz 138mg/dl (std: 68,3) olduğu görüldü. Diğer derğerler normal aralıkta olduğu tespit edildi (Tablo 2).

	mean	Std. D
Laktat	4,59	4,1
pH	7,32	0,1
pCO2	44,22	11,1
WBC(×10^9 /L)	9,6	4
Hemoglobin (g/dL)	13,36	2,2
Plt (×10^9 /L)	251	87
Glukoz(mg/dl)	138	68,3
CK (U/L)	142,4	118,7
Sıcaklık		
Max ^{o}C	22.9	11,1
Min ^{o}C	11,4	8,8

Tablo 2 Hastaların laboratuar değerleri ve sıcaklık ilişkisi

Ayın halleri ile yaş aralığı, cinsiyet, mevsimler, kullanılan ilaç sayısı arasında istatiksel olarak anlamlı bir ilişki bulunmadı (p>0,005). (Tablo 3)

Tablo 3: Ayın hallerine göre değişkenlerin değerlendirilmesi

Variables		Total n(%)	Yeni Ay n(%)	İlk dördün(%)	Dolunay n(%)	Son dördün (%)	P-Value
Yaş aralığı	18-44	171 (67,1)	44 (73,3)	43 (69,4)	47 (67,1)	37 (58,7)	0,265
	45-65	60 (23,5)	12(20)	15 (24,2)	17 (24,3)	16 (25,4)	
	>65	24 (9,4)	4 (6,7)	4 (6,5)	6 (8,6)	10 (15,9)	
Cinsiyet	Kadın	79 (%31)	24 (40)	17(27,4)	22(31,4)	16(25,4)	0,313
	Erkek	176(%69)	36(60)	45(72,6)	48(68,6)	47(74,6)	
Mevsimler	Kış	77 (17.5)	21(35)	20(32,3)	21(30)	15(23,8)	0,653
	İlkbahar	55 (24.5)	14(23,3)	12(19,4)	16(22,9)	13(20,6)	
	Yaz	57 (36.7)	12(20)	13(21)	11(15,7)	21(33,3)	
	Sonbahar	66 (21.3)	13(21,7)	17(27,4)	22(31,4)	14(22,2)	
İlaç sayısı	İlaç kullanmıyor	105(41,2)	23(38,3)	25(40,3)	32(45,7)	25(39,7)	0,725
	Tekli ilaç	96(37,6)	21(35)	23(37,1)	25(35,7)	27(42,9)	
	Çoklu ilaç	54(21,2)	16(26,7)	14(22,6)	13(18,6)	11(17,5)	
Laktat düzeyi	2 ve altı	46(25,7)	9(22)	10(22,2)	15(32,6)	12(25,5)	0,631
	2 üstü	133(74,3)	32(78)	35(77,8)	31(67,4)	35(74,5)	

TARIŞMA:

Ayın halleri ile nöropsikiyatrik etkileşimler uzun yıllardan beri merak konusu olmuştur. Owen ve arkadaşlarının yaptıkları çalışma(3) ayın halleri ile saldırgan davranış ilişki bulunamamıştır. Amaddeo(4) ve arkadaşları benzer şakilide ayın halleri ile psikiyatrik başvurular değerlendirilmiş benzer şekilde ilişki bulamamıştır.

Bizim çalışmamızda da ayın halleri ile epilepsi üzerinde ilişki bulunamamıştır. Wang ve arkadaşları(5) bizim çalışmamızla benzer şekilde ayın halleri ile epileptik nöbet ilişkisi değerlendirilmişlerdir. Aralarında bir ilişki bulamamıştır. Bizim çalışmamızın aksine Polychronopoulos ve arkadaşlarının(6) yaptıkları çalışmada döneminde nöbet nedeniyle acil servis başvurularında bir artış bulmuşlardır.

Sonuç olarak Ayın hallerinin, hava sıcaklığının ve mevsimlerin, epileptik nöbet gelişme sıklığını etkilemediği görülmüştür

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PEDIATRIC PATIENTS WITH HEAD TRAUMA AND THEIR OBSERVATION RESULTS

İNTRODUCTION:

Head trauma is common in children. Among the most important causes are falls and motor vehicle accidents. The clinical findings of the patients include nausea, vomiting, and changes in consciousness. The clinical condition of the patient, the severity of the trauma determine the pathology that will occur in the patients and imaging modality.

In this study, we evaluated pediatric patients with head trauma who were observed in the second level intensive care unit of our emergency department.

MATERIAL-METHOD:

Pediatric patients aged 0-18 years, who were followed up due to head trauma in Atatürk University Research Hospital Emergency Department between 01.08.2022 and 31.08.2022 are included the study. Patients who did not undergo brain CT but were followed up clinically were excluded from the study. Patients were retrospectively analyzed. The data of the patients were obtained from electronic patient files and written records.

RESULTS:

Twenty five pediatric patients with head trauma were followed up in our clinic. However, 5 patients were excluded from the study because brain CT was not performed. Seven girls and thirteen boys were included the study. The patients distribution by trauma type, age and gender is shown in graph 1. The number of patients with pathology in brain CT, consultation with neurosurgery clinic, control brain CT and clinical follow-up are given in the graph 2.

DISCUSSION:

For children with blunt head injuries, falls and motor vehicle accidents are the most common. In our study, the majority of the cases were traffic accidents and home accidents. Head trauma may progress more severely in the pediatric group due to incomplete myelination in the pediatric group under 1 year of age, and slower white matter maturation and differentiation. However, hemorrhages with mass effect in early childhood are less common due to the flexible structure of the skull and the more flexible brain. Pathology was detected in brain CT in only 3 patients followed up in our clinic. However, a total of 6 patients were consulted to the neurosurgery clinic. This may show us that clinical follow-up is more valuable than imaging.

CONCLUSION:

The majority of head traumas in children are preventable traffic and home accidents. We believe that head trauma can be prevented by taking necessary precautions. It was observed that all patients in the study were discharged after clinical follow-up. Thus, it should be remembered that clinical follow-up is more important than radiological evaluation in pediatric patients.

KEYWORDS:

head injury, home accident, linear fracture, traffic accident

Graph 1: Patients distribution by trauma type, age and gender

Graph 2: The number of patients with pathology in brain CT, consultation with neurosurgery clinic, control brain CT and clinical follow-up

MANAGEMENT OF PATİENTS WİTH ILEUS, GİRESUN UNİVERSİTY FACULTY OF MEDİCİNE

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INTRODUCTION: Even today, intestinal obstruction (ileus) remains a challange for general surgeons. The ideal timing for treatment decision and surgical intervention is vital for these patients.

MATERIALS & METHODS: Retrospective and descriptive study that included 189 patients admitted to the emergency department with ileus between 2020 and 2022.

RESULTS: The mean age of the patients in our study was 68.3 years. 108 women (57%) and 81 men (43%) were accepted. Obstruction affected the small intestine 74.4%, colon and rectum 21.5%. The most common cause was abdominal wall hernia (35.7%), followed by adhesions (28.4%), and malignancy (16.2%). Emergency surgical intervention was required in 49.4% of the patients, conservative treatment (nasogastric decompression, parenteral fluid) was applied to 37.1% of the patients, and 13.5% of these patients required surgery because of not respond to medical treatment in their follow-up.The mean hospital stay of the patients was 9 days. Comperison of the patients who underwent surgery or medical treatment, the need for hospitalization in the intensive care unit was found to be statistically higher in the surgical group (p=0.02).

DISCUSSION: The clinic caused by intestinal obstruction is a common situation in emergency services. The diagnostic spectrum is very wide. Since surgical or medical treatment will vary according to the cause of the disease, the diagnosis must be determined in the emergency department and a quick decision must be taken in order not to cause a possible complication. For this purpose, in our study, we examined the diagnosis and treatment processes of patients who applied to the emergency department with ileus.

CONCLUSION: Intestinal obstruction is one of the common reasons for admission to emergency department. In these patients surgical treatment should be decided quickly and should not be delayed.

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APPROACH TO THE PATIENT ADMITTED TO THE EMERGENCY DEPARTMENT WITH MASSIVE HEMATOMA IN THE BUCCAL REGION: POSTERIOR SUPERIOR ALVEOLAR NERVE BLOCK COMPLICATION

INTRODUCTION

A hematoma develops when a blood vessel, especially an artery, is punctured or ruptured by a needle. It is caused by the effusion of blood into the extravascular spaces. This is characterized by asymmetrical swelling and discoloration of the tissue (1). Hematomas can occur without a positive aspiration and by notching the blood vessel with the needle on the way to the target location or when removing the needle after anesthesia is applied (2).

Local anesthetics have been used in dentistry for more than a century to relieve discomfort during surgical and non-surgical procedures (3). Posterior superior alveolar nerve (PSAN) is a sensory branch of the maxillary part of the trigeminal nerve. PSAN block is a technique used to obtain anesthesia for maxillary molars and surroinding structures (4).

The aim of this study is to present the necessity of considering PSAN blocks in the etiology of hematoma seen in the facial region and the approach in the emergency department to hematoma that develops as a result of nerve block.

CASE

A 25 years old female patient applied to our Emergency Department with facial asymmetry, swelling on the left side of the face involving both buccal and temporal space without discoloration (Figure 1). The patient didn't have any ophthalmologic complications. The patient reported to the dental centre with a chief complaint of severe pain in the maxillary left posterior region which aggravates during sleeping and on intake of hot food. The root canal treatment was planned. One hour ago when the local anesthesia was administered for the posterior superior alveolar nerve block, an immediate swelling of the left cheek was observed.

The patient was evaluated with maxillofacial CT and the result was observed to be compatible with hematoma. Since it was difficult to find the blood vessels for the hematoma that developed after PSA block, the pressure was applied intraorally from the back as much as possible, avoiding proximity to the soft palate area and not causing pharyngeal reflex. The ice packs were applied 15 minutes per hour to the buccal region of the patient in order to provide vasoconstriction, reduce blood flow to the extravascular spaces, and also offer analgesia.

The patient that did not leave the clinic until the bleeding stopped was discharged with antibiotic therapy and analgesic medication. The patient was informed about: 1. There may be pain and limitation of movement in his jaws, 2. A warm, moist towel should be used for 20 minutes every hour the next day to help the area to absorb blood. 3. There were no serious complications usually associated with hematomas. During the following period, swelling and discoloration was disappeared after 7 to 14 days.

DISCUSSION

Hematoma rarely occurs following palatal injection due to the density of the tissue on the hard palate and its firm attachment to the bone. A fairly large hematoma can result from an arterial or venous puncture after a PSAN block or an inferior alveolar nerve (IAN) block. The tissues surrounding these vessels can hold a significant amount of blood. Blood escapes between tissues until either extravascular pressure exceeds intravascular pressure or coagulation occurs. Hematomas are often exclusively observed in the mouth following IAN block, however, hematomas can be found outside the mouth with PSAN block (5).

The recommended methods and knowledge of normal anatomy are important for injection, but nerve blocks may be associated with the risk of large and visible hematomas because "normal" anatomy can vary significantly from patient to patient. PSA nerve block is the most common, but with proper management, hematoma can disappear without causing any serious complications.

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Figure 1. The patient with buccal and temporal space hematoma.

ACİL SERVİS YOĞUN BAKIM ÜNİTESİNE YATAN HASTALARIN DEMOGRAFİK ÖZELLİKLERİ

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Atatürk Üniversitesi Tıp Fakültesi Acil Tıp Anabilim Dalı

GİRİŞ:

Acil servisler günün 24 saati sağlık hizmeti veren ve her türlü acil tıbbi hizmetlerin verildiği en önemli birimlerdir. Bu nedenle hastalıkların çeşitliliği sınırsızdır. Komplike olmayan ve reçete ile taburcu olabilen birçok hasta başvurusunun yanında ileri tetkik ve takip gerektiren, yatışı zorunlu olan hasta grupları da acil başvurularının azımsanamayacak kısmını oluşturur. Acil serviste primer patolojisi ve tanısı belli olan hastalar ilgili kliniklere yatırılmaktadır. Ayrıca intoksikasyon, görüntülemelerinde patolojik bulgu olmayan yüksek enerjili travmalar, ürtiker/ anjioödem/ anaflaksi gibi hipersensitivite reaksiyonları, kanama ve hematom takibi gerektiren travma hastaları, diyaliz ihtiyacı olmayan prerenal akut renal injurisi olan hastalar, komplike idrar yolu enfeksiyonu gibi hasta grupları hem tedavi amaçlı hem de müşahade amaçlı acil servis yoğun bakımlarda takip edilmektedir.

Biz de bu çalışmada acil servis yoğun bakıma yatırılan hastaların analizini yapmayı amaçladık.

MATERYAL METOT:

Çalışmamız 2022 yılı Ağustos ayında (01.08.2022-31.08.2022) acil servise başvuran ve acil servis yoğun bakım ünitesine yatan hastalar üzerinde yapılmıştır. Çalışma Atatürk Üniversitesi Tıp Fakültesi Acil Tıp Kliniği'nde retrospektif olarak yapılmıştır. Bu süre zarfında acil servis yoğun bakım ünitesine yatan 97 hasta üzerinde çalışma tamamlanmıştır. Çalışma retrospektif olarak hasta dosyalarından alınan bilgiler doğrultusunda tamamlanmıştır.

Çalışma için hastaların yaş, cinsiyet, başvuru nedeni ve tanısı, taburculuk durumu ve yatış süresi kayıt altına alındı.

İstatistiksel analizler için Statistical Package for Social Sciences (SPSS.20) paket programı kullanıldı. Tüm veriler ortalama±standart sapma olarak ifade edildi.

BULGULAR:

Çalışma 97 hasta üzerinde yapılmıştır. Hastaların yaşları en düşük sıfır, en yüksek 95, ortalama 39,6 idi. Bu hastalardan 40 tanesi kadın (%41,2), 57 tanesi erkek (%58,8) idi. Kadın hastaların yaş ortalaması 42,4±4,5 iken, erkek hastaların yaş ortalaması 37,7±3,1 idi ve istatistiksel olarak anlamlı bir fark görülmedi. Hastaların başvuru nedenleri (yatış nedenleri) tablo-1'de belirtilmiştir.

Değişkenler	Sayı (n)	Yüzde (%)
Düşme	21	21,6
Kafa travması	10	10,3
Araç içi trafik kazası	13	13,4
Araç dışı trafik kazası	6	6,2
İntoksikasyon	16	16,5
Kesici delici alet yaralanması	2	2,1
Ateşli silah yaralanması	1	1,0
Ateş	4	4,1
İdrar yolu enfeksiyonu	2	2,1
İshal	3	3,1
Takip	5	5,2
Allerjik reaksiyon, anjioödem, anaflaksi	6	6,2
Diğer	8	8,2
Total	97	100,0

Hastaların yatış süresi en düşük 1 gün, en yüksek 7 gün, ortalama 2,13±1,10 gün idi. Kadın hastaların yatış süresi 2,18 gün iken, erkek hastaların yatış süresi 2,11 gün idi ve aralarında istatistiksel olarak anlamlı fark görülmedi (p>0,05). Hastaların yaşları ve yatış süreleri arasında da anlamlı ilişki görülmedi (p>0,05). Hastalardan 86 tanesi (%88,7) klinikten taburcu olurken 11 tanesi (%11,3) başka kliniklere devir edildi. Taburcu olan hastaların yaş ortalaması 37,84±2,7 iken, devir edilen hastaların yaş ortalaması 54,09±7,2 idi ve istatistiksel olarak anlamlı fark yoktu (p=0,051). Taburcu olan hastaların yatış süresi ortalama 2,12 gün iken, devir edilen hastaların yatış süresi 2,27 gün idi ve istatistiksel olarak anlamlı fark yoktu (p>0,05). Yatan kadın hastalardan %12,5'i devir edilirken, yatan erkek hastalardan %10,52'si devir edildi ve istatistiksel olarak anlamlı fark yoktu (p>0,05).

SONUÇ:

Çalışmamızda acil servis yoğun bakım ünitesine yatırılan hastaların demografik özellikleri incelenmiştir. Yatan hastaların demografik özellikleri karşılaştırılmış ve aralarında anlamlı ilişki görülmemiştir. Sonuç olarak, acil servise başvuran hastalar gibi, takip gereksinimi nedeniyle yatırılan hastaların da farklı demografik özelliklere sahip olduğu, bu özelliklerin hastanın yatış süresi üzerine belirgin etkisi olmadığı görülmüştür.

ANAHTAR KELİMELER: Acil Servis Yoğun Bakım, Demografik Özellikler, Travma

ÜST SOLUNUM YOLU ENFEKSİYONU DEĞİL ENFEKTİF ENDOKARDİT

Araş.Gör. Dr. Hatice Kübra Taşci, Dr. Öğr. Üyesi Erdal Tekin

GİRİŞ: Enfektif endokardit, kalbin endokardiyal yüzünün enfeksiyonudur. Sıklıkla bir veya daha fazla kalp kapakçığının ya da intrakardiyak yerleşimli cihazların enfeksiyonundan kaynaklanır. İnsidansı gelişmiş ülkelerde 3-7/100.000dir. Nadir görülmesine rağmen enfeksiyon hastalıklarına bağlı ölümlerde sepsis, pnömoni ve intraabdominal enfeksiyonlardan sonra 4. sırada gelmektedir.

VAKA: 61 yaşında erkek hasta, ateş, boğaz ağrısı, iştahsızlık, ishal ve kusma nedeniyle tarafımıza getirildi. TA:92/63, SO2:%95, ateş:38.3°C, nabız:140/dk (hızlı ventrikül yanıtlı atriyal fibrilasyon), solunum sayısı:17/dakika idi. Hastadan ve yakınlarından alınan anamneze göre, bilinen hipertansiyonu ve ritim bozukluğu olan, 6 yıl önce kapak değişim ameliyatı olan, ilaçlarını düzenli kullanan hastanın 3 gündür boğaz ağrısı, ateş (hiç ölçülmemiş), iştahsızlık, halsizlik, günde yaklaşık 10 kez olan sulu ishal ve yemek yedikten sonra olan yediklerini içerir tarzda kusması mevcutmuş. Fizik muayenede genel durum orta bilinç açık oryante koopere, halsiz görünümde idi. Sistem muayenesinde cilt turgoru azalmış, orofarinks doğal, akciğer sesleri doğal, kardiyak üfürüm yok, bağırsak sesleri artmış, palpasyonla hassasiyeti yok. Harici muayenesi doğal idi. Tetkiklerinde enfektif parametreler yüksek, harici özellik yoktu. Görüntülemelerinde aktif enfektif odak görülmedi. Hasta invaziv akut gastroenterit ön tanısı ile intaniye kliniğine, enfektif endokardit ön tanısı ile kardiyoloji kliniğine konsülte edildi. Transtorasik ekokardiyografi ile değerlendirilen hastada enfektif endokardit düşünülmedi. Kan kültürleri alınan hasta intaniye kliniğinin önerisi ile vankomisin ve meropenem başlanarak müşahade amacıyla kliniğimize yatırıldı. Takipleri esnasında ateşi tekrarlayan ve ateş anında kan kültürleri alınan hastanın gaita incelemesi ve kültüründe patoloji izlenmedi. İshali ve kusması geriledi ancak klinik durumda değişiklik olmadı. Hastanın kan kültürü sonucunda Staphylococcus aureus (MRSA) üremesi üzerine intaniye ve kardiyoloji kliniklerine rekonsülte edilen hastanın kardiyoloji kliniği tarafından yapılan transözofajiyal ekokardiyografisinde protez kapakta vejetasyon izlenmesi üzerine hasta enfektif endokardit tanısı ile kardiyoloji yoğun bakım ünitesine yatırıldı.

SONUÇ: Enfektif endokardit, özellikle kardiyak kapak replasmanı, intrakardiyak yerleşimli cihazı olan ya da intravenöz ilaç kullanımı olan hastalarda, açıklanamayan ateş ve odağı bulunamayan enfeksiyon tablolarında mutlaka şüphelenilmesi gereken durumdur. Kuvvetli şüphe durumunda transtorasik ekokardiyografinin yeterli olmayabileceği ve transözofajiyal ekokardiyografi ile değerlendirme yapılması gerekliliği unutulmamalıdır.

ANAHTAR KELİME: Enfektif Endokardit, İshal, Transözofajial EKO

NADİR BİR OLGU: Spontan Pnömomediastinum, Bir Post-Covid Komplikasyon mu?

GİRİŞ:

Pnömomediastinum, intratorasik basınç artışı sonucu havanın trakeobronşiyal ağaçtan kaçmasına bağlı, mediastende serbest hava olması olarak tanımlanan son derece nadir bir durumdur (1). Ciddi morbiditeye ve hatta ölümcül komplikasyonlara yol açabilmesi nedeniyle son derece dikkatle değerlendirilmesi gerekmektedir.

2019 yılından itibaren tüm dünyayı etkisi altına alan Covid-19 pandemisinde; spontan pnömomediastinumun Covid-19 hastalarında ve postcovid süreçte de görülebilen bir komplikasyon olduğu bildirilmiştir (2,3,4). Ancak literatürde hali hazırda gelişme mekanizmasına dair yeterli kanıt bulunmamaktadır (5).

Biz bu sunumda geçirilmiş Covid-19 öyküsü olan ve spontan pnömomediastinum gelişen bir hastayı literatür eşliğinde tartışarak bu nadir ancak önemli klinik durumun acil servislerde yönetimine katkı sunmayı amaçladık.

OLGU:

Acil servise, otururken aniden başlayan epigastrik ağrı, bulantı-kusma ve kısa süreli sırt ağrısı şikayetleri ile başvuran, öğretmenlik yapan 36 yaşındaki kadın hastanın anamnezinde, bilinen kronik hastalığı, herhangi bir ilaç kullanımı öyküsü, travma öyküsü yoktu. Son 2 yıl içerisinde ve sonuncusu dokuz ay önce olmak üzere üç kez PCR pozitifliği ile kanıtlanmış Covid 19 öyküsü bulunan hasta aktif sigara kullanıcısı idi. Hastanın kustuktan sonra bir miktar rahatladığı ancak epigastrik ağrısının geçmemesi üzerine acil servisimize başvurduğu öğrenildi.

Hastanın acil servise başvuru anında kan basıncı TA: 120/85 mm Hg, kalp tepe atımı nabız:80/dakika, oksijen saturasyonu %96 (oda havasında), vücut ısısı: 36.5^{o}C olarak tespit edildi. Genel durumu iyi olan hastanın dispne veya takipnesi yoktu. Fizik muayenesinde; epigastrik hassasiyeti mevcut olup batında defans ve/veya rebound saptanmadı. Cilt altı amfizem mevcut değildi. Hamman bulgusu negatifti. Diğer sistem muayeneleri doğaldı. EKG'si normal sinüs ritmindeydi.

Yapılan kan tetkiklerde HCG: <0.2, beyaz küre: 6.75 10^{9}/L, Hgb: 12.9, PLT: 140 10^{9}/L, kreatinin: 0.6 mg/dL; biyokimyasal bulguları AST: 23 U/L, ALT: 15 U/L, Na:135 mmol/L, K: 3.7 mmol/L, Ca: 9.2 mg/dL, Cl: 104 mmol/L; kanama parametreleri PT: 11.8 sn, INR: 1.00, aPTT: 19.7 sn olarak tespit edildi. Tam idrar tetkikinde pH:5, dansite: 1029, eritrosit 2, lökosit 6, beyaz küre: 2, bakteri 42 olarak sonuçlandı. Hastanın toraks bilgisayarlı tomografi (BT)'sinde anterior mediastende, prevasküler alanda, prekardiyak ve perikardiyak planlarda hava dansiteleri saptanarak pnömomediastinum tanısı aldı. Akciğer parankimlerinde herhangi bir pnömonik konsolidasyon veya ayrıca patolojik bulgu izlenmedi (Resim 1).

Hasta kardiyoloji ve kardiyovasküler cerrahi bölümlerine konsülte edildi. Yapılan EKO'sunda ejeksiyon fraksiyonu: % 60, kalp boşlukları normal boyutta, inferior vena cava çapı ve solunumsal varyasyonu normal olduğu saptandı ve tamponad bulgusu olmadığı tespit edildi.

Hasta kardiyovasküler cerrahi servisinde hospitalize edildi. Hasta, serviste antibiyoterapi ve oksijen desteğiyle iki gün takip edildikten sonra çekilen kontrol toraks BT sinde pnömomediastinum saptanmaması üzerine önerilerle taburcu edildi.

TARTIŞMA:

Pnömomediastinum, nadir görülen ancak ölümcül sonuçlara yol açabileceğinden; acil servis hekimleri için son derece önemli bir tanıdır. Pnömomediastinumun 5-34 yaşları arasında görülme sıklığı 1/25000 olup vakaların % 76' sı olgumuzun aksine erkektir (6). Hastamızın istirahatte semptom tariflemesinin aksine pnömomediastinum sıklıkla hareketle tetiklenir (7). Pnömomediastinum şüpheli hastalarda toraks BT tanısal ve temel görüntüleme yöntemidir.

Spontan ve sekonder pnömomediastinum olmak üzere 2 gruba ayrılır. Spontan pnömomediastinum (SM) intratorasik basınçta ani artışın alveol içi basıncını arttırmasıyla gelişir (8). Valsalva manevrası, öksürme, hapşırma gibi intratorasik basıncın arttığı durumlar spontan pnömomediastinuma neden olabilir.

Sekonder pnömomediastinum ise; künt veya penetran travmalar, özefagus ve solunum yollarına yapılan girişimsel işlemler ile gaz üreten mikroorganizmalara bağlı mediastinal enfeksiyonlardan kaynaklanabilir (1).

Travma öyküsü olan hastalarda tanı koymak nispeten kolay olabilir ancak bizim olgumuz gibi travma öyküsü olmayan hastalarda tanının akla gelmesi ve etiyoloji araştırılması önemlidir. Travma başta olmak üzere sekonder pnömomediastinum nedenleri ekarte edildikten sonra ancak olgular spontan patoloji olarak kabul edilebilir.

Acil servise başvuran hastalarda spontan pnömomediastinum görülme sıklığı 1/30000 'dir (9). Hastalar göğüs ağrısı, boyun ağrısı, dispne, öksürük, odinofaji, subkutan amfizem, yüz ve boyunda şişme ile başvurabilir.

2019 yılından beri devam eden Covid-19 pandemisi süresince Covid-19 geçirmekte olan ve geçirmiş olan hastalarda spontan pnömomediastinum gelişebildiğini bildiren çalışmalar mevcuttur (7).

102 Covid-19 hastasının dahil edildiği bir çalışmada; hastaların % 6.1 'inde SM geliştiği, SM gelişen hastaların % 83'nün erkek olduğu ve SM gelişen hastalarda mortalitenin % 17 olduğu bildirilmiştir (5). 1100 Covid-19 hastasının dahil edildiği bir çalışmada, travma öyküsü olmayan Covid-19 hastalarında; % 3.9 oranında spontan pnömotoraks (SP) ve SM geliştiği, SP-SM gelişen hastaların %97.7' sinin erkek olduğu ve bu hastalarda mortalitenin % 51.2 olduğu rapor edilmiştir (10).

Sunduğumuz bu vakada literatürün aksine olgunun kadın olması ve pnömomediastinumun hastanın fiziksel aktivitede bulunmadığı sırada semptomatik olması dikkat çekici özellikleridir. Diğer yandan hastanın son iki yılda üç kez Covid 19 ile enfekte olması, gelişen spontan pnömomediastinumun Covid sonrası komplikasyon olabileceğini akla getirmektedir. Covid 19 enfeksiyonu süreci ve sonrasında spontan pnömotoraks ve pnömomediastinum nadir ve değişken oranlarda görülmekle birlikte fizyopatolojik mekanizmaları net ortaya konulamamıştır. Her ne kadar yapılan vaka bildirimleri ve bu özel alandaki sınırlı çalışmanın bulguları ışığında demografik hasta özellikleri ve klinik bulgular kategorize edilmeye çalışılsa da pandeminin halen devam ettiği bu süreç ve sonrasında olgu çeşitliliği ve klinik özelliklerinin literatüre kazandırılmasının son derece faydalı olacağına inanıyoruz. Ayrıca özellikle de Covid 19 pozitifliği öyküsü bulunan hastalarda, temel olarak fiziksel aktivitenin pnömomediastinum için tetikleyici olduğu kabul edilse de olgumuzdaki gibi aktivite dışı olmasına rağmen epigastrik ağrı, öksürük, dispne gibi şikayetlerle acil servislere başvuran hastalarda pnömomediastinumun da ayırıcı tanıda yer alması ve toraks BT görüntüleme endikasyonları arasında bulundurulması gerekliliği literatür zenginleştikçe daha da açıklık kazanacaktır.

Sonuç olarak; pnömomediastinum Covid-19 geçirmekte olan hastalarda olduğu gibi post-covid süreçteki olgularda da ayırıcı tanıda acil servis hekimlerince göz ardı edilmemeli ve tanısal torasik görüntülemede tipik işaretleri aranmalıdır.

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KONFÜZE KKKA

Araş. Gör. Dr. Hatice Kübra Taşci, Dr. Öğr. Üyesi Ali Gür

GİRİŞ: Kırım-Kongo kanamalı ateşi (KKKA), keneler tarafından bulaşan, ateş ve kanama ile karakterize zoonotik bir hastalıktır. KKKA keneler, enfekte hayvanların kan veya diğer vücut sıvılarıyla doğrudan temas, hastane yoluyla bulaşma ve dikey bulaşma yoluyla bulaşır. Hastalığın klinik belirtileri ani başlangıçlı ateş, baş ağrısı, halsizlik, kas ağrısı, boğaz ağrısı, baş dönmesi, konjonktivit, fotofobi, karın ağrısı, bulantı ve kusmayı içerir.

Biz de bu vakamızda atipik semptomlarla başvuran ve KKKA tanısı alan hastamızdan bahsettik.

VAKA: 77 yaşında kadın hasta halsizlik, bayılayazma, ateş ve bilinç değişikliği nedeniyle acil servise başvurdu. İlk muayenesinde vital bulguları stabildi. GKS:13, bilinç konfüze olan hastanın anamnezi yakınlarından alınabildi. Normalde yalnız yaşadığı, tatil için çocukları yanına geldiğinde bu halde buldukları ve hastaneye başvurdukları öğrenildi. Bilinen hipertansiyon ve Parkinson hastalıklarının olduğu ve ilaçlarını düzenli olarak kullandığı öğrenildi. Yapılan fizik muayenede orofarinks doğal, akciğer sesleri eşit ve ek ses yok, batın rahat, nörolojik muayenede dört ekstremite hareketli, patolojik refleks ve meningeal irritasyon bulgusu yoktu. Hastanın tetkiklerinde enfektif parametreleri yüksekti ancak belirgin enfeksiyon odağı yoktu. Hastanın santral görüntülemesinde akut patoloji izlenmedi. Lomber ponksiyonda ensefalit lehine bulgu saptanmadı. Tedavisi başlanan hasta müşahade amacıyla yatırıldı. Kontrol muayenede bilinç düzeyinde iyileşme izlendi. Hastadan alınan anamnezde 3 gün önce vücudunda kene bulduğu ve kendisinin söküp attığı, herhangi bir sağlık kuruluşuna başvurmadığı ve bu olaydan sonra halsizleştiği, iştahsızlığının olduğu ve beslenemediği ayrıca parkinson ilaçlarını da kullanmadığı öğrenildi. Hastanın kontrol kanları alındı. Başvurusuna göre platelet değerlerinde düşüş, karaciğer enzimlerinde yükseklik olduğu görüldü. Hastadan KKKA için PCR testi gönderildi ve pozitif geldi. Hasta intaniye kliniğine devredildi.

SONUÇ: KKKA non-spesifik semptomlarla seyreden, anamnez ve endemik bölge göz ardı edildiğinde tanısı zor olabilen bir hastalıktır. Özellikle endemik bölgeden gelen ve açıklanamayan enfektif tablosu olan hastalarda anamnez mutlaka derinleştirilmelidir. Hem hastanın prognozu hem de sağlık çalışanın güvenliği açısından tanının hemen konulması son derece önemlidir.

ANAHTAR KELİME: Kırım-Kongo kanamalı ateşi, Kene, Konfüzyon

AKUT GASTROENTERİT DEĞİL AKUT PULMONER EMBOLİ

Araş. Gör. Dr. Hatice Kübra Taşci, Doç. Dr. Erdal Tekin

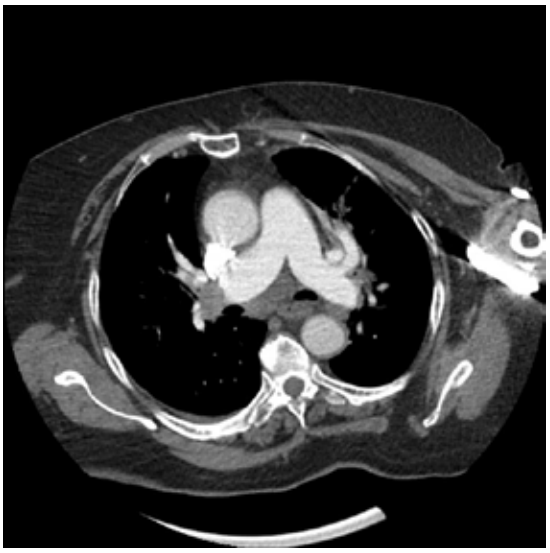
GİRİŞ: Akut pulmoner emboli (PE), yaygın ve bazen ölümcül olan bir venöz tromboembolizm şeklidir. PE'nin klinik görünümü değişkendir ve sıklıkla spesifik değildir, bu da tanıyı zorlaştırır. PE, semptom olmamasından şok veya ani ölüme kadar değişen çok çeşitli sunum özelliklerine sahiptir. En yaygın başvuru semptomu nefes darlığıdır, bunu göğüs ağrısı, öksürük ve derin ven trombozu semptomları izler. Hemoptizi alışılmadık bir semptomdur. Şiddetli PE ile hastalar şok, aritmi veya senkop ile başvurabilir. Bazıları büyük PE'li hastalar da dahil olmak üzere birçok hasta asemptomatiktir veya hafif veya spesifik olmayan semptomlara sahiptir.

Biz burada atipik bir klinikle başvurup pulmoner tromboemboli tanısı alan bir hastamızdan bahsettik.

VAKA: 77 yaşında kadın hasta 3 gündür olan ishal ve kusma nedeniyle başvurdu. Bilinen hipertansiyon dışında hastalığı olmayan hasta günde yaklaşık 10 kez dışkıladığını, dışkısında kan veya mukus görmediğini ve günde 1-2 kez yediklerini içerir tarzda kustuğunu ifade etti. Hastanın vitallerinde saturasyonu oda havasında %70-75 idi. Harici vitalleri doğaldı. Elektrokardiyografisi sinüs ritminde ve hızı normaldi. Fizik muayenede batını rahat, akciğeri sesleri doğaldı. Tetkikleri alındı ve tedavisi başlandı. Kan gazında dekompanse metabolik asidozu ve orta düzeyde hipoksisi olan hasta, dehidratasyona bağlı metabolik asidoz düşünülerek hidrate edildi. Hipoksisi açıklanamayan hastanın Wells skoru orta riskli olması üzerine D-dimer çalışıldı. D-dimer müspet gelen hastanın görüntülemesi yapıldı ve sağ ana pulmoner arterde emboli(Resim-1) saptanması üzerine düşük molekül ağırlıklı heparin yapıldı, göğüs hastalıkları kliniğine konsulte edildi ve yatışı yapıldı.

SONUÇ: Özellikle yaşlı hastalarda, şikayeti her ne olursa olsun, vital bulguların tam değerlendirilmesi, hastaya bütüncül bakılması hastanın tanısı adına şarttır. Atipik kliniklerle başvuran ve açıklanamayan klinik tablosu olan hastalarda PE akıldan çıkmaması gereken bir tanıdır.

ANAHTAR KELİME: İshal, Akut Pulmoner Emboli, Wells skoru.



Resim-1. Hastanın Toraks Bilgisayarlı Tomografi Görüntüsü

TAKİP ÖNEMLİ

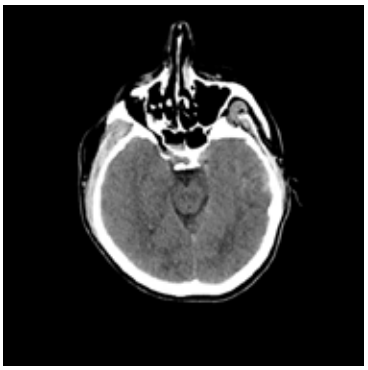
Araş. Gör. Dr. Hatice Kübra Taşci, Araş. Gör. Dr. Hasan Şenel, Doç. Dr. Erdal Tekin

GİRİŞ: Travmatik beyin hasarı (TBH), dünya çapında önemli bir sağlık kaybı ve sakatlık kaynağıdır. Kontüzyon serebri en sık TBH tipidir. Sıklıkla genç popülasyonda görülür. Künt kafa travmalarına bağlı olarak, sıklıkla araç içi trafik kazası sonrası ve coup-countrcoup tipi yaralanmalarda görülür. Ayrıca spor yaralanması, düşme ve çocuk istismarında da görülebilir. En sık frontal ve temporal lobda meydana gelir. Serebral kontüzyonların travmaya bağlı yaralanan mikrovasküler yapıların sızıntı şeklinde devam eden kanamalarına bağlı olarak geliştiği düşünülmektedir.

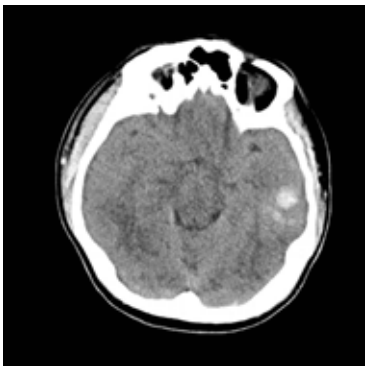
VAKA: 48 yaşında erkek hasta tarafımıza araç içi trafik kazası nedeniyle 112 ekipleri tarafından getirildi. Gelişinde genel durumu iyi, GKS:15, oryante koopere olan hastanın vitalleri stabil idi. Anamnezde ön koltukta seyahat ederken arkadan bir aracın kendi aracına çarptığını ve başının sağ tarafını ön cama çarptığını ifade etti. Emniyet kemeri takılı olan hasta savrulmamış ve başka yerini çarpmamış. Fizik muayenede sağ frontal bölge dermabrazyon, ekimoz ve şişlik mevcuttu. Harici sistem muayeneleri doğaldı. Hasta santral görüntüleme için bilgisayarlı tomografiye (BT) gönderildi. BT'de sol temporal lobda hemorajik kontüzyon ile uyumlu görünüm izlendi (Resim-1). Beyin cerrahi kliniğine konsülte edildi. İlgili klinikçe şuur takibi önerilen hasta takip için kliniğimize yatırıldı. Takibi esnasında şuur değişikliği olmayan ancak mükerrer kusmaları olan hastaya 4. saatte kontrol beyin BT çekildi. Çekilen BT'de sol temporal lobdaki kanama alanında genişleme görülen (Resim-2) hasta beyin cerrahi kliniğine rekonsülte edildi ve yatışı yapıldı.

SONUÇ: Kafa travması, sonuç skalası çok geniş olan, tekrarlanmış fizik muayenenin, yakın şuur ve semptom takibinin çok önemli olduğu acil servisin sık başvuruları arasında olan bir klinik tablodur. Özellikle hafif beyin hasarı olan ve başlangıç görüntülemesinde özellik olmayan hastaların yakın takibi önemlidir. Ayrıca bu hastaların fizik muayenelerinin tekrar edilmesi ve GKS hesaplanması klinik tablodaki değişikliğin tespiti için çok önemlidir. Bu hastalarda tekrarlanan görüntülemeler ile hastanın ilerleyen tablosu tespit edilir.

ANAHTAR KELİMELER: Kafa Travması, Kontüzyon, Travmatik Beyin Hasarı



Resim 1: Travma Sonrası İlk BT Görüntüsü



Resim 2: 4 Saat Sonra Çekilen BT Görüntüsü

ACCELERATING DECELERATION

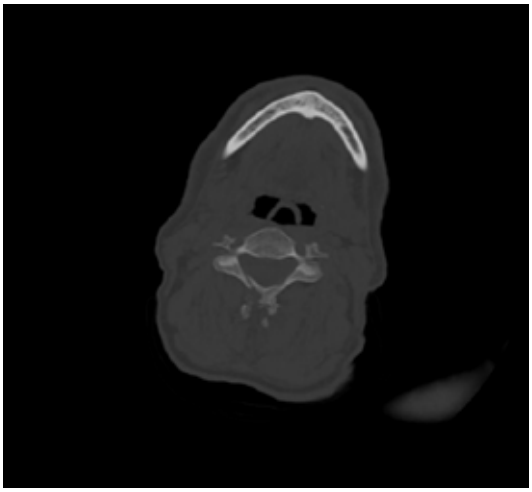
Hasan Senel, Omer Turalıoglu, Mevlana Omeroglu

INTRODUCTION: Diagnosis of cervical spine injury in post-traumatic patients involves imaging. Cervical spine injuries can range from minor and stable injuries to more serious injuries that involve vertebral fractures or damage to the spinal cord, nerve root, ligaments or vessels. Non-contrast cervical spine computed tomography (CT) is the imaging modality of choice in patients who need imaging for suspected cervical spine injury. Patients with penetrating neck trauma and neurological deficits should be immobilized and undergo an investigation, including investigation of bone injury. Cervical pathologies should be investigated especially after the acceleration and deceleration mechanism in vehicle traffic accidents.

CASE: A 66-year-old male patient applied to the emergency service with neck pain as a result of his vehicle colliding with another vehicle while he was in the front seat of the vehicle. The patient stated that his head moved forth- back abruptly at the accident. Thpatients was oriented, cooperative. Patient's glascow coma was scale:15. His vital signs were normal. On physical examination, there was no neurological deficit, upper and lower extremity motor strength was 5/5 bilaterally, and cervical tenderness on palpation was present. In the patient's imaging, there was an image compatible with cervical 4 spinous processes and right lamina fracture (Figure 1). The patient was consulted to the neurosurgery clinic. The neurosurgeon recommended to the patient a filadelphia collar. The patient was discharged with the recommendations of neurosurgery.

CONCLUSION: Cervical spinal cord injuries are an emergency clinical picture that can be seen frequently, especially in elderly patients, after the mechanism of acceleration and deceleration. Considering the mechanism of trauma. Advanced imaging methods (CT, MR) should be used in patients for diagnosis.

KEYWORDS: Trauma, servical injuri



Figüre 1

SCAPHOID FRACTURE

Hasan ŞENEL, Sultan Tuna Akgöl GÜR

INTRODUCTION: Scaphoid fractures are the most common carpal bone fracture and typically result from a fall on an outstretched arm with the wrist in dorsiflexion. A scaphoid fracture should be suspected in any patient with wrist pain following a fall. Patients usually complain of pain localized to the radial aspect of the wrist, just proximal to the thumb metacarpal. Plain radiographs should be taken immediately after injury, but these may not show evidence of a fracture. Advanced imaging methods may be required. Clinical examination alone has shown insufficient diagnostic accuracy for scaphoid fractures. While anatomical snuffbox sensitivity is the most sensitive examination finding (87-100 percent), its specificity is limited. Combining clinical testing can significantly improve specificity, but a significant number of fractures still go unnoticed without diagnostic imaging.

CASE: A 21-year-old male patient presented to the emergency department with shoulder and wrist pain after falling off a horse. The patient was placed on a stretcher and monitored. Vital signs were stable, general condition was good. Glascow coma scale was 15. On physical examination, there was tenderness in the left shoulder and right wrist. External examination was normal. A fracture was detected in the scaphoid bone of the right hand in the imaging of the patient. The patient was consulted to the orthopedics and traumatology clinic. orthopedic and traumatology clinic recommended surgerical treatment. Patient did not accept the operation and left the emergency room voluntarily, after casting a plaster cast.

CONCLUSION: The scaphoid bone has a weak blood supply extending from distal to proximal. For this reason, there is a risk of complications such as avascular necrosis in fractures, and early diagnosis and treatment are important. Open fractures and those associated with neurovascular hazard require emergency surgery.

KEYWORDS: Scaphoid, trauma, fracture

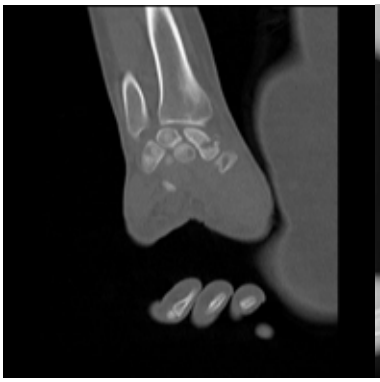


Figure 1

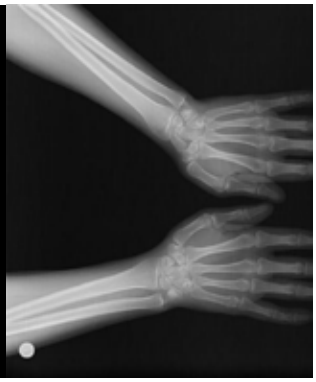


Figure 2

SLAP OF THE BEAR

Hasan ŞENEL, Sümeyye GÜNDÜZ, Ali GÜR

INTRODUCTION: Mandible fractures are a common facial injury, especially in patients with multiple injuries. It constitutes 10-25% of all facial injuries. Fractures of the mandible are often multiple, and if a fracture is detected at one site, a second fracture at another site should be suspected. The most common causes in etiology; motor vehicle accidents, assault, falls, sports and firearm injuries. Fractures usually occur in areas where the mandible is anatomically weaker. These areas are angulus, where the 3rd molar is located, due to the long roots of the canines and the neck of the condyle.

CASE:A 30-year-old male patient admitted to emergency department from an external center after he suffered a blunt trauma to the right side of his face after the bear attack in the forest. In the first evaluation of the patient in the emergency department, the general condition was moderate. Glascow coma scale was: 15, vital signs were normal. On physical examination, there was an open wound of approximately 8 cm on the right side of the mandible, tenderness in the right forearm, and widespread skin abrasions in various parts of the body. Tetanus and rabies immun globulins were performed in our emergency clinic for the patient who was vaccinated against tetanus and rabies in an external center. Because of the fracture in the mandible (Figure 1-2) and a fracture in the right radius distal in the emergency imaging, he was consulted to the maxillofacial surgery clinic and orthopedics clinic, and hospitalized for maxillofacial surgery.

CONCLUSION: The face is important for appearance and functionality. Facial injuries can impair the patient's ability to eat, speak, interact with others, and perform other important functions. Especially in multitraumas and isolated facial traumas, facial bone examination of the patients should be evaluated, and the presence of additional pathologies should not be overlooked.

KEYWORDS: facial trauma, mandible

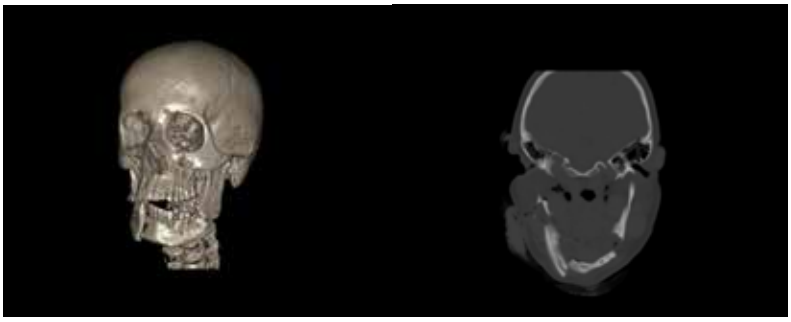


Figure 1

Figure 2

TRACHEA PERFORATION

Hasan ŞENEL, Emine ÖZDAL, Mevlana ÖMEROĞLU

INTRODUCTION: Tracheobronchial injuries are defined as injuries occurring between the cricoid cartilage and the right and left main tracheal bifurcation. This injury is a rare but potentially life-threatening injury. Tracheobronchial injury may result from penetrating or blunt traumatic mechanisms, but may also occur following iatrogenic injury. Some tracheobronchial injuries can be immediately fatal as a result of suffocation due to airway obstruction or tension pneumothorax. Milder injuries may result in delayed airway stenosis. A high index of suspicion and prompt diagnosis and treatment are essential for these injuries to optimize outcomes in these patients.

CASE: A 56-year-old male patient was admitted to the emergency department with trauma to the neck as a result of a cow attacking him. The patient admitted to emergency department complaints of a feeling of tenderness and pressure in the neck upon. The general condition of the patient was moderate, glasgow coma scale: 15, vital singns were normal. There was subcutaneous crepitation in the upper part of the thorax and neck. In the patient's imaging, there was loss of integrity in the anterior trachea at the level of the hyoid bone and diffuse subcutaneous free air (Figure 1). These findings were evaluated in favor of tracheal perforation and the thoracic surgery clinic was consulted. The patient was hospitalized by the thoracic surgery clinic.

CONCLUSIONTracheobronchial injuries may be associated with high mortality during trauma and treatment process due to disruption of airway integrity. Patients with tracheobronchial injury may require close monitoring, oxygen support and, if necessary, advanced airway support.

KEYWORDS: Trachea, trauma, perforation

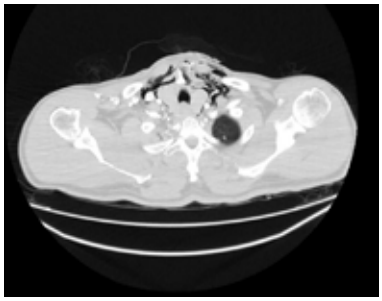


Figure 1

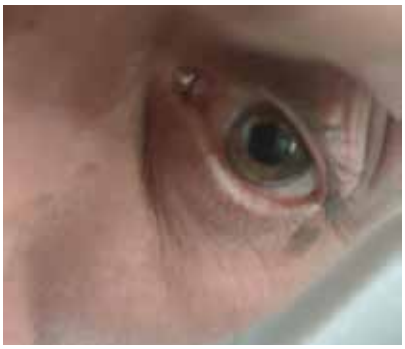
GİRİŞ:

Halk arasında boru çiçeği olarak bilinen Datura Stramonium, ülkemizde yetişen yabani bir bitkidir. İçeriğindeki maddeler(atropin,skopolamin) dolayısıyla ilaç endüstrisinde kullanılır(1,2). Ülkemizde bu bitki antispazmotik etki için yaprakları kurutulup , suda kaynatılıp çay şeklinde tüketilir. Bitkinin tohumları akne ve hemoroid tedavisinde kullanılır(3,4). Santral ve periferik asetilkolin reseptörlerinin kompetitif blokajı sonucu toksisitesi görülür. Periferal muskarinik reseptörlerin bulunduğu temel organlar; kalp , terleme ve tükrük gibi sekresyonlardan sorumlu sekretuar bezler,gastrointestinal sistem, mesane düz kasları en sık etkilenen yapılardır(5,6).

Biz vakamızda boru çiçeği (Datura Stramonium) yapraklarını kurutup çay olarak tükettikten sonra antikolinerjik semptomlarla acil servise başvuran 43 yaşında erkek hastayı ele aldık.

VAKA:

43 yaşında erkek hasta ,özgeçmişinde bilinen hastalığı yok, yakınları tarafından yerinde duramama, yakınlarını tanıyamama ve çarpıntı şikayeti ile acil servise getirildi. Yakınlarından alınan anamneze göre hastanın hemoroid şikeyeti nedeniyle arkadaşının verdiği otu kaynatıp, çay şeklinde tükettikten 2 saat sonra şikayetleri başlamış. Hastanın başvurusunda ajite görünümde, dezoryante, non koopere olduğu görüldü. Vital bulguları ; nabız:130/dk tansiyon:124/81 mmhg, parmak ucu kan şekeri:130 mg/dl, oksijen saturasyonu:%97. Hastanın pupilleri izokorik ve bilateral midriatik görünümde, bilateral ışık refleksi zayıflamıştı. Glaskow koma skoru 12 olarak değerlendirildi. Yüzde hafif flushing mevcuttu ve mukozaları kuru görünümdeydi. EKG de sinüs taşikardisi mevcut olup hızı:132/dk idi.



Laboratuvar incelemelerinde tam kan sayımı, kan biyokimyası ve arteryel kan gazı analizi incelendi, normal olarak değerlendirildi. Hastanın santral görüntülemelerinde beyin bilgisayarlı tomografi(BT) de patoloji saptanmadı. Hastaya destek tedavisi başlandı (ıv hidrasyon), hasta monitorize takip edildi, mesane sondası takıldı. Hasta yakınlarına Datura Stramonium bitkisinin resmi gösterildi ve yakınları doğruladı. Hastanın ajitasyonu için 5 mg iv diazem infuzyonu uygulandı. Hastadaki deliryum tablosunun nedeninin Datura Stramonium bitkisine bağlı antikolinerjik toksidrom olduğu düşünüldü. Neostigmin 0.5mg*4 IV olarak verildi. Hastanede bulunmaması nedeniyle aktif kömür uygulanmadı. Takibinde bilinci açılan hasta takip ve tedavisinin devamı için yoğun bakım ünitesine interne edildi.

TARTIŞMA:

Acil servislerde antikolinerjik toksisite ile sıklıkla karşılaşılır.Antikolinerjik sendromun klinik bulguları santral muskarinik reseptörlerin inhibisyonu sonucu oluşan pupillerde midriazis , ter bezlerinin inhibisyonu sonucu: hipertermi, cilt ve mukozalarda kuruluk, kalpteki muskarinik reseptörlerin inhibisyonu sonucu çarpıntı, taşikardi ve hipertansiyon , gastrointestinal sistemdeki inhibisyon sonucu ileus , mesane kaslarındaki inhibisyon sonucu idrar retansiyonu görülür(7,8). Antikolinerjik toksisitenin başlangıcı genellikle oral alımdan iki saat sonra başlar(9), hasta oral alımdan 4 saat sonra acil servise başvurdu. Antikolinerjik toksisitenin spesifik belirtileri arasında anksiyete, ajitasyon, görsel halüsinasyonlar,deliryum, psikoz, koma ve nöbetler bulunur. Halusinasyonlar genellikle nesnelerin daha büyük ve küçük göründükleri “Alice Harikalar Diyarında” olarak tanımlanır(10). Tanı anamnez ve klinik bulgularla konulur. Bizim vakamızda oral alımdan 4 saat sonra başlayan deliryum ve psikozlar mevcuttu. Takipte kullanılabilecek testler: EKG , serum biyokimyasal testleri(elektrolitler,karaciğer ve böbrek fonksiyon testleri) ve kan gazı analizidir.Bizde vakamızda bu testleri yaptık, patoloji saptanmadı.

Hasta yönetiminde ilk aşama ABC ve vital bulguların stabilizasyonudur. Hastanın kliniğine göre ajitasyon,halüsinasyon veya nöbet varsa destek tedavide ilk seçenek benzodiazepinlerdir. Vakamıza ABC yaklaşımından sonra ajitasyon için 5 mg iv diazem uyguladık. Antipiretik ajanlar hiperterminin tedavisinde önerilmez çünkü hipertermi ter bezleri inaktivasyonu sonucu gelişir. Hastada idrar retansiyonu sonucu glob vesicale gelişebilceği için foley sonda takılmalıdır. Hastaya destek tedavi (iv hidrasyon) başlanmalıdır.Hastamıza ıv hidrasyon verildi ve mesane sondası takıldı.Asemptomatik hastalar en az 6 saat acil serviste izlenmelidir. Hafif antikolinerjik toksisitesi olan hastalarda semptomların çözülmesi beklenmelidir.şiddetli kliniği olan ve fizostigmin verilen hastalar en az 24 saat gözlemlenmelidir. Skopolamin (hyosin) gibi bazı antikolinerjikler maruziyetten sonraki 24 ila 48 saat boyunca etki gösterebilir.Bu tür hastalar daha uzun süre gözlemlenmelidir.Biz de hastamızı semptomlarının tam olarak çözülmemesi nedeniyle yoğun bakım ünitesine interne ettik.

Antikolinejik sendrom durumunda destekleyici tedavi çoğu zaman yeterlidir fakat bazı durumlarda fizostigmin ile antidotal tedavi düşünülebilir(11,12). İzole antikolinerjik toksisite nedeniyle ajitasyon ve deliryum yönetiminde fizostigmin benzodiazepinlerden üstün görünmektedir(13,14). Fizostigminin moleküler yapısı dolayısıyla kan beyin bariyerini geçer; diğer moleküller(örn:-neostigmin,piridostigmin) bu bariyeri geçemez. Biz hastamıza neostigmin uyguladık semptomlarında gerileme oldu fakat bilinci tam açılmadı. Fizostigmin bu nedenlerden dolayı antikolinerjik sendromun periferik ve santral etkilerini tersine çevirmede son derece yararlıdır.Antikolinerjik zehirlenme nedeniyle tedavi edilen 52 hastanın retrospektif çalışmasında, fizostigmin ajitasyon ve deliryum kontrolünde benzodiazepinlerden daha etkili bulunmuş. Fizostigmin ile tedavi edilen hastalarda daha az komplikasyon yaşanmış ve daha kısa sürede iyileşme sağlanmış.(15) Tıbbi toksikologlar tarafından gerçekleştirilen yatak başı konsültasyonlarının retrospektif çalışmasında; fizostigmin kullanımı ,benzodiazepinlere kıyasla daha düşük entübasyon oranıyla ilişkili bulunmuş.(16)

Fizostigmin kullanımını destekleyen çalışmalar olsa da kullanımı hala tartışmalıdır.Antikolinerjik toksisite kesin değilse veya bilinçsizce kullanılırsa kolinerjik toksisite ortaya çıkabilir.

SONUÇ:

Acil servise ajitasyon,deliryum tablosuyla başvuran hastalar antikolinerjik sendrom açısından değerlendirilip detaylı anamnez alınmalıdır. Antikolinerjik sendrom olgusunun yönetimindeki en önemli basamak tanının konulmasıdır. Hasta yönetiminde destek tedavi oldukça etkin ve önemlidir.

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CLINICAL CHARACTERISTICS OF EMERGENTLY HOSPITALIZED PATIENTS WITH CRIMEAN-CONGO HEMORRHAGIC FEVER
50 YAŞ ALTI KIRIM-KONGO KANAMALI ATEŞİ İLE ACİL HASTANEYE YATIRILAN HASTALARIN KLİNİK ÖZELLİKLERİ

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GİRİŞ

Kırım Kongo Kanamalı Ateşi (KKKA) keneler tarafından insana bulaşan Arbovirüs' ün oluşturduğu bir hastalıktır. Hastalık 1944 yılında Kırım' da dikkati çekmiştir. Aynı etken asya ve afrikada da izole edilmiştir. CCHF' ye Kırım kongo virüsü olarak adalandırılan etken neden olur. Bu virus Bungavirdae ailesinden Nairovirüs cinsine dahildir (1). Türkiye'de 2002 yılında KKKA vakalarının ilk atılımından sonra, toplam ölüm oranı %5'in biraz altında olmuştur, ancak vaka sayısı artmaktadır. 2003 yılında Türkiyede Sağlık Bakanlığı ve Gıda, Tarım ve Hayvancılık Bakanlığı tarafından düzenlenen bir ekip Tokat bölgesinde inceleme yapmış ve hastaların hayvancılıkta çalıştığını ve kene ısırması öyküsü olduğunu tespit etmiştir (2).

Çalışmamızda KKKA nedeniyle acilden hastaneye yatırılan 50 yaş altında ve ek hastalığı olmayan erişkinlerin klinik özelliklerini incelemekti.

GEREÇ VE YÖNTEM

Çalışmamız Kayseri Şehir hastanesinde, 2021 ve 2022 yıllarında Mayıs, Haziran, Temmuz ve Ağustos aylarında acil servisten hastaneye KKKA tanısı ile yatan hastalar üzerinde geriye dönük olarak yapıldı. KKKA tanısı, Türkiye'deki referans laboratuvarda gerçek zamanlı PCR testi ile doğrulanmıştır (Halk Sağlığı Mikrobiyoloji Referans Laboratuvarları ve Biyolojik Ürünler Dairesi Başkanlığı). Tüm hastalar 18 yaş üstü, 50 yaşın altında ve komorbid hastalığı olmayan hastalar idi.

BULGULAR

İki yıllık süreçte, her salgın yılının Mayıs ve Ağustos ayları arasında, 18-49 yaş arası 30 vaka (%70 erkek) acil servisten hastaneye yatırıldı.

Hastaların yaş ortlaması 32,5 ± 8,5 (min:18, max:49) idi. Hastaların 21'I erkek (%70) idi.

Vakaların çoğu hayvancılıkla uğraşıyordu (n=21, %70). En sık başvuru semptomları ateş (%86.7), halsizlik (%76.7), baş ağrısı (%50), bulantı-kusma (%43.3) ve ishal (%53.3) idi.

Ortalama trombosit sayısı başvuru sırasında 63×10^9 /L idi. Başvuru sırasında altı hastada ≤ 20.000 /mm3 trombositopeni, on bir hastada AST seviyeleri ≥ 200 U/L idi; sekiz hastada ALT seviyeleri ≥ 150 U/L; üç hastada >60 s aPTT vardı.

Genel vaka-ölüm oranı %6.7 idi. On hasta yoğun bakım ünitesine alındı, yedisine plazmaferez uygulandı ve altısı hayatta kaldı. 23 (%76.6) hastaya destek tedavisi verildi ve hiçbir hastada Ribarivin tedavisi uygulanmadı. On bir hastada kene teması olmadı. En sık kene ısırığı bölgesi ekstremitelerdi (%46.7). Kene ısırığı olan tüm hastalar keneyi kendileri çıkarmıştı.

Toplam hastanede kalış süresi 6.8 ± 3.6 (2-15 gün) idi.

TARTIŞMA

Ülkemizde tespit edilen tek viral kanamalı ateş nedeni KKKA' dır ve dünyada otuzdan fazla ülkede görülmektedir. Kırım kongo virüsü arbovirusler için tıbbi öneme sahip ikinci yaygın virüstür (3).

Üklemizde 2002 yılından itibaren KKKA vaka sayıların ciddi bir artış gözlenmektedir. KKKA en çok görüldüğü iller Tokat, Sivas, Yozgat ve Çorum'dur. Hastalar çalışma çağında olan ve kene ile temasta bulunma ihtimali olan tarım ve hayvancılıkla kişilerdir (4). Benzer şekilde çalışmamızda vakaların çoğu hayvancılıkla uğraşıyordu.

KKKA' de inkübasyon, prehemorajik, hemorajik ve iyileşme olmak üzere dört ever vardır. İnkübasyon kene ısırığı sonrası dokuz güne kadar uzayabilen 1-3 günlük dönem, ateş, baş ağrısı ve halsizliğin olduğu prehemorajik 4-5 günlük dönem ve sonrasında hemorajik dönem gelişebilir. Hemorajik dönem kadar kısa ve hızlı gelişir, genellikle mukoza ve ciltte peteşi ile gelişir ve hastalığın 3. ile 5. günleri arasında başlar (5).

KKKA tedavisinde en önemli basamak destekleyici tedavidir. RNA virüsüne karşı geniş spektrumlu bir antiviral ilaç olan ribavirin sık kullanılmış olmasına rağmen, etkinliği tartışmalıdır. KKKA vakalarında plazmaferez kullanımı viral yükü azaltarak hastalığın iyileşmesi için iyi bir araç olabileceği ilk olarak Meço ve ark. tarafınca bildirilmiştir (6). Çalışmamızda ise yedi hastaya plazmaferez uygulandı ve altısı iyileşerek taburcu oldu. Hastaların %76' sına sadece destek tedavisi verildi ve hiçbir hastada Ribarivin tedavisi uygulanmadı.

SONUÇ

Nadir görülmekle birlite son zamanlarda, Kırım-Kongo kanamalı ateşi, özellikle Türkiye'nin yaz aylarında önemli hale gelmiştir. Özellikle hayvancılıkla uğraşan ve acil servise ateş, halsizlik gibi şikayetlerle gelen hastalarda, acil hekimleri viral hemorajik ateş nedenlerini göz önünde bulundurmalıdır.

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OLAĞANDIŞI LOKALİZASYONLARDA MULTİPL KİST HİDATİK: Olgu sunumu

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GİRİŞ

Kist hidatik, echinococcus granulosus türüne ait tenyaların yetişkin veya larva evrelerinin neden olduğu bir zoonozdur.[1] Tenya evresinde, nihai konağı oluşturan köpekler gibi etoburların bağırsağında barınır,[2] yumurtalar enfekte etoburların dışkısıyla çevreye yayılır ve koyun gibi otobur ara konaklar tarafından yutulur. İnsanlar tesadüfi ara konaktır.[3] Vücudun hemen hemen her bölümünü etkileyebilir, ancak en çok etkilenen organlar karaciğer (%75) ve akciğerlerdir (%15).[4] Genital trakt tutulumu ve özellikle uterusta lokalizasyon son derece nadir görülen bir durumdur ve oldukça ilgi çekicidir. Vakaların %0.2–2'sini temsil eder.[5] Biz burada karın ağrısı ve melena ile acil servise başvuran, çekilen bilgisayarlı tomografide karaciğerde , mezenterik yağ dokuda ve uterusta kist hidatik saptanan olguyu sunuyoruz.

VAKA SUNUMU

89 yaşında kadın hasta karın ağrısı ve siyah renkli dışkılama şikayeti ile acil servise başvurdu. Fizik muayenede abdomen sağ üst kadranda ve suprapubic bölgede ağrı ve hassasiyet mevcuttu ancak defans ve rebound yoktu. Rekral muayenede cıvık melena tespit edildi. Gelişinde vital bulguları şöyleydi: tansiyon 140/95 mm Hg, nabız 76 atım/dk, solunum sayısı 16 nefes/dk, oksijen satürasyonu %95, vücut ısısı 36.6 °C. Öyküsünden 10 gün önce gastrointestinal(GIS) kanama ve prerenal akut böbrek yetmezliği(ABY) ile dahiliye servisinde yattığı,endoskopi yapıldığı, gastrik ülserler tespit edildiği öğrenildi. Bilinen atrial fibrilasyon, kalp yetmezliği ve hipertansiyonu olduğu öğrenildi.Kullandığı ilaçlar apiksaban, metoprolol, furosemiddi.

Laboratuvar tetkiklerinde; lenfosit sayısı 0.86x10^3/mm^3 (1-5), hemoglobin düzeyi 11.4 g/dl (11.5-16) (2 saat sonra bakılan kontrolünde 10.61 g/dl), CRP düzeyi 4.90 (0-0.5) olup, bunlardan başka anormal değer izlenmedi. Kontratlı abdomen bilgisayarlı tomografide batın içinde farklı lokalizasyonlarda çok sayıda kist hidatikle uyumlu görüntü tespit edildi (karaciğerde , mezenterik yağ dokuda ve uterusta). Görsel 1,2,3&4.

Gastrointestinal kanama açısından acil müdahale düşünülmedi, medical tedavisi düzenlendi. Kist hidatik lezyonlarını Tip V kist hidatik olarak değerlendirildi ve takibe alındı. Gelişinde 6 gün sonra yapılan Echinococcus IgG indirect hemaglütinasyon testi negative geldi.

TARTIŞMA/SONUÇ

Komplike olmayan kist hidatik genellikle asemptomatiktir. Parazitin varlığına bağlı genel toksik reaksiyon ve kistin konumuna bağlı olarak lokal veya mekanik semptomlar görülebilir.[6] Ultrasonografinin tanısal sensitivitesi %93-98, bilgisayarlı tomografinin sensitivitesi %97'dir.[7] Serolojik testler de doğru tanı koymada yardımcı olur. İndirekt hemaglütinasyon testinin duyarlılığı %87.5'tir.[7] olarak bulundu. Negatif bir serolojik test genellikle ekinokokozu dışlamaz. Serolojik sonuçlar ile kistlerin sayısı veya boyutu arasında tutarlı br ilişki yoktur.[8]

Ultrasonografik Gharbi sınıflandırması kistleri beş tipe ayırır. Tip I- kistler saf sıvıdan oluşur; tip II- bölünmüş duvarlı bir sıvı koleksiyonuna sahiptir; tip III- kistler, yavru kistleri içerir (dejenere olmuş katı madde içeren veya içermeyen); tip IV- heterojen bir eko modeline sahiptir; ve tip V- kalsifiye bir duvara sahiptir.[9]

Tedavide genellikle kistin cerrahi rezeksiyonu veya perkütan aspirasyon ve skolisidal ajanların damlatılması ile birlikte antiparaziter tedaviyi içerir[10] Seçilmiş vakalarda kesin tedavi için antiparaziter tedavi kullanılabilir; aynı zamanda cerrahi ve perkütan tedaviye faydalı bir yardımcı tedavidir.Albendazol, E. granulosus'un tedavisi için birincil antiparaziter ajandır. Albendazolün yokluğunda veya albendazol'e karşı şiddetli advers reaksiyonları olan hastalarda alternatif bir tedavi olarak mebendazol kullanılabilir;albedazolden daha az emilir.[11]

Sunduğumuz vakada, çekilen bilgisayarlı tomografide karaciğerde 2, mezenter yağ dokuda 1, uterusta 1 adet tip V kist hidatik lezyonu tespit edilmiştir. Tip V olduğu için medical veya cerrahi tedavi önerilmemiştir.

Nadir gibi gözükse de kist hidatik nonspesifik semptomlarla karşımıza çıkan ve ülkemizde özellikle de kırsal kesimlerde azınmayacak derecede fazla şekilde karşımıza çıkan bir hastalıktır. Bilgisayarlı tomografi gibi sık kullandığımız bir tetkikle tanı konulabilmesi avantajımızdır. Özellikle uterus gibi kist hidatiğin dünya literatüründe bile çok az sayıda bildirildiği bir konumda gözlenmesi ve aynı anda hem karaciğer hem mezenter yağ doku hem de uterusta görülmesi vakamızı özellikli kıldı. Özellikle de kırsal kesimlerde çalışan her acil servis hekiminin aklının bir köşesinde bulunmalıdır. Hastanın mükerrer acil servis başvurularının ve nonspesifik semptomlarının nedeninin kist hidatik olabileceği ve özellikle de kırsal kesimde çok sık karşımıza çıkabileceği unutlamamalı tanı konulduktan sonra gerekli yönlendirmeler ve tedavi ile kontrol altına alınabileceği iyi bilinmelidir.

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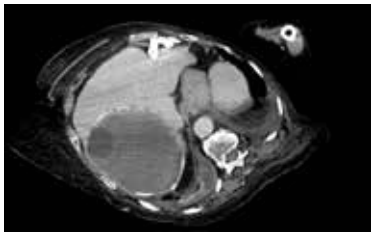
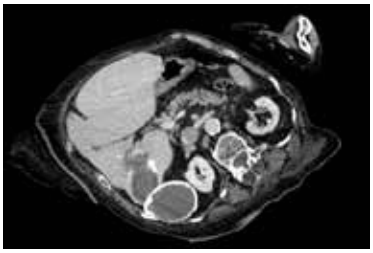
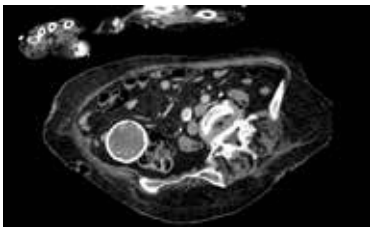
Görsel 1



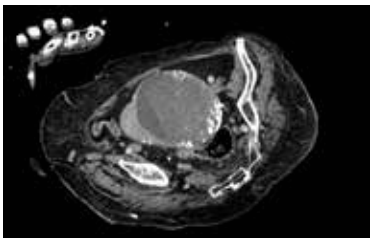
Görsel 2



Görsel 3



Görsel 4



Karaciğer segment 7,8,5 ve 6 'yı büyük oranda dolduran en geniş yerinde 150x115 mm boyutunda periferi kalsifiye, içerisinde solid ve kistik alanlar barındıran lezyon izlenmektedir. (metaztas?, Tip5 kist hidatik?). (Görsel 1) Sol 6-7. kosta düzeyinden başlayarak karaciğer sol loba doğru uzanan 39x27 mm boyutunda kalsifikasyonlar izlenmektedir. (Görsel 2) Alt abdomen üst sağ kesiminde, mezenter yağ doku içerisinde, 61x60 mm boyutunda karaciğerde tariflenen lezyon ile benzer karakterde lezyon mevcuttur(metaztas?, Tip5 kist hidatik?).(Görsel 3) Uterus korpus sol kesiminde 107x99 mm boyutunda, içerisinde ve periferinde kalsifikasyonlar barındıran, içerisinde solid ve kistik alanlar bulunan kitle izlenmektedir (primer malignite ?, Tip 5 kist hidatik ?). (Görsel 4)

ACİL SERVİS VE AMBULANSLARIN GEREKSİZ KULLANIMINDA SON NOKTA: AMBULANSLA HASTA ZİYARETİ

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GİRİŞ/AMAÇ

Ülkemizde sağlık hizmetinin ücretsiz olması ve gereksiz işgal durumlarında yaptırım uygulanmaması, hastanelerin ve hastane dışı acil sağlık hizmetlerinin yükünü arttırmaktadır. Özellikle artniyetli kişiler tarafınca ülkenin maddi kaynakları gereksiz sömürülmekte, asıl tedavi ihtiyacı olan hastalarının tedavilerini almasında gecikme olabilmekte ayrıca hekim ve diğer sağlık çalışanlarının mental ve fiziksel olarak yıpranmasına neden olmaktadır.

OLGU SUNUMU

46 yaşında erkek hasta, göğüs ağrısı ve sol kold uyuşma şikayeti ile 112'yi aramış ve ekiplerce ambulansla hastanemiz acil servis sarı alanına getilmştir. Hasta teslim alınırken 112 ekipleri hastanın göğüs ağrısı şikayeti ile 112'yi arayıp ambulans çağırdığını ama ambulansa bindikten sonra aslında göğüs ağrısı olmadığını, dahiliye servisinde yatan yakınını ziyarete gelmek için ambulansı kullandığını beyan ettiğini tarafımıza bildirdi. Hastanın neden geri bırakılmadığını sorduğumuzda ambulansta doktor olmadığı için risk almamak adına ambulans çağıran herkesi hastaneye getirdiklerini ifade ettiler. Hasta 112 ekiplerinden teslim aldıktan bir dakika sonra tedavi red tutanağı imzalayıp sarı alanı terk etti ve yakınını ziyarete gitti.

TARTIŞMA/SONUÇ

Ülkemizdebir kamu hizmeti olarak sağlık hizmetinin tamamen ücretsiz olması ve yaptırım uygulanmaması başta acil servisler olmak üzere sağlık alanındaki tüm birimlerin iş yükünü artırmaktadır. Acil ambulans sistemlerinin günümüzde sıkça uygunsuz kullanıldığı ve bunun ciddi bir sorun olduğu bilinmektedir.[1] Bu durumun temel nedenlerinden bir kaçı şu şekilde sıralanabilir. 1) Hastane öncesinde ambulansla tranfer ihtiyacının güvenle belirlenememesi,[1] 2) Hastane öncesi sağlık hizmetinde yer alan personelin görev ve yetkilerinin dar olması, 3) artan malpraktis ve sağlıkta şiddet olayları.

Yapılan bir çok çalışmada ambulansla hastaneye getirilen vakaların neredeyse yarısının uygunsuz olduğu tespit edilmiştir.[1,2,3] Bu durum halkın sağlık ve acil hastalık bilgi düzeyinin düşük olamsı veya durumun kendileri açısında belirsizliği olabilir. Ancak bizim vakamızda durum tamamen kamu hizmetinin suistimal edilmesidir. Her ne kadar yasal olarak yaptırımlar öngörülse de pratikte hayata geçirilmemesi, bu tür durumların önüne geçmeyi engellemektedir.

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RASLANTISAL SAPTANAN ÖLÜMCÜL OLABİLEN BİR TANI: KOLLOİD KİST

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GİRİŞ

Kolloid kistler, 3.ventrikülde foramen monro komşuluğunda, nadir görülen iyi huylu beyin tümörleridir. Tüm intrakranyal tümörlerin yaklaşık olarak % 1-2' sini oluştururlar. 20-50 yaş aralığında sık görülür, çocukluk çağında daha da nadir olarak görülmektedir. Kolloid kistli hastaların yaklaşık yarısı asemptomatiktir. Travma yada nonspesifik nedenlerle çekilen nörogörüntüleme sonrası tanı alırlar. Semptomatik hastalarda; baş ağrısı, bulantı-kusma, yürüme güçlüğü, hafıza bozuklukları gibi klinik bulgular görülebilmektedir. Kolloid kist; foramen monroya bası yapıp beyin omurilik sıvısı drenajını bozarak hidrosefali gelişimine, kafa içi basınç artışı ve herniasyona ve ani ölüme neden olabilir.

OLGU

73 yaşında erkek hasta 2-3 gün önce başlayan halsizlik, mide bulantısı şikayetlerine ek olarak bugün başlayan baş dönmesi, göz kararması, yürüme güçlüğü şikayetleri ile acil servise başvurdu. Fizik muayenede; Bilinci açık, koopere, oryante, GKS:15, 4 ekstremite hareketli, kas gücü tam, serebellar testler, kranyal sinir muayeneleri doğal. Tandem yürüyüş testinde hastanın peş peşe 2 adım atamadığı görüldü. Diğer sistemik muayeneleri normal sınırlarda izlendi. Vital bulguları: tansiyon 142/60 mm Hg, nabız:66 atım/dk, solunum sayısı:14 nefes/dk oksijen saturasyonu % 94 vücut ısısı: 36,1 °C'dir. Elektrokardiyografisinde; ventrikül hızı normal, normal sinüs ritmi, inkomplet sağ dal bloğu mevcut, belirgin ST-T değişikliği izlenmedi. Bilinen hastalıkları; hipertansiyon, diyabetes mellitus, kronik böbrek yetmezliğidir. Sürekli kullandığı ilaçlar: asetil salisilik asit, asetaminofen, pantaprazol, ramipril'dir. Labaratuar tetkiklerinde; Hemoglobin (HGB) 9,54 L g/dL(13 - 17), Üre 128,90 H mg/dL (17 – 43), Bun 61,38 H mg/dL(8 – 20), kreatinin 4,71 H mg/dL(0,7 - 1,2), diğer tetkikleri normal sınırlarda saptandı. Hastanın kontrastsız bilgisayarlı beyin tomografisinde foramen monro düzeyinde 10 mm boyutunda hiperdens içerikli kistik lezyon mevcuttur (kolloid kist) (Görsel 1). Kolloid kistin semptomatik olduğu düşünülerek beyin ve sinir cerrahi konsültasyonu istendi. Beyin ve sinir cerrahi bölümü olgunun önceki nörogörüntülemeleri ile yeni görüntülemesi arasında anlamlı değişiklik saptamadığı için hastaya kafa içi basınç artışı semptomları ve acil durumlar anlatılarak hastanın poliklinik takibine başvurmasını önerdi.

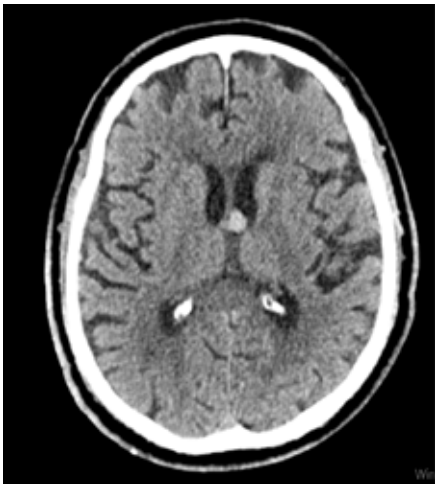
TARTIŞMA/SONUÇ

Semptomatik kolloid kistlerde tedavide nörolojik bulgularda iyileşme sağlamak ve nöroklinikte kötüye gidişi durdurmak için kist rezeksiyonu, kist drenajı, ventrikülperitoneal şant gibi cerrahi girişimler yapılabilir. Tüm kolloid kistlerin yaklaşık %5-10' una cerrahi girişim gerekmektedir. Asemptomatik ve insidental tanı konulan hastalar için tedavi yaklaşımı hususunda henüz net bir konsensus yoktur. Literatürde bu olguları cerrahi sonrası oluşabilecek komplikasyonlardan korumak için nörogörüntüleme ve klinik progresyon takibi ile cerrahisiz takip öneren, kist boyutlarında zamanla regresyon olabildiğini gösteren yayınlar olmakla birlikte; hidrosefali olmaksızın hipotalamus basısına bağlı katekolamin deşarjı gibi nedenlerle küçük boyutlarda ve asemptomatik kist olgularında bile ani ölüm olabileceği iddiasıyla cerrahi savunan nöroşurirji görüşü de mevcuttur. Hasta yaşının <65 olması, baş ağrısı, aksiyel kist çapının ≥ 7 mm olması, MR görüntülemede FLAIR hiperintens lezyon ve risk bölgesi cerrahi yapılması açısından değerlendirilmesi gereken parametrelerdir. Henüz genetik geçişi konusunda aydınlatılmış olmasa da anne-kız, ikiz ve kardeş hastalar literatürde yer almakta olup otozomal resesif genetik geçiş olabileceği iddia edilmektedir.

Kolloid kistli hastaların çoğuna rastlantısal tanı konulmaktadır. Kolloid kist; baş ağrısı, yürüme güçlüğü, kognitif fonksiyonlarda bozulma gibi nörolojik semptom verebilmekte, hastalarda ani ölüme neden olabilmektedir. Acil servise başvuran hastalarda 3. ventrikülde anormal radyolojik görünüm saptandığında altta yatan nadir ama ölümcül bir neden olabilen kolloid kist tanısı düşünülmelidir. Bu hastalara kafa içi basınç artışı sendromu semptom ve bulguları, acil durumlar anlatılmalı ve nöroşurirji takibinde olmaları önerilmelidir.

ANAHTAR KELİMELER: Kolloid kist, İnsidental Lezyon, Ani ölüm, Yürüme Güçlüğü.

GÖRSELLER



Görsel 1: Olguya ait Kolloid Kist görünümü

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ANKİLOZAN SPONDİLİTLİ HASTADA BİLATERAL PEDİKÜLER FRAKTÜR

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GİRİŞ

Ankilozan Spondilit (AS) omurgayı, sakroiliak ve kalça eklemlerini etkileyen, omurgada sinoztoza neden olan kronik inflamatuvar sistemik bir hastalıktır (1, 2, 3). İnflamasyon ligament ve tendonların kemiklerle birleşim yerinde olmasına bağlı olarak ligament ve tendonlarda kalsifikasyon ve kemik erozyonu ortaya çıkmaktadır. Vertebralardaki erozyon kareleşmeye, longitudinal ligamentlerin kalsifikasyonu "bambu kamışı" görünümüne ve omurgadaki rijidite ve immobilite de osteoporoza yol açmaktadır (1, 4). Hareket kabiliyeti azalmış ankiloze omurganın kemik mineral içeriğinin azalması ve rijidite nedeniyle kırık eğilimi artmakta, minor travmalar sonucunda omurgada kırıklar meydana gelebilmektedir (2, 3, 4).Bizde 14 yıldır AS tanısı ile takip edilen 10 yıldır da Etanercept tedavisi alan hastanın ağaçtan düşme sonrası L1 vertebrasında bilateral gelişen pedikül kırığı ve instabilizasyonu olgusunu sunuyoruz

VAKA SUNUMU

40 yaşında erkek hasta, yaklaşık olarak 3 metre yüksekliğinde ağaç dalından düşme nedeni ile acil servise getirildi. Fizik muayenesinde; bilinç açık, oryante, koopere, solunum sesleri doğal, her iki hemitoraks solunuma eşit katılıyor, batın rahat, defans ve rebound yok indirek ve direk ışık refleksleri müspet, 4 ekstremite spontan hareketli, kas güçleri tam, vücutta açık lezyon tespit edilmedi, lomber bölgede hassasiyet mevcuttu.

Gelişinde vital bulguları, TA: 130/75 mm Hg, nabız 86 atım/dk, solunum sayısı 15 nefes/dk, oksijen satürasyonu %96, vücut ısısı 36.6 °C. Bilinen ankilozan spondilit hastalığı nedeniyle Etenarcept kullanan hastanın 11.10.2017 tarihli tetkiklerinde Anti-hbc total pozitifliği olması nedeniyle entekavir kullanım öyküsü mevcut.

Laboratuvar tetkiklerinde, ilk başvuruda Hemoglobin (HGB) 14,05 g/dL (13 – 17), 2. Saat kontrolünde HGB: 13,47 g/dL (13 – 17) olup herhangi bir anormal değere rastlanmadı. Çekilen lomber vertebra bilgisayarlı tomografisinde L2 vertebra seviyesinde bilateral pedikül fraktürü ve instabilizasyonu tespit edildi. Beyin ve sinir cerrahisi tarafından servis takibine alınarak Manyetik rezonansn görüntüleme ve elektif cerrahi planlandı. (Görsel 1,2)

TARTIŞMA/SONUÇ

Ankilozan spondilitte rijit omurga travma enerjisini çevre yumuşak dokulara dağıtamamakta ve uzun bir kaldıraç kolu gibi davranıp omurgada yoğun bir bükülme kuvveti oluşturmaktadır (2, 5, 6). Böylece ankiloze omurgaya uygulanan travmanın enerjisi, omurganın ligamentleri, disk, faset eklemler ve kemik yapıları tarafından absorbe edilememekte ve osteoporotik omurgada kırık eğilimi artmaktadır(2). Birçok çalışmada AS'de uzun hastalık süresi, yüksek eritrosit sedimantasyon hızı ve C-reaktif protein seviyesi ve hastalık aktivitesi osteoporoz ile; ileri yaş, uzun hastalık süresi, hızlı radyolojik progresyon ve osteoporoz varlığı vertebral kırıklar ile ilişkilendirilmiştir (7, 9).

Bu olgu sunumunda, hastalık süresi uzun olan ve yüksek enerjili travma geçiren hastada vertebralari diskler ve intervertebral eklemlerde yaygın kalsifikasyonu olmasına rağmen atipik bir lokalizasyon olan pediküler fraktür saptanmıştır. Ankilozan spondilitte hastalarında eklem, ligament ve tendonlardaki yaygın kemikleşmeye rağmen travmalarda bile omur kırığı oluşabilmektedir.

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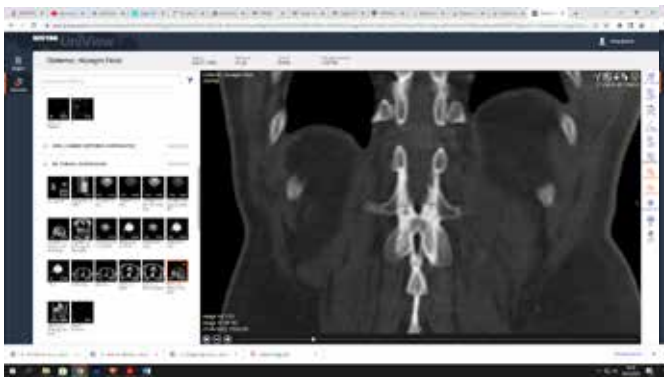
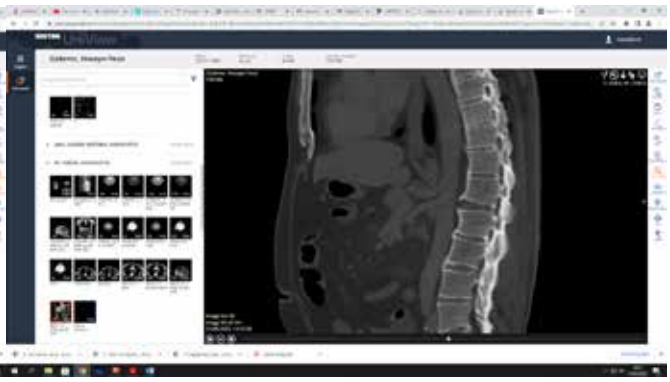
Görseller



Görsel 1



Görsel 2

ABDOMİNAL TRAVMALARDA GEÇ DÖNEM HEMORAJİ OLGULARI

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GİRİŞ

Travma, kardiyak hastalıklar, onkolojik nedenler ve pnömonilerden sonra en sık morbidite ve ölüm nedenidir. Özellikle gelişen teknolojiyle birlikte çağımızın imkanları nedeniyle genç nüfusta travma vakaları gün geçtikçe artmaktadır. Ölümcül travma hastalarının yaklaşık % 20' sini abdomen travmaları oluşturmaktadır. Sizlere tarım aracı (pat-pat) kazası sonucu oluşan künt batın travması ve delici-kesici alet yaralanması (penetran travma) içeren iki adet olgudan ve güncel travma yaklaşımlarından kısaca değinmek istiyoruz.

OLGU 1

51 yaşında erkek hasta; Bir tarım aleti olan patpat devrilmesi sonucunda patpatın altında kalma sonrasında başlayan sol yan ağrısı (flank) ve sol alt kaburgalarda ağrı şikayeti ile acil servise ayaktan başvurdu. Genel durumu iyi, GKS:15, koopere, oryante. Fizik muayenesinde sol alt kaburgalarda midaksiller bölgede ve posteriorda palpasyonla hassasiyeti mevcut diğer sistemik muayenesi normal sınırlarda izlendi. Vital bulguları: tansiyon 128/73 mm Hg, nabız:74 atım/dk, solunum sayısı:13 nefes/dk oksijen saturasyonu % 98 vücut ısısı: 36,3 °C'dir. Orta düzey uyku apnesi dışında kronik hastalığı yok, sürekli kullandığı ilaç bulunmuyor. Labaratuar tetkiklerinde; Hemoglobin (HGB) 14,7 L g/dL(13 - 17) ve diğer kan tetkik parametrelerinde anormallik izlenmedi. Acil serviste yapılan Focused Assessment with Sonography for Trauma (FAST) değerlendirmesinde patoloji izlenmedi. Yüksek enerjili travma olduğundan beyin, toraks, batın, pelvis ve vertebraları içeren ince kesitli bilgisayarlı tomografisi(MDCT) çekildi. MDCT' de sol 11.kaburga posteriorunda non-deplase kırık dışında patoloji izlenmedi, acil serviste hemogram takibi ve kontrol FAST değerlendirmesi sonrasında anormal bir durum izlenmediğinden önerilerle taburcu edildi.

Beş gün sonra hasta acil servise hasta başvurudan 6 saat önce yaklaşık 30 saniye süren bilinç kaybı olması nedeniyle tekrar başvurdu. İkinci başvuruda batında özellikle sol üst kadran hassasiyeti dışında muayenesinde ve genel durumunda patoloji izlenmedi. Vital parametrelerinde tansiyonu 105/68 mm Hg nabız 105 atım/dk, solunum sayısı:18 nefes/dk, oksijen saturasyonu % 98 vücut ısısı: 35,8 °C görüldü. FAST bakısında Perihepatik perisplenik ve intraabdominal yaygın serbest mayii izlenmiştir. Beyin bilgisayarlı tomografisinde (BT) acil müdahale gerektirecek patoloji izlenmedi. Batın BT' de perihepatik mayi, perisplenik mayi ve dalakta subkapsüler hematom, pelviste serbest mayi izlendi. Genel cerrahi servise yatışı verilen hasta 4 gün serviste non-operatif gözlem altında tutularak hasta taburcu edilmiş.

OLGU 2

37 yaşında erkek hasta özkıyım girişimi nedeniyle karından kendini bıçaklama nedeniyle acile başvurdu. Genel durumu iyi, GKS:15, koopere, oryante. Umblicus komşuluğunda rektus kası üzerinde 4-5 cm uzunluğunda 0,5 cm genişliğinde cilt kesisi ve bölgede hassasiyet saptandı, defans, rebaund izlenmedi. Diğer sistemik muayenesi normal sınırlardadır. Vital bulguları: tansiyon 135/64 mm Hg, nabız:90 atım/dk, solunum sayısı:15 nefes/dk oksijen saturasyonu % 99 vücut ısısı: 36 °C'dir. Bilinen ek hastalığı ve sürekli kullandığı ilaç bulunmuyor. Labaratuar tetkiklerinde; Hemoglobin (HGB) 15,7 L g/dL(13 - 17) ve diğer kan tetkikleri normal sınırlardadır. FAST değerlendirmesinde morison poşunda, perihepatik bölgede, perisplenik, pelvik mayi izlenmedi. Çekilen abdomen BT' sinde sol rektus kasında kesi cilt altı hava değeri ve cilt bütünlüğünde bozulma, cilt altı hematom görüldü, batın içi serbest sıvı yada pnömoperitonium izlenmedi, takip amaçlı genel cerrahi servisine yatışı yapıldı. Servis takipleri sırasında karın ağrısı şiddetlenen hastanın 2 gün sonra çekilen abdomen BT' sinde: Perihepatik, perisplenik, suprapubik bölgede ve pelviste içerisinde hiperdens alanlar bulunan yaygın serbest mayii alanları (İntraabdominal hemoraji) izlendi. Umblikus düzeyinde bağırsak ansları arasında birkaç adet milimetrik boyutlu hava habbeciği görüldü (Perforasyon ekarte edilememiş olup, penetran travmaya bağlı olabileceği de düşünülmüştür). Jejunal anslarda ödemli görünüm saptanmıştır. Tanısal laparatomi ve primer bağırsak onarımı yapılan hasta postoperatif takibi yapıldıktan sonra hemodinamik stabil olarak poliklinik kontrolü önerisiyle taburcu edilmiştir.

TARTIŞMA

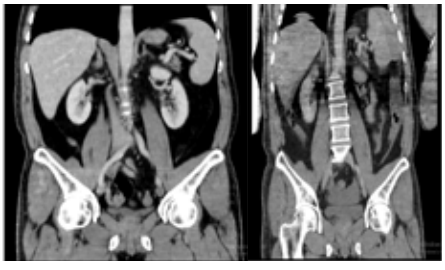
Hemodinamik olarak anstabil olan batın travması hastalarında birincil ve ikincil bakı ve resutatif işlemler (kan replasmanı) gibi hızlıca sağlanmalıdır. Travma ekibi ve acil ameliyat için cerrahi ekibe konsültasyon ivedilikle istenmelidir. Hasta başı akciğer ve pelvis grafisi, FAST tetkiki yapılabilir. Bu hastalar BT çekimi için uygun değildir, zaman kaybedilmeden cerrahi operasyona alınmalıdır. Hastalarda şok bulguları, eviserasyon, peritonit, batına nafiz yaralanma varlığında acil laparatomi yapılmalıdır. Hemodinamik olarak stabil olan hastalarda FAST değerlendirilmesi yapılmalıdır. FAST pozitifse kontrastlı batın BT çekilmelidir. Hematüri varlığında CT sistografi çekimi yapılır. Renal yaralanma şüphesi varsa kontrast sonrası 5 dk gecikmeli BT istenir. Batın BT' de kontrast kaçağı düşünülüyorsa tekrarlayan BT çekimi yapılabilir. FAST negatif hastalarda hemodinamik anstabilite açısından yakın gözlem ve tekrarlayan FAST uygulanmalıdır. Yakın vital-hemodinami takibi tekrarlayan fizik muayene yapılmalıdır, 4.saat ve 8.saat hemogram tetkikleri bakılmalıdır.

SONUÇ

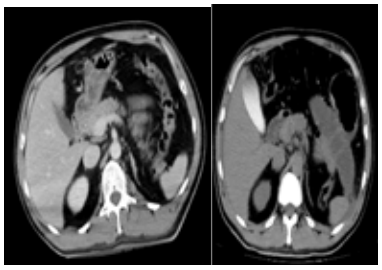
Acil servise başvuran yüksek enerjili ve multisistem travmalarında batın harici sistemlerde ekstremite kırığı vertebra kırığı gibi ikinci bir yaralanma bulgusu olduğunda batın muayenesinin klinisyeni yanıltabileceği unutulmamalıdır. Özellikle alt kaburgalarda kırıklarda batın içi ilk FAST ve BT görüntülemeleri normal bile olsa sonradan batın içi organ hasarı bulgularının ortaya çıkabileceği öngörülmelidir. Asemptomatik ve hemodinamik stabil, radyolojik görüntülemeleri normal olan multitravma ve batın travma hastalarına taburculuğunda hastalara saatler veya günler sonra gelişebilecek hadiseler anlatılmalı, tekrar acile başvurabilecekleri tembihlenmeli, ilgili travma branşlarına poliklinik kontrolüne başvurmaları önerilmelidir.

ANAHTAR KELİMELER: Abdomen travma, Abdominal hemoraji, Penetran yaralanma, Künt travma,

Figürler



Resim 1: Olgu 1' e ait ilk BT ve 5 gün sonraki BT görüntüsü



Resim 2: Olgu 2' ye ait ilk BT ve 2 gün sonraki BT görüntüsü

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ALKOL KULLANIMI SONRASI GELİŞEN PNÖMOMEDİASTİNUM OLGUSU

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GİRİŞ

Pnömomediastinum, göğüs kafesi içerisinde trakea ve özefagus komşuluğunda serbest hava izlenmesidir. Künt ya da penetran travma, özefagus peforasyonu, trakea rüptürü, kot kırığı, pnömotoraks nedeniyle oluşabilir. Kusma veya öksürük sonrası gelişebilen spontan pnömomediastinum olguları bildirilmiştir. Alkol alımına bağlı şiddetli kusma sonrası oluşan pnömomediastinum olgusunu sizlerle paylaşmak istiyoruz.

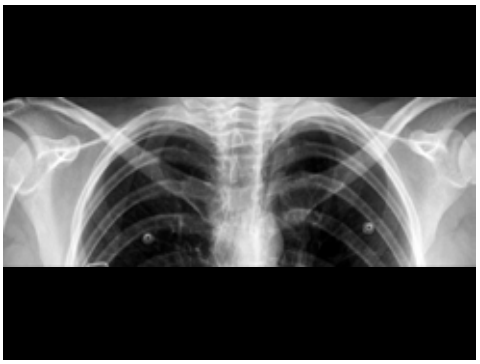
OLGU

21 yaşında kadın hasta, 4 saatten uzun süren ve devam eden baskı tarzında göğüs ağrısı şikayeti ile acil servise başvurdu. Öyküsünde, alkol kullanımı sonrasında çok sayıda fışkırır tarzda kusması olduğu, akabinde ağrısının başladığı öğrenildi. Fizik muayenede; Bilinci açık, koopere, oryante, GKS:15, solunum sistemi muayenesi ve diğer sistemik muayeneleri normal sınırlardadır. Elektrokardiyografisi normal sinüs ritminde, normal sınırlarda, ST-T değişikliği izlenmedi. Vital bulguları: tansiyon 110/72 mm Hg, nabız:84 atım/dk, solunum sayısı:15 nefes/dk oksijen saturasyonu % 99 vücut ısısı: 36,4 °C'dir. Bilinen ek hastalığı ve sürekli kullandığı ilaç yok. Ailesinde kardiyak hastalık öyküsü bulunmuyor. Labaratuar tetkiklerinde hemogram, biyokimya ve troponin değerleri normal aralıkta izlendi. Covid 19' a yönelik PCR testi negatiftir. Hastanın akciğer grafisinde trakea çevresinde serbest hava olduğu görüldü. Toraks BT (bilgisayarlı tomografi)' sinde mediastende krikoid kıkırdak hizasından başlayıp alt özefagusa kadar uzanan serbest hava değerleri izlendi, karina mesafesine ulaşmadan 2 cm mesafede trakea rüptürüne ait olabilecek şüpheli görüntü izlendi. Kontrastlı özefagografide kontrast kaçağı izlenmedi, özefagus intakt olarak değerlendirildi. Göğüs cerrahisi takibi için ileri merkeze sevki sağlandı.

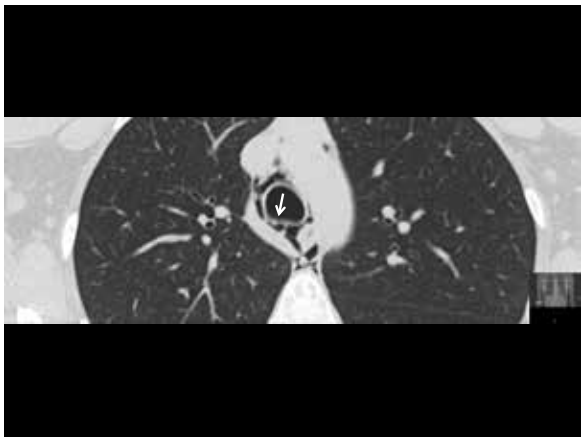
TARTIŞMA VE SONUÇ

Pnömomediastinum; Barotravma, intratorasik basınç artışına sebep olan öksürük, hıçkırık, öğürme, kusma, valsalva manevrası gibi nedenlerle oluşabilir. Pnömomediastinum olgularında temel yaklaşım mediastene olan hava kaçağının kaynağını belirleyebilmektir. Özefagus rüptürü olan olgularda mediastinit gelişebilir ve mortal seyredebilir. Pnömomediastinum; tanısı zor olan trakea-bronş yaralanmalarında bize tanı koymamızda yol gösterici bulgu olabilir. Göğüs ağrısı ile acil servise başvuran hastalarda çok sık karşılaşmadığımız için unutulabilecek bir tanı olan pnömomediastinum hatırlanmalı, akciğer grafisi ve BT değerlendirilirken gözden kaçırılmamalıdır.

ANAHTAR KELİMELER: Pnömomediastinum, Trakea rüptürü, Alkol kullanımı, Kusma.



Resim 1: Olguya ait Akciğer grafisinde trakea çevresinde hava değerleri (Pnömomediastinum)



Resim 2: Trakea çevresinde hava değerleri (pnömomediastinum) ve Okla gösterilen trakea rüptürü

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GASTROENTERİT İLE GELEN OLGULARDA SANTRAL HADİSELERİN DIŞLANMASI

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GİRİŞ

Akut gastroenterit (AGE), karın ağrısı, kramp, mide bulantısı, kusma ve ishalin gibi semptomlara yol açan mide, ince bağırsak veya kalın bağırsak inflamasyonudur. Akut gastroenterit genellikle 14 günden az sürer. 14 ila 30 gün süren tablo dirençli gastroenterit ve 30 günden fazla süren tablo kronik gastroenterit olarak adlandırılır.[1,2]

Serebellar enfarktüs (veya serebellar inme), posterior kraniyal fossayı özellikle de serebellumu içeren bir tür serebrovasküler olaydır. Bozulmuş perfüzyon, oksijen dağılımını azaltır, motor ve denge kontrolünde eksikliklere neden olur. Serebellar inmeler, nörolojik muayenede fark edilebileceği gibi, bazen belirsiz ilk sunumları ve posterior fossadaki reaktif şişmenin olumsuz etkileri nedeniyle orantısız bir morbidite ve mortalite payından sorumludur. Tüm beyin felçlerinin %1 - %4'ünü Serebellar felçler oluşturur.[4,5]

Bu olgu sunumunda, AGE tablosu ile başvuran ancak yapılan tetkikler neticesinde serebellar enfarkt tespit edilen bir olguya değinmek istiyoruz.

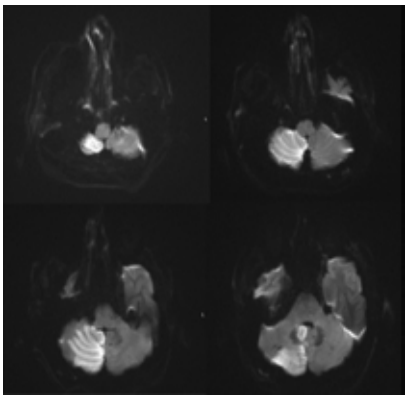
OLGU

53 yaşında erkek hasta, sabah 10.30 sıralarında baş dönmesi, mide bulantısı ve ishal şikayetleri gelişmiş. Dış Merkezde takip edilmiş, şikayetleri gerilemeyince tarafımıza sevk edildi. Hasta oryante, koopere, GKS 15, kuvvet muayenesi tüm extremitelerde 5/5, duyu muayenesi doğal, fasyal sinir muayenesi doğal ardışık hareketleri yapabiliyordu. Hasta denge kaybı tarifliyor. Dismetri ve disadokokinezi mevcuttu. Patolojik refleks yoktu. TA: 117/69 Nabız: 65/dk SatO2: %98. Bilinen ek hastalığı ve düzenli kullandığı ilaç yoktu. Semptomatik tedaviye rağmen şikayetleri gerilemeyen hastadan santral sinir sistemi görüntülemeleri istendi. Kontrastsız kranial Bilgisayarlı Tomografisi (BT) ve Diffüzyon Ağırlıklı MRI istendi. Serebellum sağ yarıda geniş diffüzyon kısıtlanması, ADC sekansında hipointens geniş akut infarkt ile uyumlu diffüzyon kısıtlanması izlenmiştir. Kontrastsız kranial BT normal olarak değerlendirilmiştir (Görsel 1&2).

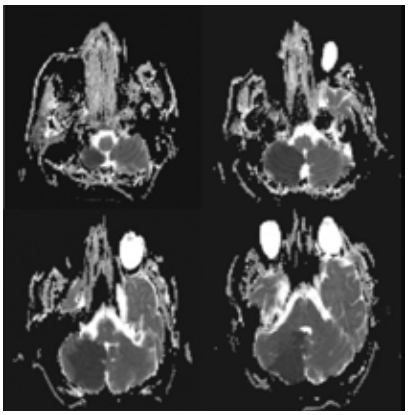
TARTIŞMA/SONUÇ

Baş dönmesi, mide bulantısı, kusma gibi semptomlar neredeyse tüm akut medikal durumlarda görülebilmektedir. Bu hastada görülen ishal klinisyeni AGE açısından alert ederek olası veya ek diğer tanıların gözardı edilmesine neden olabilirdi. Acil servise başvuran akut gastroenteriti olan hastalarda gerilemeyen şikayetlerin araştırılması gerekmektedir, altta yatan başka bir sebebe dayanabileceği unutulmamalıdır.

GÖRSELLER



Görsel 1: Olguya ait DWI MRI görüntülemeleri.



Görsel 2: Olguya ait ADC sekans görüntülemeleri.

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NÖROJENİK AKCİGER ÖDEMİ

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ÖZET

Bu yazımızda akciger ödemi tablosu ile acilimize gelen bilinc bulanikligi olan olgularda ayırıcı tanıda Intrakranial kanamalar' dan şüphelenilmesi gerektiği vurgulanmaktadır.

ANAHTAR SÖZCÜKLER: Akciger Ödemi, bilinç bulanıklığı, Intrakranial hemoraji

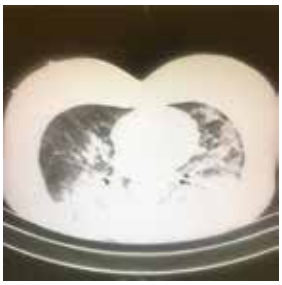
GİRİŞ

Acil Servise solunum sorunlari ile gelen hastalarda tanı ve tedavide doğru yol izlemek morbidite ve mortaliteyi azaltacığından çok önemlidir. Ön tanıda Metabolik veya sistemik bozuklukların yani sira intraakranial lezyonlar akla getirilmelidir. Ayırıcı tanı için İntrakranial yapısal patoloji ekartasyonu için kranial görünteleme yapılması gerekebilmektedir. Nörojenik akciğer ödeminin (NAÖ) başlıca tetikleyicileri epileptik nöbetler, travmatik beyin hasarı ve çeşitli intrakranial kanama biçimleridir. Teşhisi, intrakaranial göruntuleme, uyumlu klinik bulgular ve fizik muayene ile konur.

Nörojenik akciğer ödemi merkezi sinir sistemindeki bir patoloji sonrasında akciğer interstisyel ve alveolar kısımda non-kardiojenik sıvı artışı ile tanımlanabilir. NAÖ'nün iki farklı klinik formu tanımlanmıştır. NAÖ'nün erken formu en yaygın olanıdır ve nörolojik hasarı takiben dakikalar ila saatler içinde semptomların gelişmesi ile karakterizedir. Buna karşılık, gecikmiş form, santral sinir sistemi hasarından 12 ila 24 saat sonra gelişir. Solunum sıkıntısının ani başlaması, NAÖ'nün etkileyici bir özelliğidir. Tipik olarak hasta dakikalar içinde akut olarak dispneik, takipneik ve hipoksik hale gelir. Pembe, köpüklü balgam yaygın olarak görülür ve oskültasyonda bilateral raller beklenir. Sempatik hiperaktivite yaygındır. Akciğer radyografisi, akut respiratuar distres sendromu (ARDS) ile uyumlu bilateral hiperdens infiltratları ortaya çıkaracaktır. Semptomlar genellikle 24 ila 48 saat içinde kendiliğinden düzelir Bu olgu sunumunda acil servise ani gelişen solunum sikintisi ile getirilen ve hemorajik SVO` nun nadir bir komplikasyonu olan Nörojenik akciger ödemi tanısıyla yogun bakima yatırılan bir olgu sunulmuştur.

OLGU SUNUMU

35 yaşında kadın hasta acil servise solunum sıkıntısı şikayeti ile 112 ambulansı tarafından getiriliyor. Hastanin 1 saat önce aniden baslayan astanın şiddetli bir baş ağrısı ve takibinde solunum zorlugu olduğunu ifade ediyorlar. Hastanın herhangi bir cerrahi, travma öyküsü, ilaç veya madde kulanimi yok. Geliş vitalleri; tansiyon 160/120 mm Hg, nabız:135 atım/dk, satürasyon: %80, solunum sayısı: 45 solunum/dk olarak ölçülüyor. Hastanın GKS 9 (M3V4S2) olarak değerlendiriliyor. Bilinç konfüze, non oryante, non koopere. Pupiller izokorik, DIR:+/+, IIR: +/+, belirgin lateralizan bulgusu yok. Oskültasyonla bilateral tüm zonlarda raller duyuluyor ve ağzından pembe köpükler geldiği görülüyor. Pretibial ödem yok. Hastanın genel durumunun kötüleşmesi ve hava yolunu koruyamayacağı şüphesinin varlığı nedeni ile, hasta orotracheal entübe edildi. Entübasyon sırasında herhangi bir aspirat görülmedi. hastada akciğer ödemi tanısı düşünüldü. Hastanın Yapılan Toraks BT ve Beyin BT Anjio görüntülemesinde; hastada her iki akciğerde konjesyona sekonder yaygın infiltrasyonlar izlenmekte olup, anevrizma rüptürü sonucu subaraknoid kanamaya bağlı gelişen (Sag MCA alaninda dev anevrizmatik görünüm) nörojenik akciğer ödemi saptandi. Kardiyoloji tarafından kardiyak patoloji ya da akciğer ödemine neden olabilecek ek yapısal anomali tespit edilmeyen hasta yoğun bakıma yatisi yapildi.



Resim 1: Toraks Tomografi Goruntulemesinde: Her iki akciğerde konjesyona sekonder yaygın infiltrasyonlar izlenmiştir.

Resim 2: Beyin Anjiografi Görüntülemesinde: Sag MCA alaninda dev anevrizmatik görünüm

TARTIŞMA

Nörojenik pulmoner ödem klinigi daha olası bir alternatif nedenin yokluğunda pulmoner ödem oluşumuna dayanan klinik bir tanıdır. NAÖ'nün teşhisinde ; Toraks görüntülemede iki taraflı opasiteler, PaO2 / FiO 2 oranı <200 mm Hg, Sol atriyal hipertansiyon kanıtı yokluğu, Merkezi sinir sistemi (MSS) hasarının varlığı, Akut solunum yetmezliği veya akut solunum sıkıntısı sendromunun diğer yaygın nedenlerinin olmaması (ARDS; örneğin aspirasyon, yoğun kan transfüzyonu, sepsis) gerekir.

SONUÇ

Norojenik akciger ödemi olgularinda gecikilmiş teşhis ve tedavi, mortalite ve şiddetli morbidite ile ilişkili olduğundan erken tanı ve tedavi temel ilkedir. Tedavinin temelini altta yatan intrakranial hadisenin tedavisi, destekleyici bakım ve oksijenasyon oluşturmaktadır.Özgeçmişinde merkezi sinir sistemi hasari, epilepsi ya da travmatik beyin hasari benzeri öyküsü olan hastalarda dispne ve bilinç bulanıklığı ile acil servise gelen hastalarda Norojenik akciger ödemi düşünülmelidir. Anamnezin dikkatlice alınması ve doğru intracranial görüntülemelerin yapılması hayat kurtarıcı olabilmektedir.

KÜNT TRAVMA SONRASI YÜZEYSEL FEMORAL ARTER PSÖDOANEVRİZMA RÜPTÜRÜ: OLGU SUNUMU

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ÖZET

Anevrizma, damarın tüm duvarının genişlemesidir. Psödoanevrizma ise damar duvarında herhangi bir genişleme gelişmemesine rağmen yırtılmaların görüldüğü anevrizma türüdür. Ekstremitelerde bulunan psödoanevrizmaların etiyolojisinde başlıca iyatrojenik veya travmatik etkenler rol oynar, diğer etkenler arasında enfeksiyonlar, vaskülitler, ilaç bağımlılığı, anastomotik separasyonlar sayılabilir. Femoral arterin femurda fraktür olmaksızın künt travmayla gelişen psödoanevrizma rüptürü nadir görülen bir durumdur. Bu olgu sunumunda nöbet geçirme ve kısa süreli bilinç kaybı şikayeti ile acil servise gelen bir hastanın muayenesi sırasında bacağındaki şişlik fark edildikten sonra ileri tetkiklerle saptanan künt travma sonrası gelişen yüzeysel femoral arter psödoanevrizma rüptürü olgusunu sunuyoruz.

ANAHTAR KELİMELER: Anevrizma, Künt travma, Psödoanevrizma, Yüzeysel femoral arter

GİRİŞ

Psödoanevrizma; arteriyel duvarda çeşitli nedenlerle meydana gelen yırtıktan sızan kanın trombüs formasyonu oluşturup, etrafının fibröz bir kapsülle sarılması sonucu meydana gelir. Psödoanevrizmaların oluşumu genel olarak iyatrojenik veya travmatik sebeplerle olsa da vaskülitler, enfeksiyonlar, ilaç bağımlılığı, anastomotik seperasyonlar da psödoanevrizma oluşumundaki diğer önemli etkenlerdir. Görülme sıklığı toplumun farklı kesimlerinde ve etiyolojiye göre değişebilmekle birlikte bu oran risk altındaki popülasyonda ortalama %0.05-0.2 civarındadır [1]. Bu oran iyatrojenik nedenli olanlarda %8'e kadar çıkabilmektedir ve en sık femoral arterde görülmektedir [1]. Psödoanevrizmalar bulunduğu lokalizasyona ve boyutuna bağlı olarak farklı bulgularla kendini gösterir. En sık görülen bulgular ağrılı şişlik, morarma ve kanamadır. Küçük boyutlu psödoanevrizmalar spontan bir şekilde iyileşebilirken büyük boyutlu psödoanevrizmalar, geliştirebilecekleri rüptür ve kanama gibi ciddi komplikasyonlar nedeniyle tanı koyulduktan sonra acil müdahale gerektirir. Fizik muayenede lokalizasyona bağlı olarak; palpasyonla ele gelen şişlik ve pulsatil atım hissedilebilir, oskültasyonla üfürüm duyulabilir. Tanı amaçlı renkli doppler ultrasonografi (RDUSG), bilgisayarlı tomografi (BT), manyetik rezonas görüntüleme (MRI) ve anjiografi gibi görüntüleme yöntemleri kullanılabilir. Bu olgu sunumunda; acil servise nöbet geçirdiği düşünülerek getirilen hastada muayene esnasında sol uyluğundaki şişliğin ve ekimozun fark edilmesiyle femoral arter psödoanevrizma rüptürü tanısının koyulduğu olgu sunulmuştur.

OLGU SUNUMU

Doksan sekiz yaşında erkek hasta acil servisimize yakınları tarafından; sabah bir anda olan kasılma, konuşamama, bilincinin kapanması şikayeti ile 112 ekipleri tarafından getirildi. Hastanın vitalleri geldiğinde TA: 90/40 mmHg, nabız: 70 atım/dk, oksijen saturasyonu: %100, ateş: 36,7□C, kan şekeri:230 gr/dl idi. Hastanın Glasgow Koma Skalası (GKS):15 puan, oryante, koopere, bilinci açık, yapılan nörolojik muayenesi olağan idi. Hastanın diyabetes mellitus, hipertansiyon, demans hastalıkları olduğunu, bypass ameliyatı geçirdiğini öğrendik. Hastanın rivaroksaban, metoprolol, tizanidin, ramipril, torasemid, kalsiyum dobesilat kullandığını ve daha önce nöbet öyküsü olmadığını öğrendik. Fizik muayene esnasında hastanın sol bacak periferik nabızları zayıf hissedildi ve sol uyluk anterior distal 1/3'lük kısımda yaklaşık 7cm x 10cm boyutlarında palpasyonla pulsasyon alınan ağrılı bir kitle saptandı (Resim 1). Bu kitlenin hastanın bir hafta önce düşmesi sonrası oluştuğunu ve giderek büyüdüğünü öğrendik. Hastanın acil servise başvurusundan bir gün önce kardiyoloji polikliniğine gittiğinde bacağındaki ekimoz nedeniyle rivaroksaban ilacının kesildiğini öğrendik. Hastaya biyokimya, hemogram, koagülasyon tetkikleri ve beyin BT ve beyin diffüzyon MR görüntüleme tetkikleri planlandı. Biyokimya tetkiki sonucuna göre glukoz:101 mg/dl, kreatinin:2.01 mg/dl, total protein:59 g/L, albümin:33g/L, GGT:151 IU/L, ALT:12 U/L, AST:14 U/L, LDH:172 U/L, kalsiyum:8.3 mg/dl, sodyum:137 mmol/L, potasyum:3.9 mmol/L, klor :108 mmol/L, CRP:97.6 mg/L'dir. Hemogramında WBC:8960 µL, HGB:10.7 g/dL, HCT:% 31.5 ve PLT:182.000 µL'dir. Koagülasyon tetkikinde aPTT:24.3 saniye, PTZ:12 saniye, INR:1.0 idi. Hastanın beyin BT, beyin diffüzyon MR incelemelerinde patoloji saptanmadı. Hasta jeneralize tonik klonik nöbet şüphesi ile nöroloji uzmanına konsülte edildi. Uzman nöroloji hekimi hastayı gördü ve nöroloji polikliniğine takip için başvurmasını önerdi. Aynı zamanda fizik muayene esnasında hastanın sol uyluk distal 1/3'ünde saptanan şişlik ve ekimoz için yüzeyel ve RDUSG planlandı. Hastanın yapılan yüzeyel ve RDUSG'sinde sol uyluk anteriorunda cilt altı yumuşak dokular içerisinde yüzeysel femoral arter komşuluğunda derinde yerleşimli renkli doppler USG'de içerisinde pulsatil vaskülarizasyon izlenen öncelikle psödoanevrizma lehine değerlendirilen yaklaşık 40x20 mm boyutunda kistik lezyon izlendi. Bu kistik lezyon çevresinde yaklaşık 50x25 mm boyutunda hematom ile uyumlu olabilecek, vaskülarizasyon gözlenmeyen hipoekoik heterojen kitlesel görünüm izlendi. Hastaya ekstremite BT anjiyografi planlandı. Hastanın BT anjiyografisinde sol uyluk medial kesiminde yüzeysel femoral arter rüptürü ile ilişkili olduğu düşünülen yaklaşık 75x73 mm boyutlarında ölçülen kontrast ekstrabazasyonun izlendiği hiperdens lokülasyon mevcuttu (Resim 2,3). Sol popliteal arter, sol trifukasyon arter lümenlerinde kontrast geçişleri belirgin azalmıştı. Her iki alt ekstremite arter duvarlarında yaygın kalsifik plaklar mevcuttu. Sol trifukasyon arterleri distal kesimlerinde ayak bileği düzeyinden itibaren kontrast geçişi saptanmamıştı. Hasta yüzeysel femoral arter psödoanevrizma rüptürü tanısı ile kalp damar cerrahisi uzmanı tarafından acil ameliyata alınmak üzere kalp damar cerrahisi yoğun bakımına yatırıldı.

TARTIŞMA

Psödoanevrizma arter duvarında çeşitli nedenlerle oluşan defekt sonrası meydana gelen sızıntının, etraftaki yumuşak doku veya oluşan hematom içine hapsolmasıyla gelişir. Psödoanevrizmaların gerçek anevrizmalardan farkı ise arter duvarı yerine ince bir fibröz kapsül ile çevrelenmiş olmalarıdır. Psödoanevrizmaların en sık görülen etiyolojik faktörleri arasında penetran damar yaralanmaları, ilaç bağımlılarının steril olmayan sürekli travmatik damar girişimleri, invaziv tanısal radyolojik veya cerrahi girişimler yer almaktadır [2].

Psödoanevrizmalar bulundukları bölgeye, boyutlarına ve etiyolojilerine göre farklı klinik bulgularla karşımıza çıkabilir. Genelde asemptomatikler. En önemli belirtileri ağrılı bir kitlenin varlığıdır. Fizik muayene esnasında hassasiyet, kitle, palpasyonla thril veya oskültasyonla üfürüm, venöz bası veya arteriyel tıkanma bulguları saptanabilir [2]. Tanıda RDUSG, anjiyografi, BT, MRI gibi yöntemler kullanılır. Tedavi yöntemleri psödoanevrizmanın etiyolojisine, büyüklüğüne, semptomatik olup olmamasına bağlı olarak farklılık göstermektedir. Bununla birlikte etiyolojik faktörlere bakılmaksızın boyutları iki cm ve üzerinde olan, semptomatik ve yayılma eğiliminde olan ekstremite psödoanevrizmaları tedavi edilmelidir. Boyutları iki cm altında olan psödoanevrizmalar ise kendiliğinden regresyona uğrayabileceği için takip edilmeli, eğer yayılma söz konusuysa tedavi edilmelidirler [3]. Femoral arter psödoanevrizmalarının tedavisinde standart cerrahi yaklaşım, RDUSG ile kompresyon, USG ile psödoanevrizma kesesi içerisine trombin enjeksiyonu, mikro koil embolizasyon ve endovasküler onarım gibi yöntemler kullanılabilmektedir [4]. Boyutları beş cm ve üzeri olan psödoanevrizmaların rüptür olma riski yüksektir [5]. Özellikle boyutları büyük, travmatik ve semptomatik psödoanevrizmaların tedavisinde erken cerrahi girişim düşünülmelidir.

Femoral arterin femurda fraktür olmaksızın künt travmayla gelişen psödoanevrizma rüptürü nadir görülen bir durumdur [6]. Hunter kanalından sonra yüzeysel femoral arterin yüzeysel konumu künt travmalara karşı onu savunmasız hale getirir [7]. Shrestha ve ark.larının ve Kumar ve Sodavarapu'nun olgularında da künt travma sonrası yüzeysel femoral arterin psödoanevrizması görülmüştür [6,8]. Young ve ark.larının, Norris ve ark.larının, Biswas ve ark.larının, Blasier ve Pape'nin olgularında ise künt travma sonrası derin femoral arter psödoanevrizması görülmüştür [8-11]. Literatürde künt travma sonrası yüzeysel femoral arter psödoanevrizmaları nadir olarak bildirilmiştir ve bildirilen vakalar klinisyenin bu tanıyı aklına getirmesi ve şüpheciliği sayesinde ortaya çıkmıştır.

Nöbet şüphesiyle yakınları tarafından acil servise getirilen hastada fizik muayene esnasında fark edilen sol uyluktaki ekimoz hastanın tanı sürecini oldukça değiştirmiştir. Künt travma sonrası oluşan yüzeysel femoral arter psödoanevrizma rüptürü olan vakamız bu yönüyle ilgi çekicidir. Rüptüre olması ve boyutlarının büyük olması sebebiyle acil servis başvurusundan birkaç saat sonra kalp damar cerrahisi tarafından opere edilmiş ve altı gün sonra sıhhatle taburcu olmuştur.

Acil servise başvuran hastaların primer yakınması da göz önünde bulundurularak tüm sistemik muayeneleri tam yapılmalıdır. Travma öyküsü bulunan, fizik muayenede pulsatil, ağrılı hematomu olan ve zamanla bu hematomu genişleyen, ağrı kesici tedavilere yanıt vermeyen hastalarda psödoanevrizma olabileceği akılda tutulmalıdır.

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DIABETIC EMERGENCIES

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INTRODUCTION

Type 1 diabetes mellitus (DM) is characterized by autoimmune, cellular-mediated destruction of pancreatic β cells. These patients usually have almost no insulin in the circulation. It is most often described in children and young adults, but can also develop in adults. Hyperglycemia is present in all types of DM and is the main factor responsible for chronic complications[1].

T2DM is a complex heterogeneous metabolic disease characterized by chronically elevated plasma glucose levels. The pathogenesis is complex. It involves the interaction of genetic and environmental factors. The most important pathophysiological features of T2DM are insulin resistance and impaired insulin secretion. Type 2 DM is a complex, chronic metabolic disease. It is an important public health problem that contributes significantly to mortality and morbidity all over the world. It increases mortality and morbidity due to an increased risk of cardiovascular disease, stroke, visual impairment, kidney disease, and amputation[2]. Diabetes mellitus the life expectancy of patients by about 10 years[3].

In our study, DM patients admitted to the emergency department of Harran University Faculty of Medicine and admitted to the Endocrinology and Metabolism department were examined. Complaints, diagnosis and outcome methods of DM patients were reviewed retrospectively. In the light of this information, it is aimed to determine the diabetic emergencies that can be encountered frequently in the emergency services in our region and to contribute to the literature.

MATERIALS AND METHODS

In our study, 173 DM patients who applied to Harran University Faculty of Medicine between 01.01.2021 and 01.09.2022 and were admitted to the Endocrinology and Metabolism Department were retrospectively analyzed. In our study, the age, gender, complaints, comorbidities and diagnoses of the patients were evaluated. As a statistical method; mean, frequency and ratio values were used in the descriptive statistics of the data.

RESULTS

Our study included 173 patients who applied to the emergency department and were hospitalized in the Endocrinology and Metabolism department within the specified time period. 56.64% (98) of the patients were male and 43.36% were female. The mean age was 58.13.

The patients who were evaluated applied to the emergency department with one or more complaints. 67.63% (117) of the patients had high blood sugar, 30.05% (52) diabetic foot and wound infection, 21.96% (38) weakness and fatigue, 12.71% (22) polyuria, polydipsia and dry mouth, 8.67% (15) headache, 6.93% (12) abdominal pain, 5.78% (10) nausea-vomiting, and 4.62% tremor applied.

90.17% (156) of the patients had Type-2 DM, 9.83% (17) had Type-1 DM. In addition to DM, the patients had one and/or more than one additional disease. Hypertension in 29.47% (51) of the patients, Coronary Artery Disease in 24.27% (42), Hyperlipidemia in 9.82% (17), Retinopathy in 7.51% (13), 6%, 35 (11) Chronic Renal Failure, 4.62% (8) Congestive Heart Failure, 4.04% (7) Cerebro Vascular Disease, 1.73% (3) Asthma, 1%, 73 (3) had Atrial Fibrillation, 1.73% (3) had Rheumatoid Arthritis and 1.15% (2) had Hyperparathyroidism.

83.2% (144) of the patients were hospitalized with the preliminary diagnosis of hyperglycemia and complications due to irregularity in glycemic control. Of these, 30.05% (52) were hospitalized with a preliminary diagnosis of diabetic foot and wound infection. 8.09% (14) were hospitalized with a prediagnosis of Hyperosmolar Hyperglycemic Condition (HHD), 6.93% (12) with Diabetic Ketoacidosis, and 1.73% with a preliminary diagnosis of Hypoglycemia.

DISCUSSION

Type 2 diabetes mellitus (T2DM) is a complex, chronic metabolic disease. It is an important public health problem that contributes significantly to mortality and morbidity all over the world[1]. In our study, 90.17% (156) of the hospitalized patients were Type-2 DM. Acute complications in diabetic patients are diabetic ketoacidosis, HHD and hypoglycemia[3]. 8.09% of our patients were hospitalized with a preliminary diagnosis of HHD, 6.93% with Diabetic Ketoacidosis and 1.73% with a preliminary diagnosis of Hypoglycemia.

Acute hyperglycemia is defined as a blood glucose level >300 mg/dL. In this case, the patient may have excessive urine output, weight loss, fatigue, blurred vision or obvious neuropathic symptoms. Elderly patients may develop volume depletion with acute mental status changes, hypovolemic shock, and acute renal failure[4]. Of the patients included in our study, 67.63% had high blood sugar, 30.05% diabetic foot and wound infection, 21.96% weakness/fatigue, 12.71% polyuria, polydipsia, dry mouth and 8.67% of them applied to the emergency department with the complaint of headache.

Chronic complications are grouped as microvascular (retinopathy, neuropathy and nephropathy), macrovascular (coronary artery disease, cerebrovascular disease, peripheral vascular disease) and nonvascular (including infections) complications[3]. In the patient groups we included in our study, 83.2% of hospitalizations were due to chronic complications.

Dyslipidemia and hypertension, which often accompany T2DM, play an important role in macrovascular complications[5]. Of our patients, 29.47% had Hypertension, 24.27% had Coronary Artery Disease, 9.82% had Hyperlipidemia.

Diabetic foot wounds occur as a result of the interaction of multiple factors such as peripheral neuropathy, excessive plantar pressure, repetitive trauma, peripheral vascular disease and wound healing disorder[6]. 30.05% of the patients were hospitalized with the preliminary diagnosis of diabetic foot and wound infection.

CONCLUSION

DM is a complex, chronic metabolic disease. It is an important public health problem that contributes to mortality and morbidity in the world. It is frequently encountered in emergency departments in the form of acute and chronic complications.

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ACİLDE SAĞ KALP YETMEZLİĞİ

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KALP YETMEZLİĞİ

Kalp yetmezliği, dispne ve yorgunluk gibi mevcut veya önceki karakteristik semptomların varlığı ve bu semptomların nedeni olarak kardiyak disfonksiyon kanıtı (örneğin, anormal sol ventrikül ve/veya sağ ventrikül dolumu ve yüksek dolum basınçları) ile tanımlanan karmaşık bir klinik sendromdur. [1] Hemodinamik açıdan kalp yetmezliği, kalbin vücuda ihtiyacıyla orantılı bir oranda kan pompalayamadığı veya bunu ancak yüksek dolum basınçları pahasına yapabildiği bir bozukluktur. [2]

Akut kalp yetmezliği, kalp yetmezliğinin yeni veya kötüleşen belirti ve semptomlarının hızlı başlangıcı olarak tanımlanır.

SAĞ KALP YETMEZLİĞİ

Sağ kalp yetmezliği, semptom ve bulguların sağ kalp yapılarının (ağırlıklı olarak sağ ventrikül, aynı zamanda triküspit kapak ve sağ atriyum) işlev bozukluğu veya bozulmuş vena kava akışının neden olduğu, sağ kalbin normal santral venöz basınçlarda akciğerleri perfüze etme yeteneğinin bozulmasıyla sonuçlanan klinik bir sendromdur.[3]among others, primary cardiomyopathies with right ventricular (RV

Bazı hastalarda asemptomatik sağ ventrikül disfonksiyonu olduğundan ve tüm sağ kalp yetmezliğinin sağ ventrikül disfonksiyonundan kaynaklanmadığından, sağ kalp yetmezliği ve sağ ventrikül disfonksiyonu terimleri eşanlamlı değildir. Birçok spesifik kardiyovasküler bozukluk çeşitli mekanizmalar yoluyla klinik sağ kalp yetmezliğine yol açar.

Türk Kardiyoloji Derneği tarafından yürütülen HAPPY çalışmasında, Türkiye'de 35 yaş üzeri erişkin popülasyonunda aşikar kalp yetmezliği prevalansının %2.9 olduğu gösterilmiştir. Henüz belirtileri ortaya çıkmamış (asemptomatik sol ventrikül disfonksiyonu bulunan) kalp yetmezliği sıklığı ise %4.8'dir. [4] Sağ kalp yetmezliği de sol kalp yetmezliği kadar sık görülmesine rağmen sağ kalp yetmezliği konusunda yeterince epidemiyolojik çalışma bulunmamaktadır.

SINIFLAMA

Akut

Ani sağ ventrikül afterload artışı (Pulmoner emboli, hipoksi, asidemi)

Sağ ventrikül kontraktilitesinin azalması (RV iskemi, miyokardit, postkardiyotomi şoku)

Kronik

Sol ventrikül yetmezliği sonucu gelişen pulmoner hipertansiyon (En sık)

Trikuspit regürjitasyonu gibi sağ taraflı problemlere bağlı kronik volüm aşırı yükü

Ejeksiyon fraksiyonuna göre

Düşük EF (≤%40)

Orta düzeyli EF (% 41-49)

Korunmuş EF (≥%50 ↑)

ETİYOLOJİ VE PATOFİZYOLOJİ

Sağ kalp yetmezliğinin en sık ve en önemli nedeni sol ventrikül yetmezliğine bağlı sıvı retansiyonu sonrası pulmoner arter basınç artmasıdır. İzole sağ kalp yetmezliğinin en önemli nedeni ise pulmoner tromboemboli'dir. İzole sağ kalp yetersizliği kötü prognozu gösterir. [5]

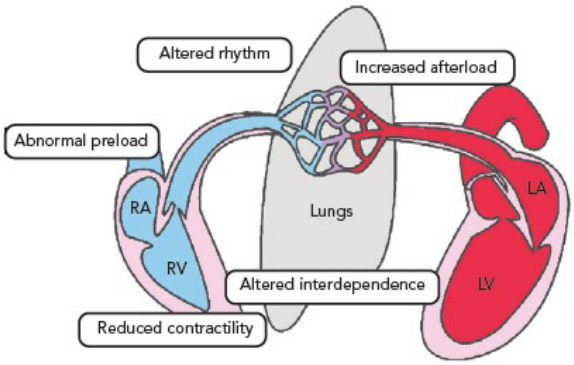
İzole sağ kalp yetmezliğinde sistemik konjesyon beklenirken pulmoner konjesyon beklenmez. İzole sol kalp yetmezliğinde ise pulmoner konjesyon beklenirken sistemik konjesyon beklenmez.

Normal sağ ventrikül işlevi, ön yük, kontraktilite, art yük, ventriküler karşılıklı bağımlılık ve kalp ritmi arasındaki etkileşimdir. Çoğu sağ kalp yetmezliği vakası, sağ ventrikül ard yükünü artırabilen, sağ ventrikül kontraktilitesini azaltabilen, sağ ventrül ön yükünü veya ventriküler karşılıklı bağımlılığı veya nedene bağlı aritmileri değiştirebilen mevcut veya yeni başlayan kardiyak veya pulmoner hastalıkları veya her ikisinin bir kombinasyonunu takip eder (Tablo 1 ve Şekil 1). Sağ kalp yetmezliğini anlamak için bu beş bileşeni değerlendirmek çok önemlidir. [6]

Tablo 1. Sağ kalp yetmezliği nedenleri

Artmış ard yük	
	LV geriye doğru yetmezliği (sol taraflı kalp hastalığı ile ilişkili pulmoner hipertansiyon)
	Pulmoner emboli, Kronik tromboembolik pulmoner HT
	Pulmoner arteriyel HT
	Kronik akciğer hastalığı
	ARDS
	Uyku apnesi, Obezite-hipoventilasyon sendromu
	Mekanik ventilasyon Sistemik RV veya RV çıkış obstrüksiyonu olan konjenital kalp hastalığı
Anormal ön yük	 Hipo-Hipervolemi
	LV ileriye doğru yetmezliği
	Perikardiyal tamponad Kronik soldan sağa şant Mekanik ventilasyon
Azalmış kontraktilite	 RV iskemi/enfarktı
	RV hasarı- SIRS (Sistemik İnflamatuar Response Sendromu)
	Kardiyomiyopatiler
	Aritmojenik sağ ventrikül displazisi Miyokardit
Bozulmuş kalp ritmi	 Bradikardi- Taşikardi
Bozulmuş karşılıklı bağımlılık	
	Perikardiyal tamponad
	Perikardiyal hastalıklar
	Septal şift

Kaynak: Arrigo M, Huber LC, Winnik S, Mikulicic F, Guidetti F, Frank M, Flammer AJ, Ruschitzka F. Right Ventricular Failure: Pathophysiology, Diagnosis and Treatment. Card Fail Rev. 2019 Nov 4;5(3):140-146 [6]

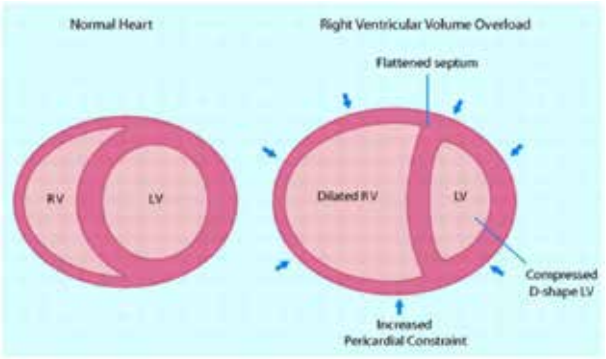


Şekil-1: Sağ ventriküler disfonksiyon mekanizmaları [6]

Artmış ard yük, pulmoner ve kardiyak kaynaklı sağ kalp yetmezliğinin ana patofizyolojik mekanizmasıdır. Sağ ventrikül yetmezliği olan hastalarda sol ventrikül sistolik veya diyastolik disfonksiyonu ve pulmoner hipertansiyon prevalansı yüksektir, bu da sağ ventrikül yetmezliğinin çoğunluğunun sol taraflı kalp veya pulmoner vasküler hastalıklara sekonder olduğu kavramını doğrular. [7]

Sağ kalbi içeren kardiyak hastalıklar, sağ ventrikül kontraktilitesini azaltabilir veya kardiyak debinin azalması yoluyla sağ ventrikül ön yükünü azaltarak sağ kalp yetmezliğine neden olabilir. Miyokardiyal enfarktüs, miyokardit, kardiyomiyopatiler gibi sol kalbi içeren hemen hemen tüm miyokardiyal hastalıklar sağ ventrikülü etkileyebilir ve sağ kalp yetmezliği yapabilir.

Perikardiyal hastalıklar sağ ventrikül ön yükünü ve ventriküler karşılıklı bağımlılığı değiştirebilirken, aritmi sağ ventrikül disfonksiyonunu kötüleştirebilir. Özellikle, kritik hastalarda aşırı hacim yüklemesi veya mekanik ventilasyon yoluyla iyatrojenik sağ kalp yetmezliği sıklıkla görülebilir.



Şekil-2: Sağ kalp yetmezliğinde bozulmuş karşılıklı bağımlılık: Sağ ventrikül dolum basınçlarındaki patolojik artışlar interventriküler septuma iletilir. Sağ ventrikül perikard (oklar) tarafından sınırlandırıldığından, bu kuvvetler septumun sola kaymasına neden olarak sol ventrikül geometrisini değiştirir. Bu değişiklikler sol ventrikül esneyebilirliğini, ön yükü ve ventriküler elastansı azaltarak kardiyak debinin azalmasına katkıda bulunur ve sol ventrikül diyastolik dolumunu olumsuz etkiler. Artmış sağ ventrikül diyastol sonu basıncından kaynaklanan perikardiyal kısıtlamaya sekonder sola septal kayma normal geometrik ventriküler ilişkiyi bozar ve ayrıca sağ ventrikül kasılma fonksiyonunu bozar. [8]

Akciğer hastalığına bağlı olarak sağ kalp yetmezliği kor pulmonale olarak tanımlanır. Sağ kalp yetmezliğine neden olan akciğer kaynaklı değişiklikler pulmoner emboli gibi nedenlerle akut olarak veya sağ ventrikül yapısı ve işlevinde kronik değişikliklere neden olan uzun süredir devam eden solunum bozukluklarından kaynaklanabilir. Birçok kronik akciğer hastalığı pulmoner dolaşımı ve sağ kalbi etkiler, ancak kronik obstrüktif akciğer hastalığı (KOAH), solunum yetmezliği ve kor pulmonalenin en yaygın nedenidir. KOAH, vasküler yatağın seyrekleşmesi, hiperkapni ve asidoz, pulmoner hiperinflasyon, hava yolu direnci, endotel disfonksiyonu ve hipoksi gibi çeşitli mekanizmalarla sağ ventrikül ard yükünü artırır. [9]

BELİRTİ VE BULGULAR

Akut sağ kalp yetmezliğinde hipotansiyon, taşikardi, takipneik ve siyanotik görünüm mevcuttur.

Kronik sağ kalp yetmezliğinde en belirgin özellik periferik ödemdir.

VCS: juguler venöz basınç artışı

baş-boyun muayenesinde venöz dolgunluk görülür.

VCİ: hepatojuguler reflü, kc konjesyon, hepatomegali, ödem, assit(transuda), alt ekstremitede ödem

Kaşektik

Barsak duvarı ödemine bağlı malabsorbsiyon sendromu gelişebilir.

Protein kaybettiren enteropatinin en önemli nedeni kalp yetmezliğidir.

Kussmaul belirtisi

Normalde inspiryumda negatif intratorasik basınç artışına bağlı kalbe gelen kan miktarı artar, boyun venleri dolgunluğu azalır.

İnspiryum sırasında boyun venlerinde dolgunluk artışı patolojiktir ve kussmaul belirtisi olarak adlandırılır.

Carvallo belirtisi

İnspiryum sırasında triküspid kapaktaki sistolik üfürümün şiddetlenmesi

İkinci kalp sesinin (P2) pulmonik bileşeninde belirginleşme

Holosistolik üfürüm (Triküspit yetmezliğine bağlı)

TANI

ELEKTROKARDİYOGRAFİ

Sağ aks sapması

Akut sağ kalp yetmezliğinde sinüs taşikardisi ve V1'de qR paterni sıklıkla görülür.[10]right ventricular strain, and adverse clinical outcome.\nMETHODS AND RESULTS: ECG's from 151 patients with suspected pulmonary embolism were blindly interpreted by two observers. Echocardiography, troponin I, and pro-brain natriuretic peptide levels were obtained in 75 patients with pulmonary embolism. Qr in V(1

Atrial flutter başta olmak üzere atrial aritmiler sıktır.

Pulmoner emboliye bağlı sağ kalp yetmezliklerinde S1Q3T3 paterni görülebilir.

X-RAY

Önemli bir SV genişlemesi durumunda, anteroposterior akciğer grafisinde kalp silueti oldukça büyük ve lateral grafide retrosternal hava sahası kaybı olacaktır.

Kardiyak silüetin, omurganın sağına fazlaca yer değiştirmesi, hemen hemen her zaman RA genişlemesini temsil eder.

Santral venöz basınç yüksekliğinde bazen genişlemiş azigos ven görülebilir.

Plevral efüzyon, özellikle pulmoner ve sistemik venöz basınçların birlikte arttığı kalp yetmezliği durumunda görülür.

EKOKARDİYOGRAFİ

Sağ kalp yetmezliğinde ana görüntüleme yöntemi ekokardiyografidir.

Sağ ventriküler dilatasyon

Diyastolik interventriküler septal düzleşme (sola kayma) = aşırı hacim yüklenmesi

Sistolik interventriküler düzleşme (sola kayma) = aşırı basınç durumu

Sağ ventriküler hipokinezi

TAPSE (triküspit kapağın anüler planda sistolik yer değiştirmesi)

RVFAC (sağ ventrikül fraksiyonel alan değişimi)

KARDİYAK MR

Kardiyak MRG, tüm kalbin 3 boyutlu görüntülemesini sunar ve sağ ventrikül hacmi, kütlesi ve ejeksiyon fraksiyonunun kantitatif noninvaziv ölçümü için altın standart haline gelmiştir. [11]

BİLGİSAYARLI TOMOGRAFİ

Kardiyak BT sağ ventrikül boyut ve işlevi hakkında hacimsel bilgi sağlar. Kardiyak MR'ın olmadığı durumlarda kullanılabilir.

Pulmoner BT pulmoner emboli ve akciğer parankim hastalıklarının tanısı konusunda yardımcı olabilir.

SAĞ KALP KATETERİZASYONU

Sağ kalp basınçların değerlendirilmesinde, koroner arter hastalığının tespitinde kullanılır.

LABORATUVAR

Akut sağ kalp yetmezliğinde karaciğer fonksiyon bozukluğu oldukça yaygındır; sistemik tıkanıklık sıklıkla kolestatik bir patern ile kendini gösterirken, hipoperfüzyon tipik olarak dolaşımdaki transaminazlarda keskin bir artışa neden olur. [12] Kronik sağ kalp yetmezliğinde transaminazlar genellikle normal olup ilerlemiş hastalık durumunda albümin düşüklüğü ve inr yüksekliği saptanabilir.

Ciddi vakalarda, sistemik hipoperfüzyonla birlikte venöz tıkanıklık, kan üre nitrojeni ve kreatinin düzeyinde yükselme ile karakterize böbrek yetmezliğine yol açabilir. [13]rather than impairment of cardiac output, is primarily associated with the development of worsening renal function (WRF

Nt-proBNP düzeyleri sağ kalbe özgü olmamakla birlikte kalp yetmezliğinde yüksek bulunabilir. Pulmoner arteriyel hipertansiyona eşlik eden sağ kalp yetmezliğinde prognozun yararlı bir belirteci olarak ortaya çıkmıştır.[14]survival predictions can be important for optimization of therapeutic strategies. The present study aimed to validate a quantitative algorithm for predicting survival derived from the Registry to Evaluate Early and Long-term PAH Disease Management (REVEAL Registry

TEDAVİ

Sağ kalp yetmezliğinde tedavi altta yatan nedeni düzeltme, hacim ve ön yük yönetimi, sağ ventrikül kontraktilitesi, sağ ventrikül ard yüküne, sağ ventrikül mekanik desteği ve gerekli durumlarda mekanik ventilasyon desteğine odaklanır.

VOLÜM VE PRELOAD YÖNETİMİ

CVP 8-12 mmHg'yi hedeflenir.

Makul sıvı bolusları gerekebilir.

Hacim aşırı yüklenmişse sıvı,tuz kısıtlaması ve agresif diüretik tedavi ile ön yük azaltılır. Diüreze dirençli hastalar için diyaliz desteği alınmalıdır.

İNOTROP VE VAZOPRESSORLERLE SAĞ VENTRKÜL KONTRAKTİLİTESİNİN ARTIRILMASI

Kardiyak output/kan basıncı yetersiz ise inotroplar başlanır. Selektif bir sağ kalp inotropu yoktur.İnotroplar beta-agonistler, kalsiyum duyarlılaştırıcılar ve fosfodiesteraz inhibitörleridir.

Ard yük azaltılmalıdır, aksi takdirde artan kontraktilite ile birlikte artan miyokardiyal O2 tüketimi gerçekleşir

Levosimendan: Pulmoner vaskuler direnci azalttığı ve sağ ventrikül işlevini iyileştirdiği gösterilmiştir.

Milrinon: Miyokardiyal oksijen ihtiyacını artırmadan beta-adrenerjik olmayan bir mekanizma yoluyla kontraktiliteyi artırır.

Perfüzyonu sürdürmek için vazopressörler kullanın:

Adrenalin, noradrenalin, fenilefrin ve vazopressin: Ortalama arter basıncını ve dolayısıyla koroner perfüzyonu artırır, ancak uygun şekilde kullanılmadığı takdirde ard yükü çok fazla artırarak miyokard O2 tüketimini artırır.

Vazopressin, seçici efferent arteriyol daralması yoluyla renal etkisinin yanı sıra pulmoner vaskuler direnç üzerinde daha az etkisi olduğu için tercihli olarak kullanılabilir.

Digoksin: Yararlı olup olmadığı bilinmiyor, ancak kardiyak outputu iyileştirebilir

ARD YÜKÜ AZALTMA

Pulmoner vasküler direnci en aza indirin: hipoksi, asidemi, alveolar distansiyondan kaçının

Seçici pulmoner vazodilatörler:

Prostaglandinler (INH, IV, SC): artan NO salınımı

Nitrik oksit: pulmoner vazodilatör, oksijenasyon ve pulmoner vaskuler direnç iyileşir ancak mortaliteye yararı olmaz, rebound pulmoner hipertansiyon yapabilir.

Sildenafil ve tadalafil (PDE-V inhibitörü): oral ilaç, fosfodiesteraz enzimi

Milrinon (Çoğunlukla bir PDE-III inhibitörü, ayrıca bir miktar PDE-V inhibisyonuna sahiptir): Pulmoner vasküler direnci azaltır, IV verilebilir veya nebulize edilebilir

Endotelin reseptör antagonistleri: Bosentan

Rekombinant BNP: neseritid; ön yükü ve ard yükü azaltır.

MEKANİK VENTİLASYON VE PEEP

Pulmoner kapiller yataktan iletilen genişleyen alveoler basınç pulmoner kapağın açılma basıncını belirler.

PEEP, sağ ventriküle iletilen basınç nedeniyle ön yükün artmasına katkıda bulunur

Düşük tidal volüm

CERRAHİ TEDAVİ VE SAĞ VENTRİKÜL MEKANİK DESTEĞİ

Kapak cerrahisi: triküspit ve pulmoner kapak

Yeniden senkronizasyon için biventriküler pacing

Mekanik Kardiyak Destek

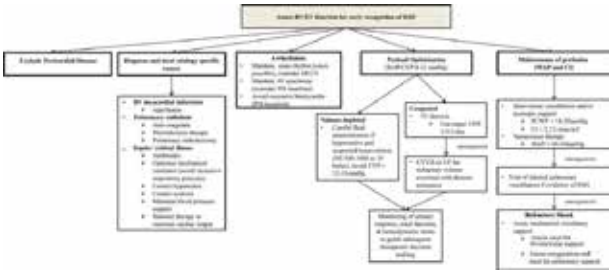
RVAD: sağ ventrikül destek cihazı

VA-ECMO

Medikal tedaviler yetersiz olduğunda, sistemik ve sağ ventrikül perfüzyonunu sürdürmek için mekanik dolaşım desteğine ihtiyaç duyulur. İzole RV yetmezliği için mekanik dolaşım desteği ile ilgili veriler sınırlıdır, ancak ekstrakorporeal membran oksijenasyonu (ECMO) en verimli ve etkili modalite olarak görünmektedir. Akut hipoksemik solunum yetmezliğine bağlı izole sağ ventrikül yetmezliği olan hastalar için, hasta şokta olsa bile veno-venöz (VV) ECMO uygun bir başlangıç konfigürasyonudur. Bununla birlikte, eşlik eden sol ventrikül yetmezliği ile birlikte primer sağ ventrkül yetmezliği olan hastalarda venoarteriyel (VA) ECMO endikedir. Her iki modalite de ön yükü azaltarak, RV duvar gerilimini azaltarak ve oksijenli kanı koroner dolaşıma ileterek sağ ventriküle dolaylı destek sağlar. Periferal kanülasyon VV-ECMO'da ve en yaygın olarak VA-ECMO'da kullanılır ve acil durumlarda bile hızlı kanülasyona izin verir. [15]due to either intrinsic injury to the RV or increased afterload. Medical treatment of RV failure should include optimizing preload, augmenting contractility with vasopressors and inotropes, and considering inhaled pulmonary vasodilators. However, when medical therapies are insufficient, mechanical circulatory support (MCS

Nakil

Balon atriyum septostomisi (BAS) gibi palyatif prosedürler



Şekil-3: Akut sağ kalp yetmezliğinin yönetimi: Tüm yönetim, hastanın hemodinamik durumunun farkında olarak gerçekleştirilmelidir. Bu durum klinik olarak net değilse, invaziv değerlendirme/izleme yapılmalıdır. Hemodinamik hedefler, kişiye özel tedavi için kılavuzlar sağlar. AV, atriyal-ventriküler anlamına gelir; CI, kardiyak indeks; CVP, santral venöz basınç; CVVHF, sürekli veno-venöz hemofiltrasyon; DCCV, doğru akım kardiyoversiyonu; IV, intravenöz; LV, sol ventrikül; MAP, ortalama arter basıncı; NS, normal salin; PAH, pulmoner arteriyel hipertansiyon; PCWP, pulmoner kapiller kama basıncı; PM, kalp pili; RAP, sağ atriyal basınç; RHC, sağ kalp kateterizasyonu; RV, sağ ventrikül; UF, ultrafiltrasyon; ve UOP, idrar çıkışı. [3]among others, primary cardiomyopathies with right ventricular (RV

SONUÇ

Acil servislerde akut sağ kalp yetmezliğinde erken tanı ve tedavi önemlidir. Her ne kadar özellikle volüm yükü açısından sol kalp yetmezliği ile arasında tedavi benzerliği olsa da, aralarında altta yatan nedenlere dayalı tedavi stratejileri farklı olabilir. Sağ kalp yetmezliğinin ve altta yatan nedenin erken tanınmasında acil servislerde ekokardiyografi gibi yöntemlerin erken kullanımı mortaliteyi azaltabilir. Ayrıca tedavide medikal tedavinin yetersiz olduğu durumlarda acil kritik bakım alanlarında VA-ECMO gibi mekanik destek yöntemlerinin kullanımının yaygınlaşması gerekmektedir.

ANAHTAR KELİMELER

Kardiyak, kontraktilite, pulmoner, ekokardiyografi, ecmo

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A DESCRIPTIVE STUDY ON HERBAL POISONING REPORTS PRESENTED IN THE NATIONAL EMERGENCY MEDICINE CONGRESSES IN TURKEY: A 5-YEAR ANALYSIS

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OBJECTIVE

Herbal poisonings are still an important emergency medical issue as a consequence of the lack of knowledge about toxicity and the increasing use of plants as an alternative treatment. In this study, we aimed to draw attention to herbal poisonings that can be seen in the emergency department in the light of the cases presented in the National Emergency Congresses about poisoning with plants in the last 5 years in Turkey.

METHODS

An evaluation of all abstracts, both posters and oral presentations, from the National Emergency Medicine Congresses held by the Emergency Medicine Physicians Association of Turkey (EPAT) in 2017 to 2021 was made. Causative plants, routes of poisonings, intentional usage, toxic effects and patient outcomes were recorded. Cases and case series with missing data were excluded from the study. Descriptive data are expressed as frequencies and percentages.

RESULTS

A total of 38 abstracts consisting of 48 patients were identified. Poisonings were reported with 17 different plant species such as Datura Stramonium (n=10), Atropa Belladona (n=6), Hyoscyamus Niger (n=6), Ferula Orientalis (n=5), and Ecballium Elaterium (n=5) as causative agents. Oral ingestion (n=40) was the most common route of poisoning and intranasal (n=5), oral mucosal (n=1), dermal (n=1), and inhalation (n=1) were the other routes of poisonings. Accidental ingestion (60%) (mistakenly or thought to be harmless) of the plants and use for alternative treatment (35%) were the most common reasons for poisoning. Anticholinergic toxidrome (n=21), hepatotoxicity (n=10) and anaphylaxis/angioedema (n=6) were the most commonly reported toxic effects. Of the patients 42% were admitted to the wards, 40% were discharged after observation in the emergency department, 8% were admitted to the intensive care units, 6% were transferred to another hospitals and 4% died in the emergency room.

CONCLUSIONS

Since poisonings with plants are common and considered as a public health problem, as they are mostly used by accident or for alternative to medical treatment, it is important to carry out educational activities about herbal poisonings in the community to minimize the impact of poisonings. In addition, herbal poisonings should be emphasized more in the emergency medicine residency programs and continuing medical education.

KEYWORDS: Emergency, herbal poisoning, plants.

PACEMAKER KOMPLİKASYONU MU? MALPRAKTİS Mİ?

GİRİŞ

Kardiyovasküler hastalıklar nüfus yaşlandıkça daha sık olarak görülür hale gelmektedir. Buna bağlı olarak da hastalarda gittikçe artan sayıda pacemaker / ICD (Implantable Cardioverter Defibrilator) uygulamasına gereksinim duyulmaktadır. ICD uygulaması arttıkça da komplikasyon olasılığı da artmaktadır (1). Çalışmaların tümü olmasa da çoğu, artan deneyim ve çağdaş cihaz ve uygulamalarla genel komplikasyon oranında bir düşüş olduğunu öne sürmüş, ancak oranlar yaşlı popülasyonlarda ve kadın hastalarda yine de daha yüksek kalmaktadır [2]. Hem implantasyon sırasında hem de implantasyon sonrasında hastanın ve cihazının ömrü boyunca ICD kullanımıyla ilişkili çeşitli komplikasyonlar vardır (3). Bu olguda ICD uygulama sonrası bisitopeni, retroperitoneal hematom ve sepsis gelişen hastayı sunuyoruz.

OLGU

68 yaş erkek hasta 112 tarafından genel durum bozukluğu ve karın ağrısı ile acil servise getirildi. Hastanın Glaskow Koma Skalası:15 genel durumu orta-kötü, oryante-koopereydi. Batında sol alt kadranda hassasiyeti mevcuttu. Diğer sistem muayeneleri normaldi. Ateş: 36,2ºC TA:86/52 mmHg Nb: 73/dk SPO2: 94 KŞ: 180 mg/dl. Özgeçmişinde hipertansiyon, diyabetes mellitus, koroner arter hastalığı ve konjestif kalp yetmezliği mevcuttu. Elektrokardiyografisi pacemaker ritmindeydi. Hastaya bir ay önce ICD takılmış ve bir hafta sonra dekompanse kalp yetmezliği nedeniyle yatarak tedavi almış. Taburculuk sonrası evde ilaçlarını düzenli kullanmasına rağmen genel durum bozukluğu gelişmeye başlamış. Laboratuarında WBC: 8,3 mcl, HB: 6,6 g/dl, MCV: 88,7 fl, PLT: 25000 mcl, INR:1,26 ku/l, BNP:579 pg/ml olduğu görüldü. Karın ağrısı nedeniyle çekilen intravenöz kontrastlı torakoabdominal bilgisayarlı tomografisinde sol renal bölgede retroperitoneal hematom saptandı. (Resim1-2) Hasta kardiyoloji tarafından değerlendirildi. Yatak başı ekokardiyografisinde EF %15-20 global hipokinetik, tamponada yol açacak perikardiyal efüzyon, bası bulgusu yoktu, lead yerinde görüntülendi. Hasta üroloji ve dahiliye tarafından değerlendirildi. Üroloji retroperitoneal hematom nedeniyle operasyon planladı ancak hastanın bisitopenisi mevcuttu. Operasyon bisitopeni tedavisi sonrasına ertelendi. Dahiliye tarafından hipotansif ve bisitopenik olması nedeniyle yoğun bakım yatışı yapıldı. Yoğun bakımda kan transfüzyonu yapılırken hastanın bilincinde bozulma ve sepsis tablosu gelişmesi nedeniyle entübe ediliyor ancak sonrasında hasta ex oluyor.

SONUÇ

Kalıcı pacemaker uygulanmasında elektrodun kalbe endokardial veya epikardial olarak yerleştirilmesi hastanın durumuna, mevcut imkanlara, cerrahın tecrübesine bağlıdır. Acil servise yakın zamanda ICD uygulaması ile gelen hastada ICD uygulamasına bağlı komplikasyonlar açısından dikkatli olunmalı ve olası komplikasyonlar gözardı edilmemelidir. Ekonomik, sosyal problemlerinin dışında mevcut olabilecek bu komplikasyonlar nedeniyle pacemaker takılma endikasyonunun iyi konması gerekmektedir.

Yapılan invaziv işlemlerden sonra hastaların olası bilinen komplikasyonları açısından düzenli takibi ve atipik şikayetler varlığında işlem ilişkili komplikasyonlardan şüphe edilmesi, tanılanması ve erken cerrahi onarım gelişebilecek morbidite ve mortalitenin önüne geçecektir. Ancak implantasyon sonrası hastanede yatış süresinin genellikle çok kısa olması nedeniyle taburculuk sonrasında da rutin kontroller yapılmalıdır.

ANAHTAR KELİMELER: Acil, Pacemaker, Komplikasyon, Malpraktis

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TRAVMATİK HEMOTORAKS İLE ACİLE BAŞVURAN HASTALARDA CERRAHİNİN ZAMANLAMASI

ÖZET

GİRİŞ

Hemotoraks her iki plevra yaprağı arasında hemorajik mainin toplanmasıdır. Plevra yaprakları arasında biriken hemorajinin ne kadar zamanda biriktiği, miktarı ve hastada oluşturduğu klinik tabloya göre tedavi algoritması şekillenir. Göğüs travmaları hemotoraksın en sık sebebidir.

Materyel metot

Ocak 2018- Temmuz 2022 tarihleri arasında Kartal Dr Lütfi Kırdar Şehir hastanesi acil servisine travma kaynaklı hemotoraks ile başvuran 80 hastanın verileri geriye dönük olarak kayıt edildi. Hastaların demografik verileri, uygulanan tedavi yöntemleri, operasyonun zamanlaması, eşlik eden pnömotoraks ve kot fraktürleri, mortaliteleri değerlendirildi.

BULGULAR

Çalışmamıza acil servise travmatik hemotoraks ile başvuran 80 hasta dahil edildi. Hastaların yaş dağılımı 13 ile 81 arasında, ortalaması 38.7 idi. Seksen hastanın 62' si erkek 18' i kadındı. Hemotoraksların 32' si künt , 48'i penetran travmaya bağlı oluşmuştu. Travmatik hemotoraksların 70'ine pnömotoraks , 21'ine kot fraktürü eşlik ediyordu. Hastaların 4'ü medikal olarak izlendi, 72 hastaya tüp torakosotomi uygulandı. Hastaların 9'u acil olarak, 9'u elektif şartlarda opere edildi. Acil opere edilenler dışında ortalama drenaj 650 cc idi. Yatış süreleri 3 ile 30 gün arasında değişmekle beraber ortalama yatış süresi 6.5 gündü. Seksen hastanın 3'ü (%3.7) mortal seyretti. Mortal seyreden hastaların 2'si ateşli silah yaralanması, 1'i araç içi trafik kazası idi.

	Künt	Penetran	Toplam
Sağ/ Sol/ Bilateral	18/20 /1	22/16/3	40/36/4
Eşlik eden pnömotoraks	30	40	70
TT sonrası ilk drenaj 1000 cc üzerinde	1	7	8
Eşlik eden 3 ve üzeri deplase kot fraktürü	9	0	9
Acil opere edilen	1	8	9
Elektif opere edilen	7	2	9
İzlem	2	2	4
Mortalite	1	2	3

	VATS	Torakotomi	Toplam
Acil	1	8	9
Elektif	7	2	9
Stabilizayon	8	1	9

SUNUÇ

Travmatik hemotoraks göğüs cerrahisinin acillerinden olup doğru yaklaşım ve erken müdehale gerektirir. Tedavisi medikal izlemden acil operasyona kadar geniş bir yelpazeyi içerir. Torakotomi acil operasyonlarda en sık tercih edilen yaklaşımken elektif vakalarda VATS ile yaklaşımın daha iyi sonuçlar verdiği kanatindeyiz.

INTRODUCTION

Mediastinal masses are rare in childhood but are life-threatening conditions because of the compression of the main vascular structures and respiratory tract. They are generally located in the anterior mediastinum and the most common cause is lymphomas. Solid tumors such as neuroblastoma, neurofibroma, teratoma, and thymoma; cystic conditions such as thymic cyst and bronchogenic cyst; masses as a result of tuberculosis and fungal infections; and vascular malformations are other causes of mediastinal masses.[1-3]

Lipoma is a well-circumscribed, mesenchymal, benign tumor originating from adipose tissue. They are generally located subcutaneously, particularly in the upper back, neck, and shoulder regions.[4] Mediastinal localization of the lipoma is an extremely rare condition. They tend to be larger in size since their diagnosis often is relatively late.[5] Mediastinal lipomas are usually asymptomatic and as a result, they frequently are diagnosed incidentally while performing routine examinations or imaging. On the other hand, they can be detected during the investigation of mild symptoms such as dyspnea, cough, or palpitations.[6-8]

To our knowledge, there are a few cases that resulted in respiratory or cardiac symptoms (6-8). Herein, we present a 5.5-year-old patient with mediastinal lipoma diagnosed during the investigation of persistent bronchiolitis and wheezing.

CASE

A 5.5-year-old male patient was admitted to the outpatient clinic due to persistent wheezing. The patient had no chronic disease or medication in history except persistent cough and wheezing caused by bronchiolitis. In addition, he had no confirmed or suspected allergic history or medication for allergy. There was no allergy or asthma in his parents. He had been first hospitalized 2.5 years ago with the diagnosis of bronchiolitis in another hospital. He used inhaler bronchodilator treatments sporadically during the symptom periods. The frequency of inhaler therapy requirements has increased recently, especially in the last few weeks.

On physical examination, his vital signs were normal (sPO_2:97, heart rate:90 beats/min, blood pressure: 90/60 mmHg, respiratory rate: 20/min). His weight was 15.8 kg (75 percentile) and his height was 93 cm (10 percentile). Diffuse rhonchi were observed in respiratory system examination. The rest of the systemic examinations were normal.

In the laboratory results, only IgE was abnormal (829 mg/dL). Other results were in normal ranges and summarized in Table 1. A posterior-anterior lung X-ray was obtained and a relatively huge opacity was found at the upper medial side of the right lung (Figure 1). The contrast-enhanced thorax computer tomography revealed a lesion compatible with lipoma in the upper mediastinum, approximately 6x4 cm in size, including the right subclavian artery and internal thoracic artery (Figure 2). Heart dimensions, mediastinal main vascular structures, trachea, main bronchi, and parenchyma areas of both lungs were normal. Additionally, a contrast-enhanced MRI was performed and the lipoma in the thoracic cavity was well described (Figure 3). The patient was referred to the thoracic surgery clinic to be evaluated for mass excision.

After surgical excision, the mass underwent a histopathological evaluation. In the macroscopic examination, tumoral tissue was observed. It had a smooth border and a thin capsule around it. Its cross-sectional surface was bright yellow-colored and diffuse transparent gelatinous structure. In the histopathological examination, tumoral tissue consisting of hypocellular lipocytes with prominent myxoid areas in the background and without mitosis and atypia was identified (Figure 4). Sparse spindle cells observed within myxoid areas showed positive expression with CD 34. In the differential diagnosis, spindle cell myxoid lipoma was ruled out due to the absence of diffuse tight collagen bundles. Myxoid liposarcoma was ruled out because there was no obvious chicken wire vascular pattern and it did not contain lipoblasts. The case was defined as myxolipoma in the presence of current histopathological and immunohistochemical findings.

Informed consent was received from the family of the patient.

DISCUSSION

Among mediastinal masses, the lipoma is one of the least common reasons. Only a few mediastinal lipomas in children have been reported, all of which were completely confined to the thorax.[2,9-11] In a collective literature review, Handorf[12] reported 15 mediastinal lipoma cases. Although it is thought that lipomas are usually symptomatic in childhood because of its slow growth nature and can be diagnosed more likely in adults, Heuer[11] reported three cases under two years old. Williams and Parsons[13] described the classification of mediastinal lipomas. According to this classification, the current patient's mediastinal lipoma can be classified as "pure intrathoracic type" because it was located completely within the thoracic cavity.[13]

Lipomas are generally known to have a slow growth rate.[5] On the other hand, the rapid increase in the amount of adipose tissue as a result of rapid weight gain can cause the rapid growth of lipomas. Trusen et al.[9] reported a paracardial lipoma which was rapid growth in seven weeks as a result of a general weight increase. Our patient has a weight of the 90 percentile for height and was overweight compared to his peers. Our patient did not have any follow-up for lipoma before our diagnosis, but a relatively larger size which is resulting in a mass effect may be related to the patient's weight.

There are many types of lipomas, one of the rare types is myxolipoma with diffuse myxoid changes in the background.[14] The primary mainstay of treatment is surgical excision in all lipomas. They are usually very close to the delicate and vital structures and require meticulous dissection during surgery. Although recurrence is rare after successfully completely resected tumors, patients should have a regular follow-up for recurrences.[12] In this way, we referred the patient to the thoracic surgery clinic for surgical resection and follow-up.

CONCLUSION

Symptomatic mediastinal lipoma is an extremely rare condition. They usually can be diagnosed incidentally. Complete surgical resection can be curative.

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PİYOJENİK FLEKSÖR TENOSİNOVİT OLGULARI

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ÖZET

Piyojenik fleksör tenosinovit (Pft) el enfeksiyonları arasında azımsanmayacak kadar sıklıkta görülmekte olup fleksör tendon kılıflarının enfeksiyonudur. Tanısı genellikle fizik muayene ile konulabilmektedir ve Kanavel bulguları tanıda yüksek duyarlılık göstermektedir. Laboratuvar bulguları ve görüntüleme yöntemleri de tanıya yardımcı olmaktadır. Erken başvuruda, tanı sonrası genellikle konservatif tedavi ile tam klinik ve fonksiyonel iyileşme sağlanabilirken; geç başvuruda, yanlış veya geç tanı ve komorbid hastalıkların birlikteliği ile cerrahi tedavi gerekebilmektedir. Sonrasında birçok hastada komplikasyonla ve fonksiyonel kayıpla karşılaşılabilmektedir.

Bu çalışmamızda acil servis ve ortopedi ve travmatoloji polikliniğinde tanı konulup tedavi ettiğimiz üç olguyu değerlendirdik. Olgulardan ikisi acil servise biri ortopedi polikliniğine başvurdu. Acil servise başvuran iki olguda da konservatif yöntemlerle klinik ve fonksiyonel tam iyileşme sağlanırken, ortopedi polikliniğine başvuran olguda geç başvuru ve komorbid hastalık mevcuttu. Hastaya kliniğin ilerlemiş olması sebebiyle cerrahi tedavi uygulandı. Tedavi süreci uzadı. Hastada sekel olarak fleksiyon kontraktürü gelişti. Bu da iş gücü kaybına sebebiyet verdi. Acil tıp hekimlerinin; geç ve yanlış tanı sonrasında ampütasyona kadar gidebilen, klinik ve fonksiyonel kötü sonuçlara sebep olabilen piyojenik fleksör tenosinoviti; el enfeksiyonu ve penetran el travmaları olan hastalarda bu ihtimali hatırlamaları gerekmektedir.

ANAHTAR KELİMELER: Piyojenik, flexör tenosinovit, Kanavel bulguları

GİRİŞ

Piyojenik fleksör tenosinovit (Pft) eldeki fleksör tendonların kılıflarının mikrobiyal enfeksiyonudur. Bütün el enfeksiyonları arasında % 2.5 - 9.5 oranında görülür ve genellikle delici el yaralanmaları sonrasında oluşur (1). En sık etken % 75 oranında Staphylococcus aureus olmakla birlikte MRSA, staph aureus epidermidis, β-hemolytic streptococcus, ve gram-negatif pseudomonas aeruginosa gibi etkenler de sebep olabilmektedir (2,3). Tanıda Kanavel bulguları oldukça önemlidir ve % 91.4 – 97.1 arasında bir duyarlılığa sahiptir (4).

Kanavel Bulguları: Yaygın 'sosis' şişmesi (etkilenen parmağın simetrik şişmesi), parmağın fleksiyonda tutulması, pasif ekstansiyonda ciddi ağrı, fleksör tendon boyunca hassasiyet olmasıdır. Görüntüleme yöntemlerinden X-Ray, USG, MR; laboratuvar testlerinden WBC, CRP ve sedimentasyon yüksekliği, enfektif ve nekrotik dokudan kültür alınması tanı koymada yardımcı olurlar. Tedavide; kliniğin iyi olduğu erken dönem olgularında i.v. antibiyoterapi, elevasyon, soğuk uygulama, splint ile immobilizasyon uygulanırken, konservatif tedaviye cevap vermeyen, geç başvuran, kliniğin kötü olduğu, doku nekrozunun olduğu olgularda cerrahi olarak irrigasyon ve debridman uygulanır. PFT; felon (distalde pulpa enfeksiyonu), interfalangeal veya metakarpofalangeal septik artrit, selülit gibi durumlardan ayırt edilmelidir. Komplikasyonları; parmaklarda sertlik, tendon rüptürü, enfeksiyonun ele yayılması, osteomiyelit, ampütasyondur (5). Bu çalışmamızda ortopedi ve travmatoloji polikliniği ile acil servise başvuran üç olguyu sunmayı planladık.

OLGULAR

Hasta	H1	H2	H3
Yaş	38	33	58
Cinsiyet	E	K	E
Meslek	İşçi	Ev Hanımı	İşçi
Şikayet ve Öykü	1 gün önce sağ el 2. parmağa tel ucu batmış	Yük taşıma sonrası sol el 3. parmakta şişlik kızarıklık şiddetli ağrı	Diyabeti olan hasta 3 gün önce sol el 2. parmağını matkap ile delmiş. 1 gün önce acil servise başvurmuş. Tendon muayenesi nörovasküler muayene doğal olması üzerine enfeksiyon hastalıkları polikliniğine yönlendirilmiş.
Fizik Muayene	Isı artışı + kızarıklık + fleksör tendon üzerinde hassasiyet + pasif ekstansiyonda ağrı + şişlik mevcut ancak sosis parmak görünümü yok.	Isı artışı + kızarıklık + fleksör tendon üzerinde hassasiyet + pasif ekstansiyonda ağrı + şişlik mevcut ancak sosis parmak görünümü yok.	Isı artışı kızarıklık mevcut. sosis parmak görünümü ve ciltte nekroza eğilim bulguları mevcut. Fleksör tendon üzerinde hassasiyet + pasif ekstansiyonda ağrı +
Laboratuvar	Wbc: 8.9 (3.7-10.4) Crp : 8,6 (0-5)	Wbc: 11.3 Crp : 12.5	Wbc : 15 Crp : 60.2 Sedimentasyon : 33 (0-20)
Görüntüleme	Özellik Yok	Özellik Yok	Özellik Yok
Tedavi	Tetanoz profilaksisi + profilaktik antibiyoterapi + parmak ucundan destekli 2. parmağı sabitleyen atel + elevasyon + soğuk uygulama	Profilaktik antibiyoterapi + parmak ucundan destekli 2. parmağı sabitleyen atel + elevasyon + soğuk uygulama	Acil cerrahi debridman+ irrigasyon uygulandı. i.v. antibiyoterapi +elevasyon + soğuk uygulama
Komplikasyon	Yok	Yok	Kontrolünde kontraktür olduğu, eklem romlarının kısıtlı olduğu görüldü.

TARTIŞMA

Piyojenik fleksör tenosinovit (Pft) nadir görülen ortopedik acil cerrahi gerektirebilen durumlardandır. Genellikle penetran bir travma sonrası olabileceği gibi bazen de künt travma sonrası hematojen yolla da bulaşla birlikte olabildiğini düşünmekteyiz. Literatürde bunu destekleyen yayınlar (1,6) mevcut olup bizim de bir olgumuzda penetran travma olmamasına rağmen Pft geliştiği gözlenmiştir. Diyabet varlığı, steroid kullanımı, madde bağımlılığı, immün sistemin zayıf olması gibi etmenler Pft oluşumunu kolaylaştıran faktörlerdir (1). Giladi ve ark. yaptığı bir çalışmada diyabet, periferik vasküler hastalık ve renal yetmezliği olan hastalarda Pft sonrası amputasyon riskinin arttığı belirtilmiştir (7). Bir olgumuzda diyabet öyküsü mevcuttu. Hastada gelişen hızlı progresyonda ve cerrahi ihtiyacı olmasında diyabetin etkili olduğunu düşünmekteyiz. Erken başvuru, tanı koymak ve uygun tedaviye başlamak başarı için önemli faktörlerdir. Gecikmiş başvurularda klinik daha kompleks bir hal almakta olup cerrahi tedavi gerektirebilmektedir. Yapılan çalışmalarda etkilenen hastaların %10-25 i tam aktif hareket aralığını yapamadığı belirtilmiştir (8,9). Bu durum özellikle genç hastalarda iş gücünü etkilemektedir. Geç başvuru sonrası cerrahi tedavi edilen olgumuzda kontraktür gelişti.

SONUÇ

PFT erken tanı ve tedavi gerektiren ortopedik acillerden olduğu için, acil tıp hekimlerinin özellikle el enfeksiyonu ve penetran el travmaları olgularında şüphelenmeleri gereken bir durumdur.

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APPLICATIONS OF INHALATIONAL NITROUS OXIDE IN PATIENTS AS AN ALTERNATIVE TO TRADITIONAL NARCOTICS AND SEDATION AGENTS IN THE EMERGENCY DEPARTMENT

Vanessa Pasadyn BA, Mohamad Moussa MD

This is the case of a 76-year-old woman who received nitrous oxide as analgesia for a shoulder reduction in the emergency department (ED). The goal of discussing this case is to emphasize the accessibility, efficacy, and safety of using nitrous oxide as a sedation agent in place of narcotics in the ED. This effort is in support of the ProMedica Toledo's PAIN (Prescribing Alternatives Instead of Narcotics) program with an overarching goal to reduce opioid use in the ED.

Nitrous oxide was documented to have been used as an analgesic at two of ProMedica Toledo's Hospital emergency departments 50 times for a variety of encounters. The reasons for nitrous oxide use at ProMedica Toledo Hospital during April through June of 2022 include limb fracture being the most common, among others like laceration, dislocation, and abscess or hernia. Specifically for our 76-year-old patient, nitrous was chosen as the agent for the patient because of advanced age, lower the risk of respiratory depression or hemodynamic instability, and to minimize side effects more commonly seen with propofol, ketamine, and benzodiazepines.

Nitrous oxide can be used for analgesia, pain management, and anxiolysis. It is a colorless, odorless gas that has rapid onset of 1-2 minutes and a short duration of 3-5 minutes. Nitrous has minimal effects on respiration and hemodynamics and has a minimal side effect profile compared to other sedatives. Nitrous is easy to administer, thus there are a wide variety of indications such as being used as an adjunct in fracture reduction, cardioversion, local anesthetic for laceration repair or foreign body removal. Some contraindications include patients being less than one year of age, drug or alcohol intoxication, or pregnancy.

Nitrous oxide is a safe sedative that can be readily used in the acute setting. The opioid epidemic is an ever present and growing issue in the United States and any effort to reduce narcotic use is imperative to prioritize. It is the responsibility of physicians, residents, and learners to understand the indications and contraindications of the use of nitrous oxide as an analgesic. This is a meaningful step in working to curb the opioid epidemic one step at a time while optimizing patient care and safety in the acute setting.

TRAFİK KAZASI NEDENİYLE HASTANEYE YATIŞ SONRASI KLİNİK TAKİPTE TESPİT EDİLEN SOL TRAVMATİK DİYAFRAGMA RÜPTÜRÜ

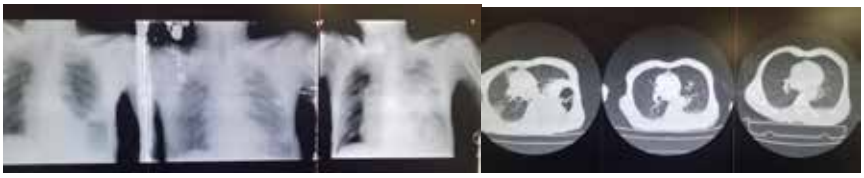
GİRİŞ

Travmatik diyafragma rüptürü (TDR); künt (%85) veya delici-kesici alet yaralanmaları (%15) sonrası oluşabilen, erken dönemde radyolojik değerlendirmelerde gözden kaçabilen mortalitesi yüksek bir durumdur. TDR sıklıkla trafik kazaları veya yüksekten düşmeler gibi yüksek enerjili travmalar sonrası görülür (1). Sol diyafragma rüptürü sağ diyafragmaya göre 10 kat daha fazla görülür. Bu durumun; diyafragmanın sol medial posterolateral bölgesinin embriyolojik gelişimde zayıf kalması ve sağ diyafragmanın karaciğer tarafından tamponlayıcı etkisi nedeniyle daha az hasarlanmasından kaynaklandığı düşünülmektedir (2). TDR' leri tek başına nadiren mortal seyrederler. Tanıdaki gecikme abdominal organ herniasyonları nedeniyle komplikasyonlara ve ölüme sebep olabilmektedir (3). Radyolojik yeni yöntemlere rağmen en önemli tanı aracı posteroanterior akciğer grafisidir (4,5). Ultrasonografi, bilgisayarlı tomografi ve magnetik rezonans gibi teknikler farklı oranlarda yol göstericidir. Rüptüre olan alanda, en sık herniasyona neden olan batın içi organlar mide ve kolondur. Sıklıkla eşlik eden organ yaralanmaları ise dalak ve karaciğeri ilgilendirir (6,7).

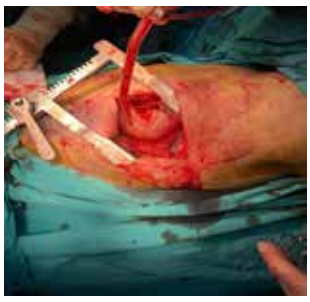
Bu olgu sunumunda trafik kazası nedeniyle acil servise getirilen, göğüs cerrahisi bölümü tarafından takip amaçlı yatış verilen, hospitalizasyonunun dördüncü gününde klinik şüphe ve radyolojik görüntülere göre ameliyata alınıp sol diyafragma rüptürü tespit edilen vakayı sunduk.

OLGU SUNUMU

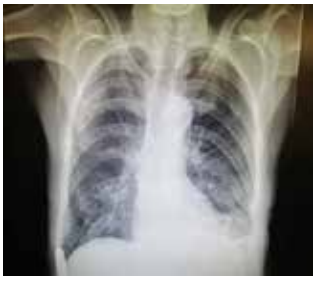
52 yaş erkek hasta, trafik kazası nedeniyle acil servise getirildi. Hasta; kafasının sol kısmında, sol göğüste ve bel bölgesinde ağrısının olduğunu ayrıca nefes darlığı çektiğini belirtti. Bilinen hastalığı ve devamlı kullanılan ilaç öyküsü yoktu. Bilinç açık, koopere, oryante olan hastanın vital bulguları; tansiyon arteryel 110/70 mmHg, nabız 95/dk, pulse oksijen saturasyonu % 90, ateş 36.2 °C idi. Fizik muayenede sol orbita ve çevresinde ekimoz, sol frontoparyetal bölgede cilt altı ödem ve palpasyonla ağrı vardı. Sol hemitoraks orta hat lateral bölgede ve alt lomber bölgede palpasyonla ağrı mevcuttu. Dinlemekle sol akciğerde solunum seslerinin azaldığı ve bazal zonlarda rallerinin olduğu tespit edildi. Diğer sistem muayeneleri doğaldı. Yapılan laboratuar testlerine göre tam kan sayımında; beyaz küre 25.31 10^3/mL, hemoglobin 12.4 gr/dL, hematokrit %37, trombosit 119 bin idi. Biyokimyada patolojik olarak ALT 48 U/L, AST 115 U/L olarak tespit edildi. Kan gazında pH 7.29, laktat 4.3 idi. Posteroanterior akciğer radyografisinde sol kostofrenik sinüs künt idi. Beyin tomografisinde sol frontoparyetal sefal hematom, toraks tomografisinde sol hemitoraksta en kalın yerinde 18 mm' ye ulaşan plaevral efüzyon ve sol 7.,8.,9. kostalarda nondeplase fraktür hattı görüldü ancak pnömotoraks gözlenmedi. Lomber tomografide lumbal dördüncü vertebra corpusunda ciddi yükseklik kaybına neden olmayan kompresyon fraktürü tespit edildi. Abdomen ve servikal tomografide acil radyopatoloji gözlenmedi. Göğüs cerrahisi tarafından takip ve tedavi amaçlı yatış verildi. Hastanın yatışı sonrası sol akciğerde pnömoni gelişti ği tespit edildi. Diğer ek semptomatik tedavilere rağmen hastanın nefes darlığı takibinde gerilemedi. Hastaya günlük posteroanterior akciğer grafisi takibi yapıldı. Hastanın sol diyafragmasının yapılan grafi takiplerinde gün geçtikçe evantre olmaya başlaması ve klinik rahatlama olmaması üzerine yatışının 4. gününde göğüs cerrahisi tarafından operasyona alındı (Resim 1.). Operasyon esnasında sol diyafragmanın anterior bölgeden itibaren 10 cm lasere olduğu ve hastanın kalın barsak anslarının sol akciğere penetre olduğu görüldü. Diyafragma laserasyonu onarıldıktan sonra hasta yoğun bakım takibine alındı. Klinik stabilizasyon sağlanan hastanın servis takiplerinde radyografik görüntülerinde düzelme gözlendi (Resim 3.). Şikayetleri azalan hasta şifa ile taburcu edildi.



Resim 1. Hastanın takibindeki posteroanterior akciğer grafi ve bilgisayarlı toraks tomografi görüntüleri (hastadan izin alınmıştır).



Resim 2. Operasyon esnasında gözlenen diyafragma rüptürü (hastadan izin alınmıştır).



Resim 3. Hastanın postoperatif 5. gününde akciğer grafisi.

TARTIŞMA

Diyafragma abdominal ve torasik organları birbirinden ayıran anatomik lokalizasyonu ve dinamik bir yapı olması nedeniyle nadiren tek başına yaralanabilen bir organdır. TDR' ünde genellikle ciddi multi-sistem yaralanmaları tabloya eşlik etmektedir. TDR' leri %90'nın üzerinde yandaş organ yaralanmaları ile birlikte olur (8). Künt diafragma rüptürü saptanan vakalarda %50 ila 80 oranında ilave olarak karın içi organ yaralanmaları eşlik eder (9,10). Literatürde diyafragma rüptürlerinin genelde genç hastalarda ve erkeklerde daha sık görüldüğü bildrilmektedir (11,12). Ülkü ve ark.' nın tüm vakaların erkek ve yaş ortalamasının 25.7 olduğu 11 TDR' lü hasta ile yaptığı çalışmada; hastaların 9' unda sol, 2' sinde sağ TDR saptanmış ve operasyona alınan 9 hastadan 4 vakada mide ve kolon, 2 vakada mide, 3 vakada ise barsaklar ve omentumun toraksa herniye olduğu bildirilmiştir. Aynı çalışmada; TDR' üne 2 dalak, 1 akciğer, 2 karaciğer, 1 mide yaralanması eşlik ettiği, dalak rüptürü olan 1 hastada sol seri kot fraktürleri, 1 hastada klavikula kırığı ve 1 hastada iskium pubis kollarında kırık aynı zamanda T11-L2 fraktürü ve parapleji bildirilmiş (8). Hasdemir ve ark.' nın sunduğu vaka takdiminde 65 yaş erkek hastanın 1.5 metre yüksekten düştükten 3 hafta sonra karın ağrısı, bulantı kusma kliniği ile başvurduğu, ayakta direkt karın grafisinde hava sıvı seviyelerini görülmesi üzerine ileus ön tanısıyla operasyona alındığı ve diyafragma sağ yarısında 5 cm' lik laserasyon olduğu ve barsak anslarının toraksa herniye olduğu bildirilmiş (1). Yetim ve ark.' nın ortalama yaşın 40 olduğu çalışmada; 7 erkek ve 3 kadın 10 TDR' lü hastanın 8' i penetran, 2' si künt travmalı ve tamamında toraksa herniye iç organların (4 vakada omentum, 2 vakada mide, 2 vakada dalak ve ince bağırsaklar, 1 vakada ise kalın bağırsak) saptandığı bildirilmiştir (13). Literatürde görülen TDR' lerinin erkeklerde ve sol diyafragmada sık gözlenmesi ile genellikle künt travmalar sonucu ortaya çıkması bizim vakamızla uyumlu idi. Vakamızda eşlik eden abdomial organ yaralanmasının olamaması dikkat çekiciydi. Bilgisayarlı toraks tomografisinde hastamızda herhangi diyafragma bulgusunun görülmemesi erken dönemde tomografinin yanıltıcı olabileceğinin bir sonucu olarak karşımıza

çıktı. Literatürde bahsedildiği gibi TDR' lerinde en önemli tanı aracının direkt radyografi olduğu vakamızda da tecrübe edildi. Klinik takip ve tekrarlayan akciğer grafileri sonucu diyafragma elevasyonunun tespiti sonrası hasta operasyona alındı. Vakamızda tespit edilen toraks içine kolon herniasyonu ise yine literatürde de belirtildiği gibi kolonun TDR' ünde sık gözlenen organ herniasyonu olmasından dolayı uyumlu idi. Hastaların sıklıkla kaybedilme nedenlerinden bir tanesi organ herniasyonu neticesinde gelişen enfeksiyon ve sonrasında septisemidir. Vakamızın rüptür olan sol diyafragma tarafında pnömoni gelişmiş; erken antibiyoterapi ve hızlı cerrahi kararı sonrasında komplikasyon olmadan tedavisi sağlanmıştır.

SONUÇ

TDR sıklıkla künt veya penetran yaralanmalar sonucu ortaya çıkabilen, erken dönemde radyolojik görüntülemelerde tespit edilememe ihtimali olan durumdur. Tanı ve tedavide geç kalınması mortalite riskini artırmaktadır. Bu nedenlerden dolayı göğüs ve batın travmalarında diafragma yaralanması gelişebileceği göz önünde bulundurulmalıdır. Şüphelenilen vakalar hastaneye yatırılıp yakın takip edilmeli, seri akciğer grafileri çekilmeli, diyafragmada elevasyon tespit edilen ve hemodinamisi bozulan vakalar geç kalınmadan olası TDR açısından değerlendirilmelidir.

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A PRACTICAL APPROACH TO TRICHIASIS, A RARE CAUSE OF PAINFUL RED EYE, IN THE EMERGENCY DEPARTMENT: A CASE REPORT

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ABSTRACT

Red-eye, one of the most frequent eye visits to the emergency department, is one of the most common indications that something in the eye is not going well. It is important to distinguish between benign diagnoses and sight-threatening diagnoses. In a 78-year-old female patient who was diagnosed with trichiasis, a rare cause of painful red eye, inward-rotating eyelashes that caused irritation on the cornea were removed by the emergency doctor in the emergency department. No complications developed in the follow-up. We suggest that this practical approach can be applied to patients with trichiasis by the emergency physicians in the emergency department.

Key words: Trichiasis, glaucoma, red eye, keratitis, eye emergencies, eye pain

INTRODUCTION

Although only a small portion of patients who apply to the emergency department with eye complaints have urgency, the existence of eye emergencies that can cause vision loss, which is one of our most important senses, should be questioned. [1] Acute glaucoma, retinal detachment, retinal artery occlusion or retinal vein occlusion, eye trauma, and chemical exposures are common eye emergencies and should never be neglected. [1,2] Red-eye, one of the most frequent eye visits to the emergency department, is one of the most common indications that something in the eye is not going well. Therefore, emergency room physicians should be knowledgeable about the evaluation of red-eye. [3] Many causes can cause the conjunctival vasculature to become enlarged or exposed, resulting in red-eye. Dry eye syndrome, conjunctivitis, Keratitis, and corneal ulcers, corneal abrasions, a foreign body on the surface of the eye, blepharitis, Episcleritis and scleritis, distichiasis, uveitis, endophthalmitis, Subconjunctival hemorrhage, corneal graft rejection, acute glaucoma, diffuse chemical burns are the prevalent reasons for red-eye disorders. [3]

Trichiasis [4], the clinical condition caused by the inward turning of the eyelashes, is a rare cause of admission to the emergency department with painful red eye. These abnormally positioned eyelashes, which grow towards the eye, irritate the eye and cause complaints such as stinging and pain in the eyes, watering in the eyes, burning sensation, glare from the lights, redness, the need to rub as if something has gotten into the eye. [5]

Eyelashes that rotate into the eye constantly irritate the transparent layer of the eye, causing corneal ulceration and infection. If this condition is left untreated, it can cause serious problems, up to permanent vision loss. Among the causes of trichiasis, there are intense, and long-lasting eyelash inflammation, old age, congenital traumas, previous surgeries, burns, past infections, and trachoma. [6]

In this study, we report the practical approach we applied in a patient who applied to the emergency department with trichiasis, a rare cause of painful red eye.

CASE: A 78-year-old female patient presented to the emergency department with complaints of pain, watering, blurred vision, and redness in the right eye. Conjunctival hyperemia was detected on inspection, and both eye pressures were measured as normal with the eye pressure measuring device in the emergency department. (Right eye: 14 mmHg, left eye: 15mmHg). When viewed with a biomicroscopy, it was observed that some of the lower eyelashes of the right eye rotated into the eye and contacted the conjunctiva (Figure 1). The cause of pain and redness in the eye due to irritation was thought to be trichiasis. An eye ultrasound was performed in the emergency department. retinal detachment, intravitreal hemorrhage, and intraocular pathological causes were excluded. An ophthalmologist was consulted to rule out intraocular pathologies. Retinal detachment, intravitreal hemorrhage, glaucoma, retinal artery vein pathologies, uveitis, scleritis, etc. ophthalmic emergencies were excluded.

Except for trichiasis, no pathological finding explaining the current clinic was detected. The cause of pain and redness in the eye due to irritation was thought to be trichiasis. Alkaline eye drops, a local anesthetic, were instilled into the right eye after obtaining informed consent from the patient in the emergency department. Afterward, Then, internally rotating lower eyelashes of the right eye were drawn with sterile fine-tipped pliers (Figure 2). After the procedure, pathologically oriented eyelashes were removed (Figure 3). Afterward, the patient was discharged with the recommendations of moxifloxacin 0.5% Sterile Ophthalmic Solution 4x1, hydrocortisone acetate eye ointment 2x1 (eyelids only), and 0.15% artificial eye drops (10ml) 4x1, with blepharitto eye shampoo (cleaning to the bottom of the eyelashes). No complication developed in the patient who was called to the emergency department and ophthalmology outpatient clinic for control. Cryotherapy was planned in the ophthalmology outpatient clinic for the permanent treatment of trichiasis.

DISCUSSION:

Although the painful red eye is a rare complaint in admissions to the emergency department, it is of serious importance because of its causes leading to permanent blindness. While investigating the etiology, it is important to determine the reasons that require elective intervention, other than the reasons that require urgent intervention such as glaucoma. Point-of-care ultrasound (POCUS) is used by clinicians at the bedside to evaluate and manage a wide variety of patient complaints. POCUS has been shown to be a useful bedside tool in the evaluation of patients with acute vision loss and elevated intracranial pressure, with findings ranging from retinal or vitreous detachments to assessment of optic nerve sheath diameter or papilledema. [7,8] In our case who applied with the complaint of painful red eye, the pressure of the eye was measured in the emergency department, and the diagnosis of glaucoma was ruled out. No pathological image was detected when viewed with an eye ultrasound. In the examination performed by the ophthalmologist, common eye emergencies that would require urgent intervention were excluded. Our patient had similar complaints about eyelashes in the past, and it was found that inward-looking eyelashes caused painful red eyes when viewed with and without a biomicroscope. Among the causes of trichiasis that causes painful red eyes, there are intense and long-lasting eyelash root inflammation, aging, congenital, trauma, past surgeries, burns, past infections, and trachoma. [6] Recurrent Chlamydia trachomatis infections cause chronic inflammation of the eye and recurrent conjunctival scarring, resulting in Trachomatous trichiasis. Since there was no history of recurrent Chlamydia trachomatis infections in the patient's history, trachomatous trichiasis was not considered as the etiologic cause. The fact that the patient is old and has a history of eyelash inflammation in the past causes trichiasis. In the treatment of trichiasis, it is important to eliminate the underlying cause. In addition, the permanent destruction of eyelashes that encounter the cornea is the main rule of treatment. There are several options for the treatment of trichiasis, and the main goal is to eliminate abnormal eyelashes and increase the comfort of the patient. Inward eyelashes can be plucked with tweezers, but this is not a permanent solution because, after 3 months, the eyelashes grow up again. [9] Permanent treatment methods are epilation (removal of eyelashes one by one), cryotherapy (freezing treatment), eyelash burning with laser, electrolysis (destruction of eyelash roots with an electric current), diathermy (radiofrequency), surgical intervention, these treatment methods can be applied individually according to the patient's condition. Can be applied alone or in combination with each other. [10] Cryotherapy was planned for permanent treatment in our patient and success was achieved. Trichiasis is a problem that must be handled by a specialist ophthalmologist. Uninterrupted trichiasis should not be neglected as it may lead to problems such as permanent damage to the corneal tissue and susceptibility to infection. Internal rotation eyelashes can be drawn with sterile tipped forceps as a temporary solution by emergency physicians working in emergency clinics. This simple practical method can be applied in emergency department clinics.

CONCLUSION

Diagnosing trichiasis is not a major challenge, but it is essential to identify associated conditions that could change the treatment strategy. When a case of trichiasis that damages the conjunctival tissue is detected in the emergency department, eyelashes can be removed by emergency physicians for a temporary solution. For a permanent solution, it should be directed to an eye specialist.

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COCAINE-FILLED CAPSULE DETECTED AFTER FIREARM INJURY: A CASE REPORT

ABSTRACT

INTRODUCTION: Emergency departments are facing an increasing number of drug-related health problems with difficult medicolegal and social consequences.

CASE: A 25-year-old male with no past medical history arrived to our emergency department. He was brought to the emergency room of our hospital by the security forces, as he suffered a gunshot wound while traveling to a place. Cocaine filled capsule was seen on plain abdominal film.

DISCUSSION: The plain abdominal film is the most commonly used radiological tool to detect 2-8 cm drug-filled packages within the gastrointestinal tract of body packers. In a study that analyzed the role of drugs in firearm deaths in New York between 1990 and 1998, more than half of firearm deaths had positive drug toxicology.

CONCLUSION: Physicians working in the emergency unit should be prepared for secondary diagnoses. In addition, different examination and imaging findings should be kept in mind in suspicious cases.

KEYWORDS: Emergency Service, Gunshot wound, cocaine capsule

INTRODUCTION

Emergency departments are facing an increasing number of drug-related health problems with difficult medicolegal and social consequences. In recent years, drug trafficking has not only increased worldwide, but the gastrointestinal tract has also been used more frequently as a vehicle for drug trafficking (1–3)sometimes called 'mini packer', is the definition of someone who admits to or is strongly suspected of ingesting illegal drugs in order to escape detection by authorities, and not for recreational purposes or to transport the drug across borders. Cocaine is the drug most commonly involved in the body stuffer syndrome. Reported cases of body stuffer deaths are rare, however a fatality related to the ingestion of a plastic bag containing cocaine is described regarding a 17-year-old dealer. The authors describe how the cocaine body stuffer syndrome differs from the usual body packer. Histological and toxicological findings are examined and discussed for a better definition of this unique syndrome. Copyright © 2002 Elsevier Science Ireland Ltd.","author":[{"dropping-particle":"","family":"Fineschi","given":"Vittorio","non-dropping-particle":"","parse-names":false,"suffix":""},{"dropping-particle":"","family":"Centini","given":"Fabio","non-dropping-particle":"","parse-names":false,"suffix":""},{"dropping-particle":"","family":"Monciotti","given":"Floriana","non-dropping-particle":"","parse-names":false,"suffix":""},{"dropping-particle":"","family":"Turillazzi","given":"Emanuela","non-dropping-particle":"","parse-names":false,"suffix":""}],"container-title":"Forensic Science International","id":"ITEM-1","issue":"1","issued":{"date-parts":[["2002","3","28"]]},"page":"7-10","publisher":"Elsevier","title":"The cocaine "body stuffer" syndrome: a fatal case","type":"article-journal","volume":"126"},"uris":["http://www.mendeley.com/documents/?uuid=034a6c5e-9fdb-34c4-a2b7-ad34c8869e0c"]},{"id":"ITEM-2","itemData":{"DOI":"10.1056/NEJMRA022719","ISSN":"0028-4793","PMID":"14695412","abstract":"The transportation of illicit drugs by concealment within the body is now a common practice, and it has implications for clinical care. Body packers may ingest dozens of packets containing life-thr...","author":[{"dropping-particle":"","family":"Traub","given":"Stephen J.","non-dropping-particle":"","parse-names":false,"suffix":""},{"dropping-particle":"","family":"Hoffman","given":"Robert S.","non-dropping-particle":"","parse-names":false,"suffix":""},{"dropping-particle":"","family":"Nelson","given":"Lewis S.","non-dropping-particle":"","parse-names":false,"suffix":""}],"container-title":"https://doi.org/10.1056/NEJMra022719","id":"ITEM-2","issue":"26","issued":{"date-parts":[["2003","12","25"]]},"page":"2519-2526","publisher":" Massachusetts Medical Society ","title":"Body Packing — The Internal Concealment of Illicit Drugs","type":"article-journal","volume":"349"},"uris":["http://www.mendeley.com/documents/?uuid=73e9c078-d298-31a7-87ac-130cefc25916"]},{"id":"ITEM-3","itemData":{"DOI":"10.5505/TJTES.2016.93462","ISSN":"1306696X","abstract":"Drug addiction is an important medical and social problem. \"Body packing\" is frequently used for concealed transportation of illegal drugs. The drug is packed in small plastic packages and swallowed or placed into body cavities, such as the rectum or the vagina. Another aspect is \"body stuffing,\" in which the drug package is usually hastily swallowed in order to avoid arrest. Presently described is case of a body stuffer who ingested a package of heroin and was successfully treated with upper gastrointestinal endoscopy. Upper gastrointestinal endoscopy is a safe alternative therapeutic option in body stuffers in selected cases.","author":[{"dropping-particle":"","family":"Asıl","given":"Mehmet","non-dropping-particle":"","parse-names":false,"suffix":""},{"dropping-particle":"","family":"Dertli","given":"Ramazan","non-dropping-particle":"","parse-names":false,"suffix":""}],"container-title":"Turkish Journal of Trauma and Emergency Surgery","id":"ITEM-3","issue":"4","issued":{"date-parts":[["2017","7","1"]]},"page":"354-356","publisher":"Kare Publishing","title":"Successful endoscopic treatment of an unusual foreign body in the stomach: A package of heroin","type":"article-journal","volume":"23"},"uris":["http://www.mendeley.com/documents/?uuid=c5ff565b-1a7b-36bd-aa1b-6c3fea4410c9"]}],"mendeley":{"formattedCitation":"(1–3. Illicit drug trafficking by ingestion can have serious health consequences (2). These people are known as 'body packers,' 'body stuffers,' 'body pushers,' 'drug mules,' 'couriers,"swallowers,' or 'internal carriers,' and are referred to collectively as'suspected internal drug traffickers' (SIDTs) (4). Body packers receive large quantities of high-purity drugs in securely wrapped packages, often machine-made using durable material (5)not simply in terms of the detection and apprehension of suspected individuals, but in the provision of care and any subsequent medical attention they may require. Recognition of the potential risks faced by such detainees and the need to ensure their safety and wellbeing during the jurisdictional process is essential. At present, variable factors affect the care and management of individuals who, amongst other terms, are referred to as 'Body-Stuffers', 'Body-Packers' and 'Swallowers'. Collectively this population is described as Suspected Internal Drug Traffickers (SIDTs. The body pushers hide medication packs in the vagina or rectum (5)not simply in terms of the detection and apprehension of suspected individuals, but in the provision of care and any subsequent medical attention they may require. Recognition of the potential risks faced by such detainees and the need to ensure their safety and wellbeing during the jurisdictional process is essential. At present, variable factors affect the care and management of individuals who, amongst other terms, are referred to as 'Body-Stuffers', 'Body-Packers' and 'Swallowers'. Collectively this population is described as Suspected Internal Drug Traffickers (SIDTs. Various types of drugs are trafficked, including cocaine, heroin, marijuana, and amphetamines. The most common of these is cocaine (4).

Although the diagnostic management of body packers has often been described in the literature, the optimal imaging modality of body stuffers has not been adequately defined and remains controversial (6)associated with medicolegal and/or social consequences. Body stuffers are street cocaine dealers, who either store wrapped packets of drugs in their rectum or hastily swallow them, prompted by fear of police's arrest. These packets can be life threatening in case of leakage. We evaluate the diagnostic value of unenhanced multidetector CT (MDCT. Plain abdominal films have limited utility, owing to the small size and amount of drugs ingested by body stuffers, as opposed to the huge drug bags incorporated by body packers (6)associated with medicolegal and/or social consequences. Body stuffers are street cocaine dealers, who either store wrapped packets of drugs in their rectum or hastily swallow them, prompted by fear of police's arrest. These packets can be life threatening in case of leakage. We evaluate the diagnostic value of unenhanced multidetector CT (MDCT. In this article, we present a body packer patient who was brought to the emergency room with a gunshot injury and was caught with a cocaine-filled pack (CFP) on plain abdominal film.

CASE

A 25-year-old male with no past medical history arrived to our emergency department. He was brought to the emergency room of our hospital by the security forces, as he suffered a gunshot wound while traveling to a place. When the patient's detailed history was taken, it was learned that he traveled frequently. Upon arrival, his blood pressure was 140/90 mmHg, pulse 90 beats per minute, respiratory rate 22 breaths per minute, pulse oximetry 95% on room air, and temperature of 39.6°C. Physical examination revealed a bullet wound entry in the lower left abdomen. The rest of the physical examination was unremarkable. In the plain abdominal film, a cocaine capsule was seen on the upper left side, and a bullet was seen in the lower left abdomen at the superior level of the pelvis (Figure 1). The patient was consulted with the general surgeon. Subsequently, the patient was hospitalized for further treatment.

DISCUSSION

Body packing and body stuffing are unique clinical situations that often present both a diagnostic and therapeutic dilemma for the emergency medicine physician, due to the patient's often unreliable or reluctant history. The plain abdominal film is the most commonly used radiological tool to detect 2-8 cm drug-filled packages within the gastrointestinal tract of body packers (7). However, due to limited contrast resolution, conventional radiographs (CR) of body packers only reveal the presence of drug containers in 40-90% of cases (6)associated with medicolegal and/or social consequences. Body stuffers are street cocaine dealers, who either store wrapped packets of drugs in their rectum or hastily swallow them, prompted by fear of police's arrest. These packets can be life threatening in case of leakage. We evaluate the diagnostic value of unenhanced multidetector CT (MDCT. Therefore, up to 60% of these ingested large bags of medication may remain undetected. The much smaller CFP ingested by body stuffers is thus even more easily missed by plain films (6)associated with medicolegal and/or social consequences. Body stuffers are street cocaine dealers, who either store wrapped packets of drugs in their rectum or hastily swallow them, prompted by fear of police's arrest. These packets can be life threatening in case of leakage. We evaluate the diagnostic value of unenhanced multidetector CT (MDCT. In this case, the patient was detected incidentally on plain radiograph.

In a study that analyzed the role of drugs in firearm deaths in New York between 1990 and 1998, more than half of firearm deaths had positive drug toxicology (8). In a study conducted among children and adolescents who died from gunshot wounds, the detection of ethanol and/or illicit drugs was 56% in homicide and 53% in suicide groups (9). In the presented case, since the patient had a gunshot wound, the association of illicit drugs was high in parallel with the high rate in the literature. In addition, since the patient is a frequent traveler, he has a high probability of body packer and bodys stuffer syndrome. Therefore, emergency physicians should be more careful during the physical and radiological examination of such patients.

CONCLUSION

Physicians working in the emergency unit should be prepared for secondary diagnoses. In addition, different examination and imaging findings should be kept in mind in suspicious cases.

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BOTH ANGIOEDEMA AND ACUTE CORONARY SYNDROME: COINUS SYNDROME

INTRODUCTION: Koinus syndrome is the development of acute coronary syndrome associated with allergy, hypersensitivity, anaphylaxis or anaphylactoid reactions with activation of mast cells. It has been reported most frequently from Europe, particularly Spain, Italy, Greece and Turkey. It has a clinical spectrum that accompanies subclinical, clinical, acute or chronic allergic reaction and extends from chest pain to acute myocardial infarction. Drugs, foods, environmental factors (such as insect bites, bee stings, pollen, latex contact) and intracoronary stent placement may trigger an allergic reaction. The most important step in the diagnosis of Kounis syndrome is to suspect this diagnosis in a patient with allergic symptoms accompanying chest pain. ECG changes range from ST segment elevations or depressions to heart blocks and cardiac arrhythmias of any degree. The main treatment for Kounis syndrome is management of ACS and suppression of the allergic reaction. In our case, we aimed to present the coinus syndrome accompanying the rash that developed after taking an analgesic drug whose name is unknown.

CASE: A 60-year-old male patient is admitted to our emergency department with typical chest pain. In the detailed anamnesis taken, it is understood that after an analgesic drug whose name he did not know a few hours ago, swelling occurred in the hands together with widespread rashes in the body, and then chest pain began. in their vitals; blood pressure: 115/75 mmHg, pulse: 75/min, pulse oximetry: 97%, body temperature: 36.5 degrees. In the systemic examination, no pathology was found. The ECG of the patient is in normal sinus rhythm and no ischemic changes are observed. The patient is given 300 mg of acetylsalicylic acid and appropriate steroid and antihistamine treatments for angioedema. The patient who had no ECG changes was admitted to the cardiology department with the diagnosis of non-STEMI, due to the high troponin value.

CONCLUSION: koinus syndrome is a specific diagnosis with a life-threatening clinical spectrum. Considering the coinus syndrome in patients who apply to the emergency department with chest pain in addition to an allergic reaction, approaching it as acute coronary syndrome in addition to the allergic condition is important in the management of this syndrome.

KEYWORDS: coinus syndrome, anaphylaxis, urticaria, acute coronary syndrome

ACİL KRİTİK BAKIMDA TAKİP EDİLEN HASTALARDA İNTRAABDOMİNAL BASINÇ VE ABDOMİNAL PERFÜZYON BASINÇ ÖLÇÜMÜNÜN PROGNOZLA İLİŞKİSİ

GİRİŞ

Bu çalışmada acil yoğun bakımda 24 saatten uzun süre kalan hastaların, İAB ölçümlerinin prognostik değerliliğini belirlenmesi amaçlanmıştır.

MATERYAL VE METOT

Çalışma prospektif gözlemsel çalışma olup lokal etik kurul onayı alındı. Çalışmaya yoğun bakım ihtiyacı olan ve acil serviste 24 saatten fazla takip edilen, idrar sondası takılı hastalar dahil edildi. Hastaların demografik özellikleri, vital bulguları, tedavileri "Sequential Organ Failure Assesment (SOFA)" skorları, İAB ve Abdominal Perfüzyon Basıncı (APB) değerleri kaydedildi. İAB ölçümü, mesane içi basınç ölçüm yöntemi kullanılarak yapıldı. Hastalarda İAB ölçümüyle eş zamanlı olarak ortalama arteriyel basınçları (OAB) da kaydedildi ve abdominal perfüzyon basınçları da APB = OAB-İAB formülü kullanılarak hesaplandı. Hastalar, İAB<12mmHg ve İAB≥12mmHg ile APB<60mmHg ve APB≥60mmHg olanlar şeklinde gruplandırıldı.

BULGULAR

Çalışmaya 89 hasta alındı. Hastaların ortalama yaşı 65.7±15.7 idi ve 47'si erkekti. Hastaların SOFA skorları 6.83±3.19, OAB 79.6±19.7mmHg, İAB 9.9±5.7mmHg ve APB 69.5±21.8mmHg ölçüldü. Hastaların %40'nda (n=36) ilk 24 saat içerisinde farklı zamanlarda ölçülen İAB yüksekliği saptandı. İAB yüksek olan hastaların yaşlarının daha ileri, SOFA skorlarının daha yüksek, APB < 60 mmHg olma durumu ve OAB daha düşük bulundu (tüm değerler için p<0.05). Hastaların %38.2'de, ilk 24 saatte farklı zamanlarda ölçülen APB düşüklüğü (60 mmHg altında perfüzyon basıncı) saptandı. APB düşüklüğü görülen hastaların ise SOFA skorlarının daha yüksek, OAB daha düşük, pozitif inotrop, mekanik ventilasyon ihtiyacının ve mortalitelerinin daha yüksek olduğu saptandı (tüm değerler için p<0.05).

SONUÇ

Yoğun bakımda diğer monitörizasyon parametreleri haricinde ek olarak ilk 24 saatte İAB ve APB ölçümlerinin değerlendirmesinin prognostik değerliğini değerlendiğimiz bu çalışmada, APB' nın düşük olmasının mortalite için bağımsız risk faktörü olduğunu gösterdik. Bu nedenle, diğer vital parametrelerin yanı sıra İAB ve APB ölçümlerinin de yoğun bakım hastalarının prognozlarını ön görmede hekimlere yardımcı olabileceğini düşünmekteyiz.

GİRİŞ

İntraabdominal Basınç (İAB) artışı sonucu oluşan ve Abdominal Kompartman Sendromuna da (AKS) ilerleyebilen İntraabdominal Hipertansiyon (İAH), kritik cerrahi ve medikal hastalarda anlamlı morbidite ve mortalite nedenleri arasında yer almaktadır [1,2]. Artmış İAB, basınç indüksiyonlu organ disfonksiyonuna neden olarak, kardiyak, pulmoner, renal, gastrointestinal, hepatik ve merkezi sinir sistemi fonksiyonlarında anlamlı bozukluklara sebep olabilir. Bu çalışmada acil yoğun bakımda 24 saatten uzun süre kalan hastaların, İAB ölçümlerinin prognostik değerliliğini belirlenmesi amaçlanmıştır.

MATERYAL VE METOT

Çalışma prospektif gözlemsel çalışma olup lokal etik kurul onayı alındı. Çalışmaya yoğun bakım ihtiyacı olan ve acil serviste 24 saatten fazla takip edilen, idrar sondası takılı hastalar dahil edildi. 18 yaş altındakiler, gebeler, nefrostomisi olanlar ve mesane cerrahisi geçirenler çalışma dışı bırakıldı. Hastaların demografik özellikleri, vital bulguları, mekanik ventilasyon desteği verilip verilmediği, sepsis varlığı, pozitif inotrop ihtiyacı, günlük "Sequential Organ Failure Assesment (SOFA)" skorları, İAB ve Abdominal Perfüzyon Basıncı (APB) değerleri, yoğun bakım yatış süreleri ve mortaliteleri kaydedildi. İAB ölçümü, mesane içi basınç ölçüm yöntemi kullanılarak yapıldı. Hastalarda İAB ölçümüyle eş zamanlı olarak ortalama arteriyel basınçları (OAB) da kaydedildi ve abdominal perfüzyon basınçları da APB = OAB-İAB formülü kullanılarak hesaplandı. Hastalar, İAB<12mmHg ve İAB≥12mmHg ile APB<60mmHg ve APB≥60mmHg olanlar şeklinde gruplandırıldı. p<0.05 değeri anlamlı olarak kabul edildi.

BULGULAR

Çalışmaya 89 hasta alındı. Hastaların ortalama yaşı 65.7±15.7 idi ve 47'si erkekti. Hastaların SOFA skorları 6.83±3.19, OAB 79.6±19.7mmHg, İAB 9.9±5.7mmHg ve APB 69.5±21.8mmHg ölçüldü. Hastaların %34'u pozitif inotrop aldı ve %53'ü mekanik ventilasyona bağlandı. Hastaların %40'nda (n=36) ilk 24 saat içerisinde farklı zamanlarda ölçülen İAB yüksekliği saptandı. İAB yüksek olan hastaların yaşlarının daha ileri, SOFA skorlarının daha yüksek, APB < 60 mmHg olma durumu ve OAB daha düşük bulundu (tüm değerler için p<0.05). Mortalite açısından ise anlamlı fark saptanmadı. Hastaların %38.2'de, ilk 24 saatte farklı zamanlarda ölçülen APB düşüklüğü (60 mmHg altında perfüzyon basıncı) saptandı. APB düşüklüğü görülen hastaların ise SOFA skorlarının daha yüksek, OAB daha düşük, pozitif inotrop, mekanik ventilasyon ihtiyacının ve mortalitelerinin daha yüksek olduğu saptandı (tüm değerler için p<0.05).

TARTIŞMA

Yoğun bakımda diğer monitörizasyon parametreleri haricinde ek olarak ilk 24 saatte İAB ve APB ölçümlerinin değerlendirmesinin prognostik değerliğini değerlendiğimiz bu çalışmada abdominal perfüzyon basıncının düşük olması mortalite için bağımsız risk faktörü olduğunu gösterdik. Bu nedenle, diğer vital parametrelerin yanı sıra İAB ve APB ölçümlerinin de yoğun bakım hastalarının prognozlarını ön görmede hekimlere yardımcı olabileceğini düşünmekteyiz.

İAB ölçümünün vital bulgular sınıflamasına alınması ve takip edilmesi için güçlü kanıtlar mevcuttur. Çok merkezli bir araştırma da İAB'nin ve APB'nin etkilerini, komorbit faktörleri de ekleyerek daha net olarak göstermiştir (3). İAH'nin ciddiyetini ve uygunsuz organ perfüzyonunu gösteren azalmış APB'dir. Caldwell ve Ricotta, artmış İAB ile adrenal bezler hariç tüm karın içi organlarda kan akımının anlamlı derecede azaldığını bildirmişlerdir (4). Diebel ve arkadaşları, 10mmHg basınçta bile hepatik arter ve mikrodolaşım kan akımının azaldığını, 20mmHg basınçta ise portal ven ve intestinal mukoza kan akımlarında anlamlı derecede azalma olduğunu tespit etmişlerdir (5). Ayrıca APB, arteriyel pH, baz açığı, arteriyel laktat ve saatlik üriner output gibi perfüzyon belirteci olarak kullanılabileceği belirten çalışmalar mevcuttur. Gözlem çalışmalarında, negatif sıvı dengesi ile sağ kalım arasında sıkı bir ilişki olduğu belirtilmektedir (6,7). Yoğun sıvı tedavisi İAH ve AKS patofizyolojisinin kilit noktasıdır. Aşırı sıvı tedavisi, barsak ödemi yaparak perfüzyonu bozup kapiller yetmezlik sendromuna yol açmaktadır. Bu daha çok, ciddi travma ve sepsis gibi durumlarda görülmektedir. APB düşük olan hastaların pozitif inotrop destek almalarına rağmen mortaliteleri yüksek olduğu gösterilmiştir. İAB ve APB takibi özellikle sepsis hastalarında sıvı replasmanı ve hemodinamik stabilitenin değerlendirilmesinde yol gösterebilir. Kritik yoğun bakım hastalarında düşük abdominal perfüzyon basıncının İAH ve AKS bağlı kötü prognozla ilişkili olabileceği öne sürülmüştür (8,9). APB olarak 60 mmHg sınır olarak kabul edilmektedir (10). Bu nedenle APB'nin 60 mmHg üzerinde tutulması WSACS tarafından belirgin şekilde tavsiye edilen tedavi stratejisi içinde yer almaktadır. Çalışma sonuçlarımızda literatürle benzer olarak APB'nin kritik seviye olan 60 mmHg üzerinde tutulması sağ kalımı ve mortaliteyi tahmin etmede önemli bir parametre olduğunu desteklemektedir.

SONUÇ

Çalışmamız yoğun bakımda yatan hastaların yaklaşık yarısında intrabdominal basınç artışı olduğunu gösterdik. İBA artışı ve APB azalması, mortalite, sepsis, (+) inotrop desteği, ventilatör destek ihtiyacı gibi olumsuz sonlanımlar açısından önemli bir prediktör faktör gibi durmaktadır. Bu nedenle biz yoğun bakım hastalarının İAB ve APB'larının belirli aralıklarla takip edilmesinin yararlı olabileceğini düşünmekteyiz.

Tablo-1 Parametrelerin İAB'a göre hasta gruplarında karşılaştırılması

	İAB≥12mmHg (n=36)	İAB<12mmHg (n=53)	p değeri
Yaş	69.9±14.6	62.7±15.8	0.032
SOFA, 1. gün	8.06±3.34	6.00±2.84	0.002
OAB, 1. gün	71.9±20.4	84.8±17.6	0.002
APB <60 mmHg	25 (69.4)	9 (17.0)	<0.001
Sepsis	12 (33.3)	11 (21.6)	0.220
Pozitif inotrop	19 (52.8)	10 (19.6)	0.001
Mekanik ventilasyon	21 (58.3)	28 (52.8)	0.608
Mortalite	18 (50)	16 (29)	0.059

Tablo-2 Parametrelerin APB'a göre hasta gruplarında karşılaştırılması

	APB<60mmHg (n=34)	APB≥60 mmHg (n=55)	p değeri
Yaş	67.5±15.1	64.5±16.1	0.385
SOFA, 1. gün	8.21±3.29	5.98±2.85	0.001
OAB, 1. gün	62.8±12.9	90.0±15.6	<0.001
APB <60 mmHg	25 (73.5)	11 (20.0)	<0.001
Sepsis	12 (35.3)	11 (20.0)	0.101
Pozitif inotrop	21 (61.8)	8 (14.5)	<0.001
Mekanik ventilasyon	23 (67.6)	26 (47.3)	0.048
Mortalite	18 (52.9)	16 (29)	0.02

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USE OF VENTRICULOPERITONEAL SHUNT RESERVOIR AS AN ALTERNATIVE TO LUMBAR PUNCTURE, CASE SERIES

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ABSTRACT:

Hydrocephalus is a common neurological disorder in both childhood and adulthood. Non-communicating hydrocephalus may occur due to obstruction of the cerebrospinal fluid (CSF) flow pathways by structural anomalies such as tumors, infections, adhesions, and developmental defects while communicating hydrocephalus might develop due to CSF absorption disorders or excess production. In symptomatic cases, treatment is divided into two approaches as medical and surgical. The most commonly used method in surgical treatment is the ventriculoperitoneal (VP) shunt system. The ventriculoperitoneal (VP) shunt system can have numerous advantages and complications and is expected to yield continuous and long-term solutions. One of its advantages is that CSF samples can be taken from the reservoir located on it. In cases suspected of intracranial infection but for whom Lumbar puncture (LP) cannot be performed, the shunt reservoir in the patient provides sufficient opportunity for CSF retrieval.

KEYWORDS: Shunt tapping, Lumbar puncture, Emergency department, Hydrocephalus, Central Nervous System Infection

INTRODUCTION:

In the emergency department (ED), it may be necessary to take CSF samples from patients for many different reasons: central nervous system and shunt infections, pseudotumor cerebri, and suspected subarachnoid hemorrhage (SAH). When LP cannot be performed due to various reasons such as intracranial space-occupying formation, increased intracranial pressure, infected or injured lumbar region skin tissue, obesity, previous lumbar region surgery or meningocele operations, puncture from the VP shunt reservoir is an effective, practical, less invasive and more comfortable method for both obtaining CSF samples and reducing intracranial pressure[1-4].

CASE REPORT:

CASE 1: A 54-year-old male patient was admitted to the emergency room with fever and generally poor health complaints. The patient, who has operated on for aneurysmatic SAH 2 years ago with a history of diabetes and hypertension, is fed through a gastrostomy catheter. There is a pressure sore in the lumbar area. There is a VP shunt, and the shunt pump (reservoir) is working.

Computerized brain tomography (CBT) and thorax CT were requested. Operation material, VP shunt, and large ventricles were observed in the CBT. On thorax CT, there was suspected pneumonic infiltration in the lower lobe of the left lung.

Since the lumbar area was unsuitable for patients with altered consciousness, a shunt reservoir was used to obtain CSF samples to exclude central nervous system (CNS) infection. The sample was not compatible with the disease. The patient was hospitalized with a pre-diagnosis of pneumonia.

CASE 2: A 58-year-old female patient who installed a shunt following the diagnosis of hydrocephalus six years ago, who was also bedridden, was admitted to the emergency service with a fever that did not fall for two days. On her physical examination, she exhibited confusion of consciousness, disorientation, lack of cooperation, fever, and neck stiffness. Other system examinations were within acceptable limits. In her CBT, the shunt system and previous multiple infarcts were observed.

Since the lumbar area with pressure sore was not suitable for CSF sample collection for CNS infection exclusion, the sample was obtained from the shunt reservoir. Consistent with the infection, CSF glucose was 61 mg / dl (simultaneous blood glucose 170 mg / dl) and CSF protein 777 mg / dl. The patient was admitted to the infection service with a pre-diagnosis of meningitis.

CASE 3: Shunt insertion was conducted in a 77-year-old male patient diagnosed with normal pressure hydrocephalus 1.5 years ago. The patient was admitted with fever, malaise, and fluctuations in the level of consciousness. General condition is within moderate limits; he was partially cooperative and disorientated with no neck stiffness. The shunt reservoir was filled by applying pressure on it. In CBT, chronic ischemic changes were observed in shunt catheter.

CSF sample for SSS extraction was taken from the shunt reservoir of the patient who did not give his consent for LP. The sample was not found to be compatible with the infection. The patient was admitted to the neurology clinic for further examination.

During the follow-up in all three cases, no complications related to the shunt developed after the procedure.

DISCUSSION:

VP shunt usually consists of the short (ventricular) catheter, shunt valve, and long (peritoneal) catheter [5]. The reservoir is usually located near the valve. The cranial catheter is fed into the lateral ventricles with “a burr hole” opened in the skull. This catheter is often combined with the valve system in the parietooccipital area under the skin, which regulates the amount of CSF to be evacuated by pressure adjustment. On the other end of the valve system, a peritoneal catheter is connected under the skin, connected to the anterior part of the abdomen, and then into the peritoneum.

When CSF sampling or extraction is required, the shunt reservoir is palpated, which exhibits subcutaneous swelling in the parietooccipital region and thus can be palpated, collapses when pressure is applied to it with fingertips, but rises as filled with CSF again within seconds. If there is any doubt about its location, a plain radiograph can be taken. (Figure 1)

The area is disinfected with antiseptic agents at least three times over the skin using sterile sponges. The needle section of the insulin injector, which is 26 gauge, is placed on the tip of the 10cc injector barrel according to the required CSF amount required to be drained. The insulin injector needle is advanced in a Z-shape under the unshaved skin next to the swelling of the reservoir, piercing the silicon surface of the reservoir and applying negative pressure to provide CSF drainage. Due care should be taken in order not to cause intracranial hypotension with excessive drainage.

Drainage is obtained according to the amount of CSF needed. It is a painless, fast, and safe method requiring local anesthesia. LP complications such as CSF fistula, headache, epidural bleeding, herniation syndromes can also be avoided.

LP is a vital intervention strategy in the diagnosis and treatment stages of neurological and infective diseases throughout medicine. To avoid damaging the valve part of the shunt, the classic recommendation is to teach the shunt tap to control the life-threatening intracranial pressure increase or by emergency physicians in the absence of a brain and neurosurgeon[6].

On the other hand, the fact that this sampling method is free from such detrimental effects as epidural-subdural hemorrhages, headaches, and intracranial hypotension due to BSF fistula, skin infections, inappropriate lumbar region structure, and most importantly, death due to tonsillar herniation, which might develop about LP procedure, are some advantages of using a shunt. In patients with VP shunt, the existence of an alternative method such as CSF removal from the shunt reservoir can be considered as turning the existing situation into an opportunity. It is a minimally invasive method, which does not require any initial condition such as local anesthesia and LP; it is also is a fast procedure, which is an effective and practical method to reach and diagnose CSF, especially in emergency services.

CONCLUSION

As a result, in a patient with a VP shunt, tapping from the reservoir to obtain CSF is a practical method preferred in the emergency department, which has significant advantages over LP.

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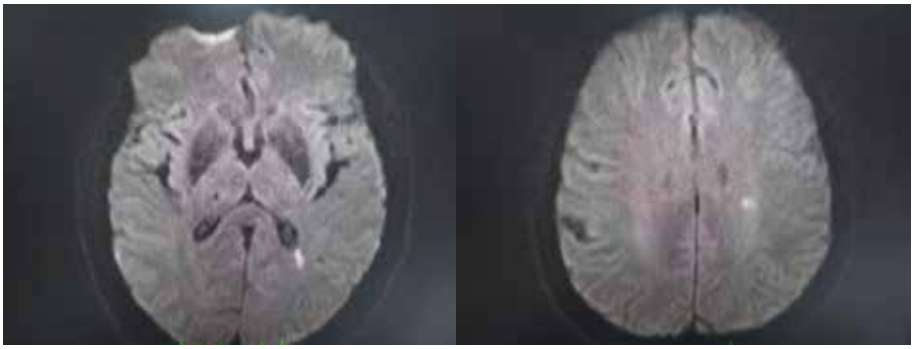
BILATERAL TOTAL HEARING LOSS DUE TO ISCHEMIC STROKE

INTRODUCTION: Ischemic strokes are characterized by the abrupt or at least very acute onset of focal neurologic symptoms and signs that leave persistent neurologic deficits. Ischemia in different vascular territories presents with specific syndromes. The history should focus upon the time of symptom onset, the course of symptoms over time, possible embolic sources, possible recent trauma (which could either represent a contraindication to intravenous thrombolysis or suggest an arterial dissection as a cause), conditions in the differential diagnosis, and concomitant diseases. Depending on the location of the feeding vessel, different clinics may appear. In this case, we aimed to present the ischemic svo developed in a patient with bilateral sudden hearing loss.

CASE PRESENTATION:A 63-year-old male patient presents to the emergency department with sudden hearing loss in both ears that developed 3 days ago. He has no known systemic disease other than hypertension. No active drug use. Blood pressure: 170/100 mmHg heart rate: 105/min sat: 96% body temperature: 36.5 degrees. Neurological examination reveals no features other than hearing loss in both ears. In ear examination, the ear canal is natural, and both eardrums are detected naturally. Other systemic examinations are normal. The patient, who did not detect any pathology in the examinations, has bilateral hearing loss, and proceeds to central imaging. The patient, who detected acute infarct areas in the diffusion MRI, is being interned by the neurology clinic.

CONCLUSION: Rapid evaluation is important in ischemic stroke. The brain is important in terms of controlling the vital centers. Since many neurological symptoms can be seen in focal ischemic stroke, the attention of the clinician is important in recognizing the disease.

KEYWORDS: hearing loss, ischemic stroke, stroke



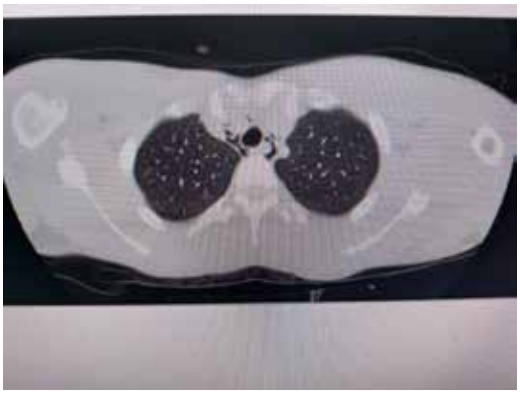
A RARE CASE RELATED TO ROASTED CHICKPEA: PNEUMOMEDIASTINUM

INTRODUCTION: Pneumomediastinum is defined as the presence of air or other gas in the mediastinum and is also known as mediastinal emphysema. Pneumomediastinum can be categorized as spontaneous or traumatic. Traumatic pneumomediastinum is caused by blunt or penetrating trauma to the chest or iatrogenic injuries such as thoracic surgery. Pneumomediastinum occurs when air leaks into the surrounding bronchovascular sheath through small alveolar tears. Less frequently, pneumomediastinum results from air escaping from the upper respiratory tract, intrathoracic airways, or gastrointestinal tract due to increased intraluminal pressure or impaired wall integrity.

CASE: A 50-year-old male patient applied to our emergency department with the complaint of chest pain after eating chickpeas. Vitals of the patient who has no known additional disease: blood pressure: 110/70, pulse: 97/min, pulse oximetry: 92%, fever: 36.7 degrees. Pathology in the examination of the patient. Not detected. There is no feature in the EKG taken. Pneumomediastinum is detected in the thorax CT of the patient, whose routine examinations did not reveal any features. No perforation was found in the esophagus and trachea. The current pneumomediastinum picture of the patient is thought to be alveolar rupture due to coughing, and he is admitted to thoracic surgery.

CONCLUSION: Our aim; In addition to diagnosing pneumomediastinum, the goals of evaluation should be to evaluate potential triggers (eg, asthma or vomiting), exclude other causes of existing symptoms (pneumothorax, esophageal perforation), and evaluate for complications (tension pneumomediastinum). It is important to be suspicious in the emergency room to recognize this condition, which has life-threatening complications.

KEYWORDS: pneumomediastinum, chest pain, shortness of breath



TRIMALLEOLAR FRACTURE AND TIBIOTAS LUXATION DUE TO HIGH ENERGY TRAUMA

INTRODUCTION: Ankle fractures are increasingly common injuries that require a careful approach for appropriate treatment. Both lateral and medial malleolar fractures are called bimalleolar fractures and are usually unstable. A bimalleolar fracture with a posterior malleolar fracture is called a trimalleolar fracture. Trimalleolar fractures are unstable and typically occur in larger force injuries. They have a higher risk of complications than bimalleolar fractures and require surgical stabilization. Tibiotalar luxation may sometimes accompany these fractures, as the mechanism of formation of trimalleolar fractures requires high energy. Since tibiotalar luxation is a frequent cause of arterial injury, rapid diagnosis and treatment protocol is important in emergency. In our case, we aimed to present our patient who had a combination of trauma-related trimalleolar fracture and tibiotalar luxation.

CASE: A 41-year-old female patient is brought to our emergency department with the complaint of falling on her ankle from a height. Vital blood pressure: 125/80 mmHg pulse: 98/min pulse oximetry: 98% body temperature: 36.8 degrees. On examination, it is determined that the ankle has a deformic appearance. The ankle is swollen and edematous, and peripheral neurovascular examination is found naturally. In the images taken, trimalleolar fracture and tibiotalar luxation are detected and orthopedics is consulted. After the reduction procedure in the emergency, the orthopedics are interned and an operation plan is made.

CONCLUSION: Bimalleolar and trimalleolar fractures are unstable and require operative fixation. Emergencies such as neurovascular problem or fracture dislocation should be treated promptly. Neurovascular examination, fixation and early consultation are important in the emergency department.

KEYWORDS: trimalleolar fracture, tibiotalar luxation, ankle fracture

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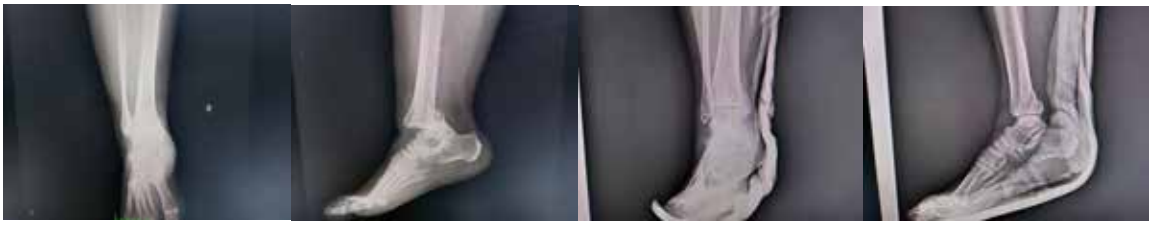

AMPUTATION CASES WHICH ARE ADMITTED TO THE EMERGENCY SERVICE IN THE ATATÜRK UNIVERCITY

INTRODUCTION: amputation cases have an important place for the emergency room considering the mortality, morbidity and especially the economic burden. Currently, there is no current study in our region regarding studies on different amputation cases. We aimed to examine the amputation cases that occurred in this place.

METHOD: patients were collected retrospectively between 01.01.2022-15.09.2022. the demographic data, the dates application to the emergency room, the level of amputation, the treatment applied and the termination in the emergency room were recorded.

RESULTS: in the nine-month period, a total of 80 patients (0.01% number of cases/city population) applied to the emergency room with amputation. among all patients, the median age was 29(interquartile range, ICR 1-72), and the rate of male patients was 78%. the most commen application times were july(21%) and april(15%). when the application times to the emergency services are examined, 76% of the weekdays it has been observed that the applied at 08:00-16:00 (working time) with 52%. 29% of the cases that occurred in July were during the feast of the Sacrifice. Considering the mechanism of occurrence, it was observed that 95% were after minor trauma, 5% were after major trauma. when the amputation levels were examined, it was found that the distal interphalangeal level was the most common with 92.5%, and the rarest with the ratio of 7.5% humerus proximal and femur proximal. emergency departments, on the other hand, 68.8% of them were treated urgently and followed up on an outpatient basis; Although none of them were referred to another advanced hospital and none of them were replanted. 25% of the patients were hospitalized and operated. No patient had mortality.

CONCLUSION: The trauma mechanism and the condition of the amputated organ are important for replantation. With this study, it can be predicted that although it is a third-line hospital, replantation procedures that require special surgical experience cannot be performed at all levels.

KEYWORDS: Amputation, emergency service, morbidity

ANAPHYLACTIC REACTION TO NORMAL SALINE AND RINGER'S LACTATE.

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ABSTRACT:

Normal Saline (NS) (0.9% Sodium Chloride Solution) and Ringer Lactate (RL) solution, which is widely used in patient care for volume replacement and resuscitation, have in common that these two solutions contain saline. Lactated Ringer's solution has some allergic reactions such as localized or generalized hives and itching, swelling of the eyes, face, or throat, coughing, sneezing, or difficulty breathing. But standard saline solution generally is not allergic. Herein, we present a 19-year-old male patient who developed an anaphylactic reaction to normal saline and Ringer Lactate solution infusion during vomiting and nausea due to acute gastroenteritis. This case report is aimed to discuss a case of urticaria caused by normal saline containing saline and Ringer Lactate solution.

KEYWORDS: Anaphylactic Reaction, Normal Saline, Ringer Lactate

INTRODUCTION:

Normal Saline (0.9% NaCl) and Lactated Ringer's solution are widely used in patient care for volume replacement and resuscitation [1]. The common feature of these two solutions is that they contain saline. Urticaria is a skin disease common in all societies and is characterized by itchy and edematous plaques that appear suddenly and disappear spontaneously within the same day. (2) These solutions are known to be safe and widely used by physicians to close the fluid deficit. Common side effects of Lactated Ringer's Injection include allergic reactions, such as localized or generalized hives and itching, swelling of the eyes, face, or throat, coughing, sneezing, or difficulty breathing. Other side effects of Lactated Ringer's injection may include fever, infection at the injection site, or redness/red streaking and swelling from the injection site [2].

This case report is aimed to discuss a case of urticaria caused by normal saline containing saline and lactated Ringer's solution, which is known as a safe solution.

CASE REPORT:

A 19-year-old male patient presented to the emergency department with complaints of diarrhea, nausea, and vomiting that lasted for two days. He stated that he had diarrhea 10-12 times a day and did not have oral intake due to nausea and vomiting. He was conscious and oriented on physical examination, and his Glasgow Coma Score was 15. In the oropharynx examination, the tongue was dry. The abdominal examination did not show defense or rebound but decreased abdominal tone. His heart rate was 115/minute; arterial blood pressure was 80/50 mm/Hg. There was urine output. Other system examinations were regular. The patient did not have a chronic illness or regular medication. In terms of dehydration treatment of the patient, an intravenous line was opened, and 500 cc ringer lactate was started. One ampoule of metrizamide was put into Ringer lactate for nausea. A few minutes after beginning the serum, the patient developed hyperemic and itchy plaques in the lower abdomen (figure 1). The liquid solution was stopped. Avil (45.5 mg pheniramine maleate) and phenol (medilprednisolan 80 mg) were applied. Lesions were extinguished in the follow-up. Urticarial lesions were linked to metrizamide ampoule given in ringer lactate. To reduce the fluid loss, 500 ccs of normal saline was started in a controlled manner on the patient. Hyperemia developed in the neck region a few minutes after saline infusion (figure 2). In addition, there were hyperemia and urticarial lesions on the inner surface of the left forearm (figure 3). IV saline infusion was stopped. Avil and phenol were repeated. The typical substance in the first and second serum was only Saline fluid. After the patient's urticarial lesions were extinguished, controlled 5% dextrose was administered via the IV line. The patient, relieved in the emergency observation and with no features detected in the examinations, was discharged with supportive treatment. No feature was seen in the follow-up.

DISCUSSION:

Normal Saline is 0.9% sodium chloride. It is a hypernatremic and hyperchloremic solution. Its transition to the extracellular compartment is rapid. Its osmolarity is slightly higher than that of plasma. It is compatible with blood products and drugs. Lactated Ringer's solution, on the other hand, is Lactate-buffered Ringer's solution. It is isotonic. Electrolyte ratios are similar to the extracellular fluid. If given in large amounts, metabolic alkalosis may occur because lactate is metabolized in the liver to bicarbonate. A bolus may be applied. It has a lower osmolarity than plasma.

Each liter of solution in isotonic liquid contains 9 grams of sodium chloride (salt); in ringer lactate, Each liter of solution contains 3 grams of sodium lactate, 6 grams of sodium chloride, 0.4 grams of potassium chloride, and 0.3 grams of calcium chloride dihydrate. The only common feature of these two solutions is that they contain sodium chloride. In this case, both solutions attributed the urticarial lesion to sodium chloride. Because these solutions are inexpensive, widely available, have a long storage shelf life, and produce results equivalent to colloid preparations, salines are the most commonly used intravenous fluid. Since they are considered safe by physicians, they are frequently used as fluid therapy for the care of patients with sepsis, hemorrhagic shock, and other life-threatening diseases, replacing the fluid and salt lost from the body. Millions of liters of saline-containing solution are used in healthcare institutions all over the world [3].

A solution of 5% dextrose in water is helpful in treating dehydration, replacing the lost fluid from the body, and using various intravenous drugs. It is also used to cover some of the body's energy needs by replacing sugars lost from the body or that cannot be taken orally. In this case, 5% dextrose was applied to saline solutions to replace the fluid lost due to the development of urticarial lesions.

There are many factors responsible for the etiology of urticaria and anaphylaxis. Drugs are among these factors. The most common medications include nonsteroidal anti-inflammatory drugs (NSAIDs), antibiotics, blood pressure drugs, Intravenous fluids, and blood products. It is thought that urticaria developed in the case against the saline NaCl in the solution [4-6].

Although millions of liters of saline are used in hospitals, two cases of anaphylaxis against saline were reported when the English literature was reviewed by [7, 8]. No patient with urticarial lesions has been reported. In our case, urticarial lesions were identified in the early period, and since urticarial treatment was started early, it could have prevented it from turning into anaphylaxis.

The general approach in treating urticaria consists of eliminating the cause and relieving the symptoms. Symptomatic treatment should be started without delay while conducting an etiological investigation in urticaria. Anti-histamines are the first choice and most used drugs in treating urticaria. Systemic Corticosteroids are recommended for short-term use in acute urticaria [3]. In this case, intravenous treatments were stopped, and urticaria treatment was started using antihistamines and steroids.

In conclusion, in this case, report, it was emphasized that there are no safe drugs and solutions in the emergency department and that, like all drugs, saline-containing solutions can cause a wide variety of side effects, including urticarial lesions. As physicians, we must closely monitor all patients we treat and be alert to possible side effects.

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Figures.

Figure 1. Hyperemic and itchy plaques in the lower abdomen after saline infusion.

Figure 2. Hyperemia in the neck region: a few minutes after saline infusion.

Figure 3. Hyperemia and urticarial lesions on the inner surface of the left forearm after saline infusion.

COVID-19 PANDEMISININ ACIL SERVISDEKI OFTALMOLOJIK ACIL DURUMLARA ETKISI

GİRİŞ:

2020 yılı, bir RNA virüsü olan SARS-CoV-2 (Şiddetli Akut Solunum Sendromu Coronavirüs 2) nin neden olduğu viral bir pandemi yılı oldu. Bu virüs, 2002 ile 2004 yılları arasındaki SARS salgınından sorumlu olan SARS-CoV ve 2012 ile 2014 yılları arasında esas olarak Orta Doğu'da bir salgına neden olan MERS-CoV den oluşan koronavirüs ailesine aittir(1).

Bu virüs ilk olarak 2019'un sonunda, Çin'de Wuhan'da görüldü(2). Sonrasında hızla dünyaya yayıldı ve 2020'nin başında tüm kıtalara bu viral yayılmanın hızı ve neden olduğu hastalığın ciddiyeti nedeniyle, Dünya Sağlık Örgütü COVID-19 hastalığını 11 Mart 2020'de bir pandemi olarak nitelendirdi(2). O zaman, dünya çapında 4.16 milyon vaka ve 285.000 ölüm raporlandı. SARS-CoV-2'nin klinik belirtileri oldukça heterojendir ve değişken yoğunluktadır (ateş, öksürük, ishal, baş ağrısı, tat veya koku kaybı). Yine de bazı kişilerde ölüme yol açabilen ciddi akut solunum sıkıntısı sendromlarına neden olur. Bu son derece bulaşıcı virüsün ana bulaşma yolları, doğrudan temas (yüzey) ve hava yoluyla (damlacıklar) ile olmaktadır(3) .

Türkiye'de COVID-19 ile ilgili vaka ve hastaneye yatışlardaki hızlı ve önemli artış, hükümeti 16 Mart 2020 ile 1Haziran 2020 (9 hafta) arasında katı bir ulusal karantina önlemi uygulayarak bir sağlık acil durumu ilan etmeye sevk etti. Bu önlem, nüfusu evde kalmaya ve hareketlerini kısıtlamaya zorladı. Hayat Eve Sığar(HES) diye adlandırılan bir denetim sistemi ile yalnızca belirli faaliyetlere izin verildi. Kurallara uyulmaması durumunda para cezası bile uygulandı.

COVID-19 pandemisinin tüm dünyada olduğu gibi Türk sağlık sistemi üzerinde de sonuçları oldu (örneğin, kardiyovasküler acil merkezler ya da acil servislerde değişik hasta gruplarında azalma). Benzer şekilde bir çalışmada vurgulandığı gibi özellikle oftalmolojik acillerde de belirgin bir etkilenme oldu(4).

Bu çalışmada, 2020 yılı karantina ve karantina sonrası oftalmoloji acil servisindeki hasta akışlarının gelişimini 2019'daki referans dönemle kıyaslayarak değerlendirmekti. Temel amaç karantinanın oftalmolojik acil durumların ciddiyeti üzerindeki etkisini ve acil servislerin bu anlamda nasıl kullanıldığını değerlendirmekti.

GEREÇ VE YÖNTEMLER:

Gülhane Eğitim Araştırma Hastanesinde elektronik sağlık kayıt sistemi taranarak retrospektif bir çalışma tasarlandı. Aynı zamanda Ankara'da üçüncü basamak oftalmoloji merkezi olan hastanemiz acil servisine karantina öncesi, karantina boyunca ve sonrasında başvuran hastaların cinsiyet, yaş ve tanıları ile ilgili veriler analiz edildi. Sonuçlar; 2019, pandemi yılı olan 2020 ve 2021yıllarının aynı zaman dilimleriyle karşılaştırıldı. Üç zaman dilimi tanımlandı ve kronolojik olarak numaralandırıldı: 16 Mart -1 Haziran 2019 (1. Dönem karantina öncesi); 16 Mart -1 Haziran 2020 (2. dönem, karantina dönemi); 16 Mart -1 Haziran 2021(3.dönem, karantina sonrası).

Dışlama kriterleri olarak, dosya oluşturma hatası olan, boş ya da mükerrer kayıt yapılan ve eksik olan hasta kayıtları çalışmaya alınmadı. Her hasta için cinsiyet, yaş, konsültasyon nedeni kaydedildi.

İstatistiksel analiz olarak tanımlayıcı istatistikler kullanıldı. Kategorik değişkenler sayıları ve yüzdeleri ile nicel değişkenler ise ortalamaları ile tanımlanmıştır.

BULGULAR:

Hastaların demografik özelliklerine bakıldığında; tüm dönemlerde erkek hasta oranının fazla olduğu görüldü. Ayrıca yaş ortalaması açısından yapılan değerlendirmede de her üç dönem çok belirgin bir farklılık izlenmedi. Tüm özellikler Tablo 1 de özetlenmiştir.

Acil göz başvuru sayısı, 1. dönem (n=682) ile 2. dönem (n=247) karşılaştırıldığında karantina döneminde (n=435) %63'den fazla azalma izlenirken, karantina sonrası dönemde ise pandemi öncesi döneme göre (n=121) %17 oranında artış saptandı(n =803). 3.dönem 'e başvuran hasta sayısında bir artış olurken, ciddi oftalmolojik hastalık oranında da bir miktar artış oldu(1. dönemde %15.6 ve 3.dönemde sırasında %16.8) ve acilden yatırılan hastaların oranı istatistiksel olarak benzerdi (%4.1 e karşı %4.9).). Vaka yükünün >%30'unu oluşturan ilk üç patoloji, 1.dönemde sırasıyla konjonktivit, travma ile ilişkili patolojiler, gözde yabancı cisim ve göz kapağı enfeksiyonları idi. 2.dönemde ise sırasıyla travma ile ilişkili patolojiler, gözde yabancı cisimve konjonktivit ön sırada idi. 3. dönemde tablonun pandemi öncesi döneme benzer hale geldiği, bunun yanında özellikle gözde yabancı cisim hastasının %32 oranında arttığı gözlemlendi. Ayrıca 3. Dönemde nörooftalmolojik şikayetler ile başvuran hasta sayısında da artış izlendi(n=65).

Tablo 1: Demografik özellikler

	1.DÖNEM	2.DÖNEM	3.DÖNEM
Hasta sayısı(n)	682	247	803
Ort. yaş	31.69	36.56	31.45
Cinsiyet(kadın)(%)	251(%36.80)	83(%33.60)	275(%34.24)
Cinsiyet(erkek)(%)	431(%63.19)	164(%66.39)	528(%65.75)
Kadın yaş ort.	34.78	41.00	34.57
Erkek yaş ort.	29.83	34.31	29.85

Tablo 2: Konsültasyon nedenleri

Nedenler (n)	2019	2020	2021
Travma	91	88	97
Konjoktivit	267	76	295
Gözde yabancı cisim	58	28	86
İridosiklit	4	1	10
Keratit	47	4	43
Lakrimal sistem bozuklukları	12	1	17
Göz kapağı hastalıkları(ektropion,entropion)	13	0	10
Göz kapağı enfeksiyonları(Blefarit,arpacık,şalazyon)	60	3	75
Konjonktiva bozuklukları(hemoraji)	42	8	37
Retina hastalıkları(dekolman, arter tıkanıklığı vs.)	22	13	17
Nörooftalmik hastalıklar	10	2	65
Orbita boz.enflamasyonu	20	7	14
Ateşli silah yaralanması	14	13	17
Göz ve görme muayenesi	23	3	12

TARTIŞMA:

Hastanemizdeki acil servis göz başvuruları ile ilgili düşüş yaklaşık%63 olarak izlendi.Bu sonuç başka çalışmalarda bildirilen %54 ila %73 arasında değişen düşüşler bildiren çalışmalar ile uyumlu bulunmuştur(5,6).

Bu düşüşün çeşitli nedenleri olabilir. Özellikle başlangıçta bazı kişilerin maske ve dezenfektanlara rahatlıkla ulaşamaması ve bazı hastalardaki hastaneden viral kontaminasyon korkusu önemli etkenlerden biridir. Ayrıca kısıtlama önlemleri ile sosyal ortamların ve okulların kapanması bulaşıcı hastalıkların oranında azalmaya neden olmuş, karantina tedbirleri nedeniyle seyahat

kısıtlamaları da kişilerin hastaneye ulaşmalarına engel olmuştur. Kısmi de olsa teletıp uygulamaları ile bazı göz konsültasyonlarından kaçınmak mümkün olmuş olabilir. Ayrıca bu düşüş iş kazalarınıda içeren travma vakalarında da azalmaya katkıda bulundu.

Çalışmamız, ciddiyet düzeylerine bakılmaksızın tüm tanılarda eşdeğer bir azalma buldu.Daha önce bahsedilen çalışmalar farklı sonuçlar göstermektedir. Bir çalışmada hafif tanılarda bir azalma ve ciddi tanılarda bir artış bildirilirken(6) bir başka çalışma da orta ve yüksek şiddetteki konsültasyonların oranında bir artış ve düşük ve orta şiddetteki konsültasyonlarda bir azalma bulmuştur(7). Ancak bu çalışmalarda bizimkinden farklı olarak 0 ile 5 arasında değişen (0-hafif şiddetli tanılar, 1,2-orta şiddetli tanılar, 3-orta tanılar, 4,5-ağır tanılar)bir skorlama sistemi kullanılmıştır(BaSe SCOrE skorlama sistemi)(8).Bu nedenle bizim çalışmamızla karşılaştırılması zordur.

Hastaların yaş ortalaması, çalışmamızın tüm gruplarında benzerdi (tecrit döneminde 36 yaş ve 2019 kontrol döneminde 31 yaş). Bu bulgular, 50 yaşın üzerindeki (ciddi bir COVID-19 formu geliştirme riski daha yüksek olan) hastaların tıbbi acil servise danışmaktan korktukları hipotezini desteklememektedir. Bu sonuçlar karantina dönemi ile 2019'un aynı dönemi arasında benzer bir ortalama yaş bulan bir yapılan çalışma ile tutarlıdır(9). Bazı çalışmalarda a ortalama yaşta bir istikrar ve hatta hafif bir artış bildirmektedir (7).Çalışmacılar kontrol dönemine kıyasla kilitlenme sırasında ortalama yaşın 48'den 52'e çıktığını buldular. Bizde çalışmamızda ortalama yaşın benzer şekilde 31 den 36 ya çıktığını bulduk. Uzaktan çalışma ve yarı zamanlı çalışma getirilmesi, mesai saatleri içinde danışan hastaların oranını değiştirmedi.

Tanılara daha ayrıntılı bakıldığında, retina dekolmanı örneği, görsel iyileşmenin cerrahi tedavinin erken gelişimi ile ilişkili olduğu vitreoretinal bir acil durum olduğu için önemlidir. Çalışmamızda karantina sırasında retina dekolmanlarında %41'lik bir azalma olurken, karantina sonrası dönemde bu azalma 2019'un aynı dönemlerine göre sadece %22,7'dir. Literatürde bu bu açıdan bakılan çalışmalarda -%26,3 ile -%65.7 arasında değişik oranlar bulunmuştur.(10). Retina dekolmanı insidansındaki beklenmedik düşüş birkaç faktörle açıklanabilir: Nd : YAG lazer arka kapsülotomi sayısında azalma, yüksek irtifada daha az uçuş ve seyahat, günlük yaşamda ve fiziksel aktivitelerde değişiklikler, katarakt ameliyatlarının sayısındaki azalma etkili bir faktör olabilirdi. İlginç bir şekilde, karantinayı takip eden 2 ayda retina dekolmanlarına yönelik cerrahi aktivitede herhangi bir artış bildirilmedi, bu da mevcut bulgularımızla uyumlu bulunmaktadır.

Diğer teşhisleri incelediğimizde, karantina önlemlerinin konjonktivit gibi belirli teşhisleri azaltıcı bir etkisi olabileceğini varsayabiliriz. Karantina sırasında 2019'un aynı dönemine kıyasla %70 oranında bir azalma olduğu net olarak izlenmektedir. Çalışmamız, 2019›un aynı dönemine kıyasla tecrit sırasında ameliyat sonrası komplikasyonlarda %41'lik bir düşüş bildiriyor. Bu sonuç, yalnızca acil duruma indirgenmiş olan "planlanmış" cerrahi aktivitedeki (örn. katarakt) azalma ile açıklanmaktadır. personel ve ekipmanın yoğun bakım ünitelerine nakledilmesi için ameliyatlar.

Bu çalışmanın temel sınırlılığı, tek merkezli olması ve tüm ülkeye genellenemeyecek olmasıdır. Bununla birlikte, bu sınırlama, sağlık önlemlerinin ülke genelinde aynı olması gerçeğiyle dengelenebilir. Bu sonuçları diğer üniversite merkezlerinin sonuçlarıyla karşılaştırmak ilginç olacaktır. Ayrıca, oftalmolojik acillerin sayısında yıllık bir artış olduğu iyi bilinmesine rağmen, karantina öncesi dönemi incelemek ve karşılaştırma sürelerini önceki yıllara göre uzatmak uygun olabilirdi .

SONUÇ:

2020'de sokağa çıkma yasağı, oftalmolojik acillerin sayısında önemli bir düşüşe neden oldu ve tüm teşhis türlerini eşit şekilde etkiledi. Ayrıca hastalar kolaylıkla hastaneye ulaşamadığı için toplam oftalmik acil başvuru sayısında azalma meydana gelmiş olup; bunların çoğunluğunu acil müdahale gerektiren ciddi oftalmik başvurular oluşturmuştur. Bu durum büyük olasılıkla, karantina önlemleri nedeniyle, sadece gerçek acil hastalarının başvurusu ile ilgili idi. Karantina sonrası dönemde, bir önceki yıla göre, oftalmik acil başvurularda artış görülmüştür. Buna karantina döneminde ertelenmiş muayene ve ameliyatlar nedeniyle, göz poliklinik muayene başvurularının aşırı yoğunlaşması ve poliklinik randevusu alamayan hastaların acil servislere yönelmesi neden olmuş olabilir. Sonuç olarak, bu çalışma ile acil servislerin amacına uygun kullanılabilmesi için bu tür kısıtlama günlerinden ders alınması ve ona göre tedbirlerin üretilmesi gerektiği vurgulanmak istendi. Kapanmanın etkisi ile olan acil seviş başvurularındaki düşüşün karantina sonrası kalıcı olmadığı görüldü.

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PERCHERON ARTER ENFARKTI OLAN BİR OLGUDA IV TPA DENEYİMİ

GİRİŞ: Talamusun kan akımında çeşitli varyasyonlar vardır ve bunların potansiyel varlığını bilmek tanı ve tedavi açısından önem taşımaktadır. Percheron Arteri, posterior serebral dolaşımda görülen nadir bir varyanttır. Posterior serebral arterin (PCA) P1 segmentinden köken alır. Bu arteri ilgilendiren bir inme; paramedian talamus enfarktına ve buna eşlik eden ya da etmeyen mezensefalon enfarktına neden olabilir. Klinik bulguları; vertikal göz hareket bozukluğu, bellek kusuru ve koma olarak bir triad şeklinde özetlenebilir. Bu vaka bildiriminde mide bulantısı ve diplopi şikayetiyle acil servise başvuran ve muayenesinde vulpian bulgusu ve sol hemiparezi saptanan, intravenöz doku plazminojen aktivatörü (IV tPA) uygulanan ve percheron arter enfarktı tanısı konulan 52 yaşındaki kadın hastanın takip ve tedavi sürecinin paylaşılması amaçlanmıştır.

OLGU: Bilinen hipertansiyon hastalığı olan ve karvedilol 12,5 mg/gün kullanan hasta günlük işlerini yaptığı sırada mide bulantısı olmuş, çift görmesi başlamış ve ağzında kayma olmuş. Bundan dolayı hastanemiz acil servisine başvurmuş. Hastanın acil servis başvuru vitalleri normal olarak görüldü. Nörolojik muayenesinde şuuru açık, konuşması belirgin olarak dizartrik olarak görülen hastanın sağ vulpian bulgusu, sol santral fasial paralizisi ve sol hemiparezisi mevcuttu. Hastaya beyin bilgisayarlı tomografi (BT) çekildi. Akut patoloji izlenmedi. Hastaya beyin – karotis BT anjiyografi çekildi. Majör intrakranial ve ekstrakranial damarlar patent olarak izlendi. Hastaya difüzyon manyetik rezonans görüntüleme (MRG) yapıldı. Akut kısıtlı difüzyon bulgusu izlenmedi. Hasta, muayene bulguları ile birlikte değerlendirildiğinde hiperakut dönemde supratentoriyal iskemik inme olarak değerlendirildi. Majör damar oklüzyonu olmayan hastaya mekanik trombektomi uygun görülmedi. Kontrendikasyon saptanmayan hastaya alteplaz plandı. Yaklaşık 80 kg olan hastaya toplamda 72 mg alteplaz planlandı. 7,2 mg yaklaşık 1 dakika içinde puşe olarak uygulandı. Ardından idameye geçildi. Takibinde hastanın şuuru stupora kadar geriledi. NIHSS 4 puandan daha fazla arttığı için infüzyon stoplandı. Hipertansif seyretmeyen hastada ön planda intrakranial hemoraji düşünülmemekle birlikte kanama ekartasyonu açısından beyin BT çekildi. Kanama lehine bulgu saptanmadı. İnfüzyona devam edildi ve tamamlandı. İnfüzyon sonrası çekilen beyin BT'de kanama görülmedi. Hastanın yoğun bakım takibinin 1. gününde şuuru düzeldi. Çekilen kontrol difüzyon MRG'da sağda daha geniş olmak üzere bilateral talamik enfarkt görüldü. Hasta takip ve tedavisinin ardından tam iyilik haliyle taburcu edildi.

SONUÇ: Percheron arteri, PCA'nın P1 segmentinden tek bir dal olarak köken alır ve bilateral paramedian talamusun kan akımını sağlar. Bu arterin oklüzyonuna bağlı inme serebrovasküler hastalıkların nadir bir nedenini oluşturur; ancak talamus enfarklarının hafıza kusurlarına ve şuur bozukluklarına neden olabilmesi nedeniyle percheron arter enfarktının tanınması ve tedavisi önem taşımaktadır. Literatürde IV tPA uygulanan percheron arter enfarktı hastalarının relatif olarak daha iyi bir sonlanıma sahip oldukları görülmüştür.

ANAHTAR KELİMELER: percheron, pca, inme, alteplaz, talamus

EVALUATION OF CONSULTATIONS FROM THE EMERGENCY DEPARTMENT TO OBSTETRICS AND GYNECOLOGY

Zekiye SOYKAN SERT, Ekrem Taha SERT

ABSTRACT

PURPOSE: This study aimed to investigate the results and necessity of the consultations by examining the patients who were consulted to the Obstetrics and Gynecology Clinic from the Emergency Department (ED).

METHODS: We retrospectively scanned the data of patients who were consulted to the Gynecology and Obstetrics clinic from the ED between January 2019 and June 2020. The patients' age, complaints at the time of admission to the ED, initial diagnoses, comorbidities, obstetric characteristics and gestational weeks of pregnant women, reasons for consultation, surgical operations performed, radiological and laboratory tests, outcomes in the ED (discharge, hospitalization, exitus, referral) were recorded.

RESULTS: 17.9% of the patients were consulted for gynecological reasons and 82.1% for obstetric reasons. The most common reason due to obstetric reasons was labor pain (25.50%). The second most common reason was pelvic pain (20.51%). We found that 14.7% of the patients gave birth and 4.6% had emergency surgery. 30.6% of the patients consulted from the ED were referred to gynecology and obstetrics outpatient clinic. No Obstetrics and Gynecology pathology was found in 15% of the patients.

CONCLUSİON: Consultations process have a crucial place in the ED. Organizing training programs in institutions that train specialist physicians and organizing the consultation process with inter-clinic meetings can prevent unnecessary consultations.

KEYWORDS: Emergency department, Obstetrics and Gynecology, Consultation, Patient

SPONTANEOUS CORONARY ARTERY DISSECTION: A RARE CAUSE OF ACUTE CORONARY SYNDROME

Fatih Mutlu, Murat Gül

INTRODUCTION: Spontaneous coronary artery dissection (SCAD) is a very rare clinical condition. SCAD is a non-traumatic and non-iatrogenic separation of the coronary arterial wall and is an infrequent cause of acute myocardial infarction. It is more common in younger patients and in women. It usually occurs in a single coronary artery, rarely in more than one coronary artery. The left anterior descending coronary artery was the most frequently affected vessel.The clinical course of SCAD ranges from asymptomatic patients to acute ST-elevation myocardial infarction and even sudden cardiac death. Potential predisposing factors include fibromuscular dysplasia, postpartum status, multiparity (≥4 births), connective tissue disorders, systemic inflammatory conditions, and hormonal therapy.

CASE: A 59-year-old male patient was admitted to the emergency department with syncope, epigastric pain and burning and pain in his throat. Physical examination revealed tenderness in the epigastric region. Oropharynx was normal. Lung and heart sounds were normal. There were no additional abnormal examination findings. The patient had a history of hypertension. Initial assessment of the patient showed a temperature 36.4°C, heart rate 84 bpm, blood pressure 128/86 mm Hg, respiratory rate 20 breaths/min, and an oxygen saturation of 97% on room air. Laboratory tests were normal except for an elevated serum troponin level.Troponin I levels was elevated at 12528,0 pg/mL (reference range 0-17,50 pg/mL). Electrocardiogram (ECG) showed normal sinus rhythm without any ST-T wave changes.Emergency coronary angiogram showed spontaneous dissection distal to the left main coronary artery. The patient was transferred to the operating room.

CONCLUSION: SCAD has a wide range of clinical manifestations varying from mild symptoms and stable angina to myocardial infarction and even cardiogenic shock and arrhythmias. Acute coronary syndrome is the predominant presentation. Our patient did not have any risk factors or history of ischemic heart disease. He presented with syncope and epigastric pain and had an elevated serum troponin level. Spontaneous coronary artery dissection should be kept in mind in patients presenting with epigastric pain and syncope and with possible predisposing factors.

KEYWORDS: Acute coronary syndrome, spontaneous coronary artery dissection, clinical manifestation

PULMONER EMBOLİ TANISINDA SİSTEMİK İMMÜN-İNFLAMATUAR İNDEKSİN TANIDAKİ YERİ

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GİRİŞ

Pulmoner emboli (PE) acilde sık tanı alan bir hastalıktır (1). Hastaneye başvuru şekli plöretik göğüs ağrısı ve nefes darlığı olabileceği gibi, daha az olasılıkla senkop, hemoptizi gibi şikayetlerle de başvurabilir (2). Geliştirilmiş skorlama sistemleri ile bir laboratuvar parametresi olan D-dimer, özellikle düşük ve orta riskli hastalarda tanıyı dışlamak için kullanılan bir biyobelirteçtir (3). Tanı için en çok kullanılan yöntem bilgisayarlı tomografi ile pulmoner anjiografisidir (BTPA). Özellikle yüksek riskli hastalarda veya orta riskli olup D-dimer testi pozitif saptanan hastalarda kullanılmaktadır (4).

Sistemik immün-inflamatuar index (SII), 3 farklı hemogram parametresini içeren (platelet sayısı X nötrofil sayısı/lenfosit sayısı) çeşitli kanser türlerinde prognoz açısından değerli olduğu kanıtlanan bir parametredir (5) (6). Bununla beraber birbirinden farklı hastalıklarda da, koroner arter hastalığı ve hemorajik intrakraniyal kanama gibi, bu parametrenin kötü sonlanım ve mortaliteyle ilişkili olduğuna dair çalışmalar mevcuttur (7) (8).

Bizde çalışmamızda pulmoner emboli tanısı almış hastalarda SII hastaları tanıma veya dışlamadaki etkinliğini değerlendirmeyi amaçladık.

GEREÇ VE YÖNTEMLER

Çalışmanın Dizaynı: Çalışmamız retrospektif, kesitsel bir çalışmadır. 3. Basamak bir acil servise 01.01.2021- 01.12.2021 tarihleri arasında başvuran ve pulmoner emboli şüphesiyle BTPA çekilen hastalar çalışmanın evrenini oluşturacaktır. Çalışmaya yerel etik komitenin onayı alındıktan sonra başlanmıştır.

Hastaların Seçimi: Çalışmaya 18 yaşından büyük, acil servise başvuran ve pulmoner emboli şüphesiyle BTPA çekilen hastalar dahil edilmiştir. Hastalar pulmoner emboli saptananlar ve pulmoner emboli saptanmayanlar olarak iki gruba ayrılmıştır. Kesin tanı BTPA sonucuna göre konulmuştur. 18 yaşından küçük, BTPA çekilemeyen veya hastane sisteminde görüntülenemeyen, hemogram değerlerinde değişikliğe neden olacak ek hastalığı olan hastalar, koagülasyon parametrelerinde yatkınlığa neden olacak ek hastalığı olan hastalar ve çalışmaya dahil edilen laboratuvar parametrelerine veya demografik verilerine ulaşılamayan hastalar çalışma dışı bırakılmıştır.

Verilerin Toplanması: Hastane bilgi sisteminden hastalara ait yaş, cinsiyeti gibi demografik verileri ile üre, kreatinin, ALT, D-dimer, CRP, lenfosit, nötrofil, lökosit ve platelet sayısı verileri kaydedildi. Sonrasında hastalara ait BTPA görüntülemelerine ait veriler kaydedildi. Bu hastalar pulmoner emboli olanlar ve olmayanlar diye iki ayrı gruba dahil edildi. Pulmoner emboli olmayan hasta grubunda değerlendirilen hastaların varsa BTPA'daki patolojileri (pnömoni, plevral efüzyon ve diğer diye kategorize edildi), patoloji yoksa normal yorumlandı diye kayıt altına alınmıştır.

Primer Sonlanım: SII değerlerinin pulmoner emboli hastalarının tanısındaki veya tanıyı dışlamadaki yerini saptamaktır. Sekonder sonlanım ise pulmoner emboli tanısıyla BTPA çekilen hastalardaki diğer laboratuvar parametreleri ile PE arasındaki ilişkinin araştırılmasıdır.

İstatistiki Analiz: Çalışmada elde edilen bulgular değerlendirilirken, istatistiksel analizler için IBM SPSS Statistics 22 (IBM SPSS, Türkiye) programı kullanıldı. Çalışma verileri değerlendirilirken, parametrelerin normal dağılıma uygunluğunu hesaplamak için Shapiro Wilks testi, tanımlayıcı istatistiksel metodların (Ortalama, Standart sapma, Ortanca ve interquartil aralıkları, Frekans) yanı sıra parametrelerin niceliksel verilerinin karşılaştırılması normal dağılıma uymuyorsa Mann Whitney U testi ile ile normal dağılıma uyması halinde Student t testi ile yapıldı. Pulmoner emboli tanısında kullanılabilecek bağımsız parametrelerin belirlenmesinde ise univariate ve multivariate lojistik regresyonu analizine başvuruldu. Niteliksel verilerin karşılaştırılmasında Ki-kare testine başvurulacak olup, anlamlılık düzeyi $p<0,05$ olarak alınacaktır.

BULGULAR

Çalışmaya başlangıçta 136 hasta alındı. Bu hastalardan 13 tanesinin görüntüleme raporlarına ulaşılamaması, 6 tanesinin laboratuvar değerlerinin tam olarak elde edilememesi ve 2 tanesinde hematolojik malignite saptanması sebebiyle çalışma dışında bırakıldı. Bu hastalar dışlandıktan sonra toplamda 115 hasta çalışmaya dahil edildi. Hastaların 61 (53.0%)'i kadındı. Çalışmaya dahil edilen hastaların 34 (29.6%)'ünde pulmoner emboli mevcuttu. Görüntülemesinde emboli saptanmayan hastaların 29 (35.8%)'unun görüntülemeleri normal olarak yorumlanırken, 19 (23.5%)'inde plevral efüzyon saptandı. Çalışmaya dahil edilen hastaların demografik özellikleri ve görüntüleme bulguları Tablo 1'de özetlenmiştir.

Pulmoner emboli saptanan ve saptanmayan hastaların demografik verileri ve laboratuvar değerleri karşılaştırıldığında, pulmoner emboli saptanan hastaların D-dimer değeri ortalaması 13±19 olarak hesaplandı ve bu değer emboli saptanmayan hastalardan istatistiksel olarak anlamlı bir biçimde daha yüksekti ($p=0.035$). SII değeri ise emboli saptanan hastalarda 1334±1213 saptanmış olup, bu değer emboli saptanan hastalarda emboli saptanmayan hastalara göre anlamlı şekilde daha düşüktü ($p=0.018$). Çalışmada karşılaştırılan diğer laboratuvar değerleri arasında ise anlamlı bir fark saptanmadı (Tablo 2).

Yapılan lojistik regresyon analizinde ise, pulmoner emboliyi göstermede anlamlı olarak saptanan tek gösterge D-dimer olarak saptanmıştır (odds oranı: 1.031 GA [1.001-1.062] $p=0.046$). SII değeri ise lojistik regresyon modeline göre tek başına pulmoner emboli tanısı koymada yol gösterici değildir (Tablo 3).

TARTIŞMA

Bildiğimiz kadarıyla literatürde PE ile SII ilişkisini araştıran tek bir çalışma mevcuttur. Bu çalışmada PE tanısı konan hastalarda, SII değerleri ile PE ciddiyeti karşılaştırılmıştır. Çalışma hastalar yüksek riskli, submasif ve masif olmayan olarak sınıflandırılmış buna yüksek riskli gruptaki SII değeri 1863 [1447-2762] olarak saptanmış olup, diğer gruplara göre daha yüksek saptanmıştır (9). Başka bir tromboembolik durum olan serebral venöz trombozda da yüksek SII değerinin kötü sonlanım ilişkili olduğu saptanmıştır (10). Peng ve ark. yaptığı VTE tanısında inflamatuar belirteçlerin araştırıldığı bir çalışmada ise yüksek SII değerlerinin, kalça kırığı olan hastalarda VTE'nin bağımsız bir göstergesi olduğu gösterilmiştir (11). Bizim çalışmamızda PE saptanan hastalarda SII değeri 1334±1213 saptanmış olup, bahsi geçen ilk çalışmayla yakın sonuçlar elde edilmiştir. Ancak bizim çalışmamızda elde edilen SII değeri, PE saptanan hastalarda, saptanmayanlardan anlamlı derecede daha düşüktü. Bildiğimiz kadarıyla çalışmamız SII değerinin PE'den şüphelenilen hastalarda, SII ile PE ilişkisinin araştırıldığı ilk çalışmadır. Çalışmamızda SII değerinin düşük çıkmasının en önemli nedeninin, diğer tromboembolik olaylarla SII değerinin karşılaştırıldığı çalışmalarda, bu değerin hasta grup ile sağlıklı kontrol grubunun karşılaştırılmasından kaynaklandığı düşünmekteyiz. Yapılan çalışmalarda inflamatuar belirteçlerin ve özellikle nötrofil/lenfosit oranının kalp yetmezliği ile beraber olan pnömoni hastalarında ve kronik obstrüktik akciğer hastalığı (KOAH) gibi PE ayırıcı tanısında yer alan hastalıkları belirlemede kullanışlı bir belirteç olduğu gösterilmiştir (12) (13). Bizim çalışmamızda da 48 (59.3%) hastada pnömoni veya plevral efüzyon saptanmıştır. SII değerinin PE saptanmayan hastalarda daha yüksek bulunmasının sebebinin, bizim PE saptanmayan hasta grubumuzun sağlıklı gönüllülerden değil, başka bir enfektif süreci olan kişilerden oluşması olabilir.

Limitasyonlar: Çalışmanın retrospektif tasarımı ve küçük bir hasta popülasyonu ile yapılması en önemli kısıtlılığıdır. Hastalara ait ek hastalıkların ve yakın zamanda geçirilmiş enfeksiyon bilgisine ulaşılamaması başka bir kısıtlılık gibi görünmektedir. Çalışmanın doğası gereği hastalara ait PE yönelik klinik skorlama değerlerine ulaşılamamıştır.

SONUÇ

SII değeri PE ayırıcı tanısında tek başına kullanılabilecek bir parametre değildir. PE şüphesi olan hastaların ayırıcı tanısında birçok enfektif süreç mevcut olup, bu durum SII değerinin kullanımına engel teşkil etmektedir. Ancak daha büyük hasta grubuyla yapılacak çalışmalarda daha farklı sonuçlar elde edilebilir.

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Tablo 1. Çalışmaya dahil edilen hastaların tanımlayıcı istatistikleri

		n (sayı)	%
Cinsiyet			
	Kadın	61	53.0
	Erkek	54	47.0
Emboli Durumu			
	Var	34	29.6
	Yok	81	70.4
Emboli dışı görüntüleme bulgusu			
	Normal	29	35.8
	Pnömoni	29	35.8
	Plevral efüzyon	19	23.5
	Diğer	4	4.9

Tablo 2. Emboli saptanan ve saptanmayan olguların demografik verileri ve laboratuvar değerlerinin karşılaştırılması

	Emboli saptanan	Emboli Saptanmayan	P
Cinsiyet[₸]	16 (47.1%)	38 (46.9%)	0.575
Yaş*	67±18	64±16	0.336
Üre [¥]	47 [25-65]	43 [31-59]	0.672
Kreatinin	0.93 [0.74-1.14]	0.91 [0.75-1.16]	0.934
ALT	45±115	28±28	0.216
CRP	65±83	70±123	0.844
WBC	10710 [7992-13510]	10760 [7430-14340]	0.900
PLT	230000 [181250-290250]	250000 [175500-300000]	0.968
Lenfosit	1985±1233	1575±987	0.620
Nötrofil	7180 [5265-9985]	7690 [4740-12565]	0.704
D-dimer	13±19	5±13	0.035
SII	1334±1213	2158±2446	0.018

[₸] Kategorik verilerin gösterilmesinde sayı ve % değeri kullanılmıştır. Verilen karşılaştırılmasında Ki-kare testi kullanılmıştır.

**Normal dağılıma uyan verilerin gösterilmesinde ortalama ± standart sapma kullanılmıştır. Verilen karşılaştırılmasında Student's T testi kullanılmıştır.*

[¥] Normal dağılıma uymayan verilerin gösterilmesinde ortanca ± 25-75 güven aralığı kullanılmıştır. Verilen karşılaştırılmasında Mann-Whitney U testi kullanılmıştır.

Tablo 3. Pulmoner emboli tanısında kullanılabilecek laboratuvar değerleri için lojistik regresyon analizi

	Wald	Odds Oranı			
		95% G.A.	p		
D-dimer	3.980	1.031	1.001	1.062	0.046
SII	2.861	1.000	0.999	1.000	0.091

Omnibus χ^2 (2) = 9.56 p=0.008 R^2 = 0.114 (Negelkerke)

G.A.=güven aralığı

SPONTANEOUS RETROPERITONEAL HEMATOMA: A RARE CAUSE OF FLANK PAIN

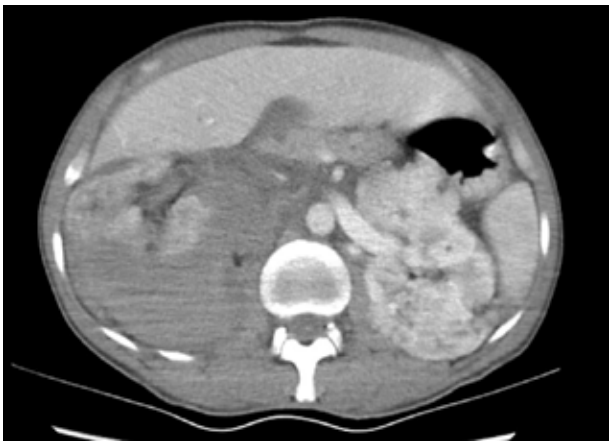
Hüseyin Mutlu, Fatih Mutlu

INTRODUCTION: Bleeding in the retroperitoneal space is a serious complication. Hypovolemia and shock develop late after losing a large volume of blood. Although retroperitoneal hemorrhages are usually seen in events such as retroperitoneal organ damage due to blunt or penetrating trauma or rupture of an abdominal aortic aneurysm, spontaneous bleeding may also occur rarely.Spontaneous retroperitoneal hematoma is a difficult condition to diagnose and is defined as bleeding into the retroperitoneal space that develops without trauma or an iatrogenic condition. It has been associated with hematologic diseases and malignancies and is more common in patients receiving systemic anticoagulation.

CASE: A 49-year-old male patient presented to the emergency department with right flank pain, decreased urinary output and hematuria. Initial assessment of the patient showed a temperature 36.8°C, heart rate 84 bpm, blood pressure 113/67mm Hg, respiratory rate 17 breaths/min, and an oxygen saturation of 96%. The patient had a history ofangiomyolipoma. His medications included acetylsalicylic acid. On physical examination costovertebral angle tenderness was present and abdominal tenderness. Her complete blood count revealed hemoglobin value of 12.9 g/dl, white blood cell 9,38 10^9/L. There was macroscopic hematuria in the urine sample. Abdominal ultrasound showed diffuse fluid appearance. An abdominal computerized tomography revealed a spontaneous retroperitoneal hematoma due to bleeding of an intraparenchymal branch of the right renal artery.

CONCLUSION: Retroperitoneal bleeding is a medical emergency that is often difficult to diagnose due to its rarity and the nonspecific symptoms with which it presents. The diagnosis of retroperitoneal hematoma requires a high degree of clinical suspicion as patients do not exhibit any clinically apparent signs and symptoms until a substantial amount of blood loss has occurred. Physicians should always think of retroperitoneal bleeding in patients presenting with abdominal pain, especially if they have a bleeding disorder or receive anticoagulants or antiplatelets.

KEYWORDS: Retroperitoneal hematoma, flank pain, emergency department



SYNCOPE WITH HEAD INJURY, THE TIP OF THE ICEBERG!

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INTRODUCTION:

Syncope is defined as a temporary loss of consciousness due to cerebral hypoperfusion, characterized by rapid onset, short duration, and complete spontaneous resolution.

There are different types of syncope; one of them is cardiac syncope. The most common cause of cardiac syncope is arrhythmias. In this case, we present a patient who admitted because of head injury , but finallly diagnosed with cardiac syncope due to severe aort stenosis .

CASE:

A 48-year-old male patient with no known comorbidity admitted to the ER with head trauma. In the anamnesis, it was learned that he had trauma after syncope while running for catching train. Also, he added that he had chest pain meanwhile for the first time in his life. Vital signs were evaluated as normal. On physical examination, there was diffuse edema and ecchymosis around the left eye due to trauma. There was crepitation over the left zygomatic arch. Eye movements and vision examination were normal. For the etiology of syncope ECG and blood tests were obtained. No acute pathology was detected on the ECG. CT scan showed displaced fractures in the orbital wall and zygomatic bone. He was consulted with plastic surgery for elective surgery. After blood tests were resulted normal, cardiology consultation was obtained due to syncope following chest pain after exertion. Echocardiography demonstrated severe aortic stenosis that indicated to cardiac syncope. The patient was referred to another hospital with coronary intensive unit for further evaluation.

DISCUSSION:

Syncope is a clinical picture that we encounter quite frequently in the emergency department. Many causes are benign. However, the causes, in particular cardiac causes that can be fatal should not be ignored. Arrhythmias are the most common cause of cardiac syncope. Structural causes such as aortic stenosis, acute myocardial infarction/ischemia, hypertrophic cardiomyopathy, cardiac masses (atrial myxoma tumors, etc.), pericardial disease/tamponade, congenital anomalies of the coronary arteries, and prosthetic valve dysfunction are rarely seen, however should not be neglected.

Aortic stenosis is a valvular disease that causes left ventricular outflow obstruction. Symptoms such as exercise dyspnea or fatigue develop gradually after a long asymptomatic latent period of about 10 to 20 years. Patients develop chest pain, heart failure and syncope. Survival in the asymptomatic phase is excellent, but within a few years of symptom onset, mortality is greater than 90%. Therefore, patients with suspected cardiac syncope should be further evaluated with echocardiography for possible structural causes such as aortic stenosis.

NÖROLEPTİK MALİGN SENDROM: OLGU SERİSİ

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GİRİŞ: Nöroleptik Malign Sendrom (NMS) dopaminerjik ilaç kullanımı en sık da antipsikotik ilaç kullanımı ile görülen potansiyel olarak ölümcül bir sendromdur (1). Klinik olarak yüksek ateş, kas rijiditesi, otonom işlev bozukluğu, bilinç değişikliği, kreatin kinaz (CK) yüksekliği ve lökositoz ile karakterizedir (2). NMS görülme sıklığı %0.02–3 arasında değişmektedir. Mortalite, 1984 öncesinde %40'a yakınken, sonraki dönemlerde %11.6'ya gerilemiştir (3).

Bu yazıda kliniğimizde NMS tanısı alan 5 olgu literatür bilgileri eşliğinde tartışılmıştır.

OLGU 1

74 yaş kadın, acil servise 4 gündür olan genel durumunda bozulma ve bilinç değişikliği nedeni ile getiriliyor. Bilinen parkinson, alzeihmer, hipertansiyon ve Diyabet öyküsü mevcut. Gelişinde tansiyon 100/60 mm/Hg , ateş : 40.1 derece , solunum sayısı: 35/dk Nabız 120/dk idi. Genel durumu kötü Glaskow koma skalası(GKS) 9 oryantantasyon ve kooperasyon kısıtlı idi. Ciddi kas rijiditesi mevcuttu. Yakınlarından alınan anemnezde hastanın ketiapin kullandığı ancak ilaçlarını 2 aydır düzenli kullanmadığı öğrenildi. Yapılan tetkiklerde elde edilen patolojik sonuçlar: Üre: 71 mg/dl , kreatinin :1.91 mg/dl , Kreatin Kİnaz (CK):4071 U/L, Sodyum (Na) :157 mmol/L Klorür : 111 mmol/L , laktat:12 olarak tespit edildi. Beyin tomografisi görüntülemesinde akut patoloji saptanmadı. Nöroleptik Malign Sendrom ön tanısı ile Acil Kritik Yoğun Bakıma (AKYB) yatırıldı. Amantadin, Dantrolen Sodyum ve Bromokriptin başlandı. Takiplerinde bilinç durumu kötüleşen hasta RSI ile entübe edildi. Yoğun bakım takiplerinde CK gerileyen, ateşleri düşen ve genel durumu düzelen hasta extübe edilerek 8. Gününde Nöroloji servise devredildi.

OLGU 2

67 yaş erkek, acil servise başvurusundan 2 saat önce başlayan bilinç bulanıklığı, ateş, bulantı ve kusma şikayetleri ile getiriliyor. Bilinen KOAH, şizofreni ve Alzeihmer tanıları mevcuttu. Hasta seroquel (ketiapin) kullanıyordu. Geliş vitallerinde Ateş : 36.8 derece, spo2 :88 ,Tansiyon :120/70 mm/Hg Solunum sayısı : 24/dk olarak ölçüldü. Genel durumu orta, bilinç konfü, GKS 14 oryantasyon ve kooperasyon kısıtlı idi. Yapılan tetkiklerde elde edilen patolojik sonuçlar: Laktatdehidrogenaz (LDH) :452 mg/dl, CK : 262 U/L, Sodyum :114 mmol/L ,klorür : 79 mmol/L, ph :7.38, pCo2 : 38 ,HCO3 : 22 mmol/L, laktat :2.9 olarak ölçüldü. Beyin tomografisi görüntülemesi normaldi. Toraks görüntülemesinde bilateral alt loblarda infiltrasyon saptandı.Yakınlarından alınan anamnezde hastanın şikayetlerinin yemek yedikten sonra başlamıştı. Hastada ön planda pnömoni ve hiponatremi düşünüldü. Hastaya seftriakson ve klacid başlandı. %3 Nacl ve hidrasyon önerildi. Hastanın acil servis takiplerinde Ateşi 40 C derece olarak ölçüldü, takipne ve taşikardi başladı. Kaslarda rijiditesi görüldü. Alınan kontrol kanlarında CK 5944 U/L , Sodyum : 124 mmol/L olarak ölçüldü. Nöroleptik kullanımı olan ateş kas rijiditesi ve CK Yüksekliği olan hastada Nöroleptik Malign Sendrom gelişmiş olabileceği düşünüldü ve Nöroloji konsultasyonu istendi. Nöroloji tarafından hastaya NMS ön tanısı ile Dantrolen Sodyum , amantadin ve bromokriptin başlandı. Hasta NMS + pnömoni ön tanısı ile Acil Yoğun bakım ünitesine yatırıldı. Yatışının 7. Gününde şifa ile taburcu edildi.

OLGU 3

75 yaş erkek, dün bakımevinde olan kasılmalar ve tepkide azalma nedeni ile acil servisimize getiriliyor. Bilinen Parkinson, alzeihmer, kalp yetmezliği öyküsü mevcut. Hastanın ketiapin kullanımı mevcuttu. Vitallerinde Ateş: 38 C derece, Tansiyon : 106/67 mm/Hg, Solunum sayısı : 24/dk, Nabız 110/dk olarak ölçüldü. Gelişinde hasta letarjik oryantasyon ve kooperasyon kısıtlı idi. Hastanın nörolojik muayenesinde belirgin bir lateralizan bulgu yoktu, ciddi tremor ve kas rijiditesi mevcuttu. Hastanın laboratuvarında üre : 55 mg/dL kreatinin : 1.34 mg/dL, CK : 4391 U/L, Na : 143 mmol/L Beyin ve Toraks bilgisayarlı tomografileri normaldi. Difüzyon mr görüntülemesinde akut difüzyon kısıtlaması saptanmadı. Yakınlarından alınan anamnezde hastanın kullandığı ilaçların tekrar düzenlenmesi amacı ile 2 hafta önce nöroloji poliklinikte doz değişikliği yapıldığı öğrenildi. Hasta nöroloji ve enfeksiyon ile konsülte edildi. Hastada NMS düşünüldü ve Amantadin, bromokriptin Dantrolen Sodyum başlandı. Hasta takip ve tedavi amaçlı acil yoğun bakım ünitesine yatırıldı. Hasta 14. yatışının gününde şifa ile taburcu edildi.

OLGU 4

72 yaş kadın hasta, acil servisimize gelişinden bir gün önce başlayan bilinç bulanıklığı ve kasılma şikayeti ile geliyor. Geliş vitalleri Ateş : 38.5 C derece, SS : 26/dk, Ta : 92/64 mm/Hg, nabız : 108/dk idi. Hastanın Hipotiroidi ve şizofreni öyküsü mevcuttu. Olanzapin 10 mg, Ketiapin 800 mg kullanıyordu. Gelişinde genel durumu orta, bilinç bulanık , oryantasyon ve kooperasyon kısıtlı idi. Kaslarda ciddi rijidite mevcuttu. Laboratuvarında patolojik değerler Üre :161 mg/dL, Kreatinin : 3.57 mg/dL, ALT :215 U/L , AST : 357 U/L, LDH :1252 U/L, CK :4042 U/L, Na :156 mmol/L, WBC : 20 BİN 10^9/L, Laktat : 4.5 olarak ölçüldü. Hastanın beyin görüntülemesinde akut patoloji saptanmadı. Difüzyon mr görüntülemesi normaldi. Hasta dahiliye, enfeksiyon ve nöroloji bölümlerine konsulte edildi. Nöroloji tarafından CK yüksekliği olan , ateşi olan , bilinç bulanıklığı , kas rijiditesi nöroleptik kullanımı olan hastaya NMS tanısı kondu ve tedavisi düzenlendi. Hasta takip amaçlı Acil yoğun bakım ünitesine yatırıldı.Yatışının 13. gününde şifa ile taburcu edildi.

OLGU 5

42 yaş erkek hasta, Acil servisimize suicid amaçlı dün 32 adet olanzapin alımı sonrası ajite olması nedenli yakınları tarafından getiriliyor. Hasta şizofreni tanılı ve olanzapin 10 mg kullanıyor. Geliş vitallerinde; Ateş : 36.7 C derece, Tansiyon : 100/70 mm/Hg, Solunum Sayısı : 20/dk, Nabız : 100/dk olarak ölçüldü. Hastanın genel durumu kötü, ciddi ajite, muayene uyumsuz olmakla birlikte yapılan ilk değerlendirmede akut patoloji bulunmadı. Laboratuvarda CK :4827 U/L olarak görüldü. Hasta psikiyatriye konsulte edildi. Psikiyatri tarafından yakın ateş takibi, hidrasyon ve ajitasyonunun devam etmesi halinde diazem önerildi. Hastanın nöroleptik kullanması, CK yüksekliği olması nedenli NMS açısından risk altında olması nedeni ile hastaya yoğun bakım takibi önerildi. Hastanın acil servis takipleri esnasında takipnesi arttı, Solunum sayısı 32/dk olarak ölçüldü , Ateşleri yükseldi, ateş : 40 C derece olarak görüldü, Tekrar alınan laboratuvarda CK değerinin 8800 U/L olarak görülmesi üzerine hasta suicid ve NMS ön tanısı ile Acil ybü yatırıldı. Hastanın yatışının 1. gününde yoğun bakım takiplerinde kardiyak ve solunum arresti gelişti, CPR yanıtı alınamayan hasta exitus kabul edildi.

Tartışma : Nöroleptik malign sendrom antipsikotik kullanımının kendine özgü bir yan etkisidir. Tipik ve atipik antipiskotik ajan kullanımı esnasında meydana gelebilir. Yapılan çalışmalarda atipik antipiskotik ajanlarla daha az görüldüğü görülmüştür ve atipik antipsikotikajanlar ile mortalite oranı da daha düşüktür. (4) Bu oran %0.02 ile %2.44 arasında değişmektedir. (5) Bizim olgularımızda üç hasta ketiapin , bir hasta ketiapin ve olanzapin birlikte , bir hasta ise sadece olanzapin kullanıyordu. Hastalarımızın hepsinin atipik antipsikotik ajan kullanması atipik antipsikotik ajanların daha sık reçete edilmesi ile açıklanabilir.(6) Hastalarımızın dördünün de ketiapin kullanması düşük risk grubunda bile olsa tüm antipsikotik ajanların bir risk faktörü olduğunu gösterir.

NMS'de tüm yaşlar (çocuklar dahil) ve her iki cinsiyet etkilenir, ancak bildirilen vakalar arasında genç yetişkin erkekler baskındır. Ortalama başlangıç yaşı yaklaşık 40'tır, (7) Bizim olgularımızda 3 erkek, 2 kadın dağılımı bulunmaktaydı, vaka sayısının az olması sebebi ilee erkek ve kadın arasındaki dominansı değerlendirmek için yetersizdir. Bizim vakalarımızda ortlama yaş 66'dır ve en genç vakamız 42 yaşında şizofreni tanılı bir erkektir.

Nöroleptik malign sendrom hipertermi, kas sertliği, yüksek kreatin kinaz seviyesi ve otonomik dengesizlik ile karakterize bir sendromdur (8). Tanı için birçok farklı kriterler geliştirilmiştir. Bunlar içinde en güncel olanı Ruhsal Bozuklukların Tanısal ve İstatistiksel El Kitabı (DSM-5), NMS'yi ilaca bağlı hareket bozukluklarının bir alt formu olarak sınıflandırır. Yayınlanmış kapsamlı tanı kriterleri Tablo 1'de gösterilmektedir.

Tablo 1.

DSM V Nöroleptik Malign Sendrom Tanı Kriterleri	
Major Semptomlar	1. Rijidite 2. Hipertermi (>38.0°C, ağızdan en az 2 kez ölçülmüştür) 3. Terleme 4. Semptomların başlamasından 72 saat önce dopamin antagonistine maruz kalma
Minor Semptomlar	Otonom sinir sistemi : Taşikardi (başlangıç seviyesinin >%25 üzerinde oran), hipertoni (başlangıç seviyesinin >%25 üzerinde veya dalgalanma ile), siyalore, üriner inkontinans, solgunluk, takipne (başlangıç seviyesinin >%50 üzerinde), dispne Zihinsel durum : Değişen bilinç: niteliksel (deliryum); kantitatif (stupordan komaya) Motor semptomlar : Tremor, akinezi, distoni, miyokloni, trismus, dizartri, disfaji Laboratuvar bulguları : ↑Lökositler, ↑CK, ↑Myoglobin, ↑Katekolaminler, ↑Kreatinin, ↓Fe, metabolik asidoz, hipoksi
Dışlama Kriterleri	Yukarıda belirtilen semptomlar başka bir maddeye veya nörolojik veya diğer genel tıbbi duruma bağlı değildir.

DSM 5 dahil tüm sınıflandırmanın ortak tanı kriteri nöroleptik ajan kullanımı ile birlikte hipertermi ve kas rijiditesinin olmasıdır (9). Bizim olgularımızın 3ünde ateş geliş anından itibaren bulunmaktayken, olgu 2 ve olgu 5'de sonradan ateş ve kas rijiditesi meydana gelmiştir. Hastaların antipsikotik ajan kullanımının olası ayırıcı tanıda nöroleptik malign sendrom düşünülmesine yol açmıştır. Özellikle olgu 2'de artan kreatin kinaz yüksekliği, taşikardi gibi diğer otonomik belirtilerin meydana gelmesi hastaya pnömoniye ek olarak NMS tanısı koydurmuştur. Hipoventilasyon , göğüs kas rijiditesi nedeni ile NMS ile birlikte pnömoniye meyil artar (10). Özellikle atipik antipisikotik ajanlarda semptomlar daha hafif ya da daha gizli seyredebilir. Atipik antipsikotiklere bağlı gelişen NMS tablosunda CK düzeylerindeki artışın tanısal yaklaşımı kolaylaştıracağını savunmaktadırlar . CK düzeyleri hastalığa spesifik bir biyobelirteç olmasa da, özellikle şüpheli olgularda takip parametresi olarak değerli olabilir (11) Özellikle olgu 2'de CK düzeylerindeki sonradan artış tanı koydurmada yardımcı olmuştur.

NMS'na yatkınlaştırıcı faktörler arasında; dehidratasyon, malnütrisyon, bitkinlik, parenteral nöroleptik uygulaması, yüksek doz nöroleptik kullanımı, ileri yaş, erkek cinsiyeti, nöropsikiyatrik bozukluklar, travmatik beyin hasarı, ajitasyon, organik beyin hasarı, demir eksikliği, minor enfeksiyonlar, HIV infeksiyonu, ve eş zamanlı olarak lityum, antikolinerjik ajanlar ve bazı antidepresanların kullanımı sayılabilir (12). Nöroleptiklerin eşzamanlı kullanımı ile dehidratasyon arasında güçlü ilişki bulunmaktadır. Serum Na düzeyinin 145 mmol/L'nin üzerinde olması hipernatremi olarak tanımlanır. (13) Hipernatremisi olan olgularda genellikle hipovolemiye bağlı susuzluk hissi, bulantı, kusma, hipotansiyon, taşikardi, başağrısı, halsizlik, mukozalarda kuruluk, bozulmuş turgor ve daha ciddi durumlarda bilinç düzeyinde bozulma gibi belirtiler görülebilir. Olgularımızın dördünde serum Sodyum seviyesi 145 mmol/L olan sodyum seviyesinin üst sınırına yakın veya üstündedir. Bu durum hastalarımızın dehidrate kaldığının bir göstergesidir. Bu durum hastalarda sıklıkla görülen ateş ve terleme ile de açıklanabilir.

Nöroleptik Malign sendrom tedavisinin en önemli yönü gelişmesini önlemektir. NMS ile ilgili olası risk faktörlerinin azaltılması, şüphelenilen olguların erken tanınması ve erken müdahale komplikasyon gelişimini önleyecektir (12). NMS tıbbi bir acildir ve tedavi edilmediği takdirde ölümle sonuçlanabilmektedir. Yapılacak ilk ve en önemli müdahale şüphelenilen farmakolojik ajanın derhal kesilmesi şeklinde olmalıdır. Tedavi planı Destekleyici tedavi, farmakolojik müdahaleler ve Elektorkonvulsif Terapi (EKT) şeklinde düzenlenmelidir. (14) Destekleyici tedavide amaç ; sıvı-elektrolit açığının gidermek, asit-baz dengesinin sağlamak, ateşi kontrol altına alınmak ve oluşabilecek komplikasyonları (kardiyorespiratuar yetmezlik, böbrek yetmezliği, aspirasyon pnömonisi ve koagülopatiler) önlenmek olmalıdır. Sendromun ciddiyeti nedeniyle, semptomatik tedavi her zaman yeterli değildir ve farmakoljik ajan olarak dantrolen, benzodiazepinler, dopamin agonistleri özellikle bromokriptin veya elektrokonvülsif terapinin (ECT) uygulanması gibi spesifik NMS tedavileri faydalı olabilir. Bizim hastalarımızın hepsine destekleyici tedavi ve tıbbi farmokolojik tedavi verilmiştir. Farmakolojik tedavide dantrolen, Amantadın ve Bromokriptin nöroloji önerileri de alınarak kullanılmıştır. Hastalarımızın hiçbirinin elektrokonvülsif terapi almaması hastanemizde yapılmaması nedenlidir ve tedavi açısından olgularımızın bir kısıtlayıcısıdır.

Diğer birçok tıbbi durum NMS'yi taklit edebilir ve bu da yanlış teşhis edilmesini kolaylaştırır. Ayırıcı tanıda serotonin sendromu, malign hipertermi, menenjit veya ensefalit, sıcak çarpması, ajite deliryum, toksik ensefalopatiler, yoksunluk sendromları, metabolik acil durumlar ve konvülsif olmayan status epileptikus gibi merkezi sinir sistemi (CNS) enfeksiyonları sayılabilir. Bizim vakalarımızda da bu ayırıcı tanılara yönelik gerekli laboratuar değerlendirmeleri ve Beyin bilgisayarlı tomografisi, difüzyon mr gibi görüntülemelerine gidilmiştir. BBT VE MR görüntülemelerinin normal olması bizi akut serebral bozukluklardan uzaklaştırmıştır.

SONUÇ: NMS oldukça nadir görülen, morbidite ve mortalitesi yüksek seyreden bir hastalıktır. Bu nedenle acil servise bilinç bozukluğu ve ateş şikayeti ile getirilen hastalarda ayırıcı tanıda mutlaka düşünülmesi gereken bir hastalıktır. Özellikle ileri yaşta olan, antipsikotik ve Parkinson ilaçları kullanan, ateş şikayeti mevcut olan hastalarda ön planda ekarte edilmesi gerekir.

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ACİL SERVİSTE BİR ENFEKTİF ENDOKARDİT OLGUSU

MANİSA CELAL BAYAR ÜNİVERSİTESİ ACİL TIP ANABİLİM DALI

GİRİŞ: İnfektif endokardit (İE), kalbin endokardiyal yüzeyinin infeksiyonu olup,sıklıkla kalp kapaklarını etkilemekle birlikte, septal defektleri veya mural endokardı da tutabilir.İE, nadir görülmesine karşın, gerek tanı ve tedavisinin güçlüğü, gerekse yüksek morbidite ve mortaliteye yol açması nedeniyle halen önemini koruyan bir hastalıktır.OLGU:20 yaşında kadın hasta acil servise 3 haftadır devametmeke olan idrar yaparken yanma, halsizlilk ve kusma ile acil servis yeşil alanına ayaktan başvurdu.Genel durumu iyi vitalleri stabil hasta fm: batında sol üst ve sol alt kadranda minimal hassasiyeti mevcuttu.Nörolojik muayenesi olağan. Dizartri yok ancak konuşması yavaştı. Harici patolojik muayene bulgusu saptanmadı.Hastanın rutinlerinde TİT'te 2+ proteinirüsi, kanlarında K:2,5 Na: 125 Kreatinin : 1,3 CRP:19(R:0-0.5)PLT:9000 Hb: 9 o.üzere sitopeni, afr yüksekliği ve elektrolit imbalansı saptandı.Mevcut bulguları ile elektrolit replasmanları tamamlanan hastanın nörolojik muayenede konuşmadaki yavaşlaması(yakınlarından alınan bilgiden daha önceden konşmalarının daha hızlı olduğu doğrulandı) santral görüntüleme planlandı. Santral görüntüleme sonucunda hastada lakûne enfarktlar saptandı.Batında sol üst kadranda hassasiyet o.üzerine görülen Abdomen USG'de Dalak ,uzun ekseninde 13 cm ile artmıştır,Dalak lateralinde yaklaşık 2 cm boyutunda çizgi şeklinde splenik enfarkt alanıyla uyumlu olabilecek hipodens alan izlendi.Hasta enfekisyon hastalıkları genel dahiliye, nöorloi ve kardiyoloji konsülte edildi. Kan kültürleri alındı. Iv antibiyoterapi başlandı.Takibinde yapılan EKO'da EF: %60 , 3.DERECE EGZANTİRİK MY , AVmax: 1.5 , AY YOK , 1 TY , PABs: NORMAL , SAĞ YAPILAR OLAĞAN BOYUTTA , LA:4.1 cm ,KALP ÇEVRESİNDE SIVAMA TARZINDA BASI BULGUSU OLULTURMAYAN PERİKARDİYAL EFÜZYON İZLENDİ. MİTRAL KAPAK POSTERİOR LEAFLET ATRİYAL YÜZÜNDE 1.39 x 1.78 cm BOYUTLARINDA EKOJENİTE İZLENDİ . (VEJETASYON ? NON-BAKTERİYAL TROMBOTİK ENDOKARDİT ?)Hasta enfektif endokardit ön tanısı ile Koroner Yoğun Bakım Ünitesine devir edildi.Kan kültür sonuçlarında STREPTOCOCCUS MITIS/STREPTOCOCCUS ORALIS üremesi olduğu görüldü.TARTIŞMA: Enfektif endokardit (İE) nadir görülmesine karşın, yol açtığı morbiditeler ve yüksek mortalite hızı nedeniyle halen önemini koruyan bir infeksiyon hastalığıdır. Son yıllarda gelişmiş ülkelerde yapılmış epidemiyolojik çalışmalarda İE sıklığının yaklaşık 6/100 000 olduğu ve İE'nin, sepsis, pnömoni ve intraabdominal infeksiyonlardan sonra yaşamı en çok tehdit eden dördüncü infeksiyon hastalığı olduğu görülmüştür.

Klinik spektrumunun çeşitliliği; hastaların infeksiyon hastalıkları ve klinik mikrobiyoloji, kardiyoloji, kalp ve damar cerrahisi, nöroloji, romatoloji, iç hastalıkları gibi çok fazla daldan hekime başvurmasına neden olur. Bir çalışmada İE olgularının %27-38'inde tanının, otopsiye kadar konulamadığı, bu oranın yıllar içinde değişmediği (1970-1985 arası %35, 1986-2008 arası %42.8), özellikle yoğun bakım birimi ve transplantasyon hastalarında gözden kaçtığı bildirilmiştir. Beyin, dalak ya da akciğer embolizmi hastaların %30'unda görülmektedir ve sıklıkla hekime başvuru nedeni olmaktadır.

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LARGE AND LONG TERM COMPLICATION OF ACUTE NECROTIZING PANCREATITIS; WALLED-OFF PANCREATIC NECROSIS

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INTRODUCTION

Walled-off pancreatic necrosis (WOPN) describes a mature, encapsulated collection of pancreatic and/ or peripancreatic necrosis with a well defined inflammatory wall. Approximately 1-9% of the patients it usually occurs four weeks after the first attack as a late complication of acute pancreatitis. Half of patients may require surgical drainage treatment. The drainage method mostly commonly used in recent years is endoscopic intervention. In this report, a WOPN case that reached large dimensions and fully recovered in approximately 4 months with endoscopic treatment is presented.

CASE REPORT

A 52-year old male patient was admitted to the emergency department with complaints of abdominal pain, nausea and yellow-green colored vomiting. His complaints started in three days ago and continued intermittently. Vital signs are stable. It was reported that the patient was hospitalized for 10 days with the diagnosis of acute pancreatitis 1 month ago. His medical history is unremarkable except for cholecystectomy and chronic alcohol use two times a week for nearly 20 years. Physical examination revealed no significant finding except epigastric tenderness. WBC:8.600/µL, hemoglobin:10.9-g/dL, platelet:498.000/µL, glucose:122 mg/dL, lipase:27 U/L, amylase:258 U/L, CRP:59 mg/L and calcium:8.7 mg/dL. In contrast-enhanced abdominal tomography study, “a significant decrease in density and a cystic lesion of dimentions 21x14 cm in the peripancreatic area was evaluated in favor of necrosis in the body of pancrease” was observed. Findings were interpreted in favor of WOPN. The patient was admitted to the gastroenterology clinic for further examination and treatment. After clinical follow-up, endoscopic cystogastrostomy was performed. At the end of the treatment process, which lasted about 4 months, it was observed that the cyst was completely resorbed and the cystogastrostomy stent was removed.

DISCUSSION

While WOPN is seen in an average size between 11-17 cm, our case is one of the largest cases in the literature with its size of 21*14 cm. The underlying reason for the reaching such a large size may be chronic alcohol use. Endoscopic treatment for WOPN has become the mainstay therapy given its minimally invasive approach, good treatment response, and reduced side effect profile compared to more invasive approaches. Endoscopic treatment method was used in our case as well. This case reports that WOPN that occurs after an acute necrotizing pancreatitis attack can reach very large dimensions and may require a long treatment period despite the treatment methods developed. Emergency physicians should be knowledgeable and careful about acute pancreatitis attack and its complications.

ACİL SERVİSE BAŞVURAN COVID-19 PNÖMONİ HASTALARINDA D-DİMER/LENFOSİT ORANI İLE CURB-65'İN PROGNOZ TAYİNİNDE ETKİNLİĞİNİN KARŞILAŞTIRILMASI

GİRİŞ

Koronavirüs hastalığı 2019 (COVID-19), şiddetli akut solunum sendromu koronavirüsü 2 (SARS-CoV-2) infeksiyonu sonucu gelişen, multisistem tutulum ile seyreden bir hastalıktır. COVID-19 asemptomatik olabilir veya hafif, orta veya şiddetli klinik tablolara neden olabilir[1].

Çin Hastalık Kontrol ve Önleme Merkezi ve Wuhan şehir sağlık otoriteleri 31 Aralık 2019'da Wuhan Şehri'nde nedeni bilinmeyen bir pnömoni salgını bildirdiler. 7 Ocak 2020'de bu pnömoni salgınına yeni bir koronavirüs türünün (2019-nCoV) neden olduğu anlaşıldı. 11 Şubat 2020'de Dünya Sağlık Örgütü (DSÖ) bu yeni koronavirüsü şiddetli akut solunum sendromu koronavirüs-2 (SARS-CoV-2) olarak, bu infeksiyonun neden olduğu hastalığı ise COVİD-19 olarak adlandırdı[2]. COVID-19'un 11 Mart 2020'de pandemi olarak ilan edilmesiyle, SARS ve Ortadoğu solunum yetmezliği sendromu (MERS) pandemilerinden sonra yeni yüzyılda ilan edilen koronavirüs kaynaklı üçüncü pandemi olmuştur[1].

SARS-CoV-2'nin insandan insana esas olarak damlacık ile ve temas yolu ile bulaştığı bilinmektedir [3, 4]. COVID-19 tanısı SARS-CoV-2'nin ters transkripsiyon polimeraz zincir reaksiyonu (RT-PCR) ile gösterilmesi ile konur[5].

COVID-19 kliniğinde ön planda ateş, öksürük ve nefes darlığı ile ilerleyen akciğer tutulumu olsa da, ekstra-pulmoner yapıların etkilenmesi sonucu kardiyak, gastrointestinal, hepatik, renal, nörolojik, olfaktor, gustatör, oküler, kutanöz ve hematolojik semptomlarla da karşımıza çıkabilir[6]. Hastane yatışları ve mortalitenin büyük bir kısmı akciğer tutulumu ve buna bağlı gelişen solunum yetmezliği nedeniyledir[7].

SARS-CoV-2 tüm yaş grubundan insanları enfekte edebilir. Bununla birlikte yaşlı insanlar ve komorbiditesi olanlarda şiddetli hastalık gelişme riski daha fazladır. Kanser hastaları ve immünsupressif tedavi alan hastaların ve gebelerin de daha yüksek riske sahip oldukları düşünülmektedir[8]. Erkeklerde, kadınlara göre COVID-19 nedenli ciddi komplikasyon gelişme riski daha yüksektir[9].

SARS-CoV-2 ile enfekte olan insanlarda kötü prognozu tahmin etmek için laboratuar parametreleri üzerinde çalışılmıştır. Artmış d-dimer, kardiyak troponinler, WBC, laktat, LDH, CRP ve kreatinin düzeyleri; azalmış lenfosit ve platelet sayısı ve düşük albümin düzeyi kötü prognoz ile ilişkili olarak bulunmuştur [10-12].

Pnömoni vakalarının prognozunu öngörmek için kullanılan çeşitli skorlama sistemleri mevcuttur. CURB-65 skoru pnömoni hastalarında 30 günlük mortaliteyi öngörmek için kullanılan skorlama sistemlerinden biridir. CURB-65 skorunun COVID-19 pnömonisininmortalite tahminde güvenilir bulunduğunu bildiren yayınlar mevcuttur [13].

Bu çalışmanın amacı, acil servise başvuran, SARS-CoV-2 PCR pozitif olup bilgisayarlı toraks tomografisi (BTT) sonucunda COVID -19 pnömonisi tanısı alan hastalarda, d-dimer düzeyi, lenfosit sayısı, d-dimer/lenfosit oranı (DLO) ve CURB-65 skorunun prognoz tahminindeki etkinliğini araştırmaktır.

GEREÇ VE YÖNTEM

ÇALIŞMANIN YERİ, ZAMANI VE TİPİ

Bu çalışma Sağlık Bilimleri Üniversitesi Bursa Yüksek İhtisas Eğitim ve Araştırma Hastanesi Yetişkin Acil servisine, 01.04.2020 ile 15.09.2020 tarihleri arasında COVID-19 semptomları ile başvuran hastaların verileri incelenerek retrospektif olarak yapıldı. BTT sonucu COVID-19 pnömonisi tanısı konulan, RT-PCR testi pozitif olan, 18 yaş ve üzeri ve çalışma verilerine eksiksiz ulaşılabilen hastaların çalışmaya dahil edildi.

Çalışma verilerine eksiksiz ulaşılamayan, 18 yaş altı hastalar, RT-PCR testi negatif olan, COVID-19 pnömonisi olmayan ve gebe hastalar çalışma dışı bırakıldı. 15.04.2020- 15.09.2020 tarihleri arasında COVID-19 acil servisine 5988 hasta başvurusu olmuş olup bu hastaların 612'sinde RT-PCR testi pozitif olarak saptandı. Kriterleri karşılayan toplam 248 hasta çalışmaya dahil edildi.

ÇALIŞMANIN YAPILDIĞI YER VE ÖZELLİKLERİ

Çalışma, üçüncü basamak bir hastane olan Bursa Yüksek İhtisas Eğitim ve Araştırma Hastanesinin erişkin acil servisinde yürütüldü.

Bursa Yüksek İhtisas Eğitim ve Araştırma Hastanesi, Türkiye'de COVID-19 vakaları görülmeye başlandığı andan itibaren COVID-19 tanı ve tedavisini yürüten bir merkez olmuş ve T.C. Sağlık Bakanlığı Sağlık Hizmetleri Genel Müdürlüğü'nün 14500235-403.99/ sayı ve "Pandemi Hastaneleri" konulu yazısı uyarınca "Pandemi Hastanesi" olarak kabul edilmiştir. Hastane bünyesinde COVID-19 şüpheli hastaların başvurusu için Pandemi poliklinikllerinin açılmasının yanı sıra, özellikle solunum sistemine dair bulguları olan hastaların muayene ve takip-tedavileri Acil Tıp Kliniği tarafından yürütülmüştür.

ÇALIŞMA EVREN VE ÖRNEKLEMİ

Çalışmamıza; Bursa Yüksek İhtisas Eğitim ve Araştırma Hastanesi Erişkin Acil Tıp Kliniği'ne başvuran, 18 yaş ve üstü, başvuru anında çekilen BTT görüntülemesi COVID-19 ile uyumlu olarak değerlendirilen ve RT-PCR pozitif olan hastalar dahil edildi.

ÇALIŞMA PLANI

Çalışmaya dahil edilen hastaların verileri, hastane bilgi yönetim sistemi üzerinden elde edildi. Çalışmaya başlanmadan önce, çalışma bilgileri T.C. Sağlık Bakanlığı Sağlık Hizmetleri Genel Müdürlüğü Bilimsel Araştırma Çalışmaları Platformu'na kaydedilerek onay alınmıştır. Bursa Yüksek İhtisas Eğitim ve Araştırma Hastanesi Klinik Araştırmalar Etik Kurulu'nun onayladığı 2011-KAEK-25 2020/05-02 nolu protokol ile yürütüldü.

Standart çalışma veri giriş formu oluşturularak hastaların dosyalarından elde edilen demografik bilgiler (yaş, cinsiyet), acil servise başvuru tarihi, vital bulgular (dakika solunum sayısı, glaskow koma skoru (GKS), sistolik kan basıncı (SKB), diyastolik kan basıncı (DKB), parmak ucu oksijen saturasyonu (SPO_2), konfüzyon varlığı/yokluğu, başvuru şikayetleri, kronik hastalıklar, toraks bilgisayarlı tomografi görüntülemeleri ve radyoloji uzman yorumu, laboratuar değerleri (BUN, d-dimer, lenfosit sayısı), RT-PCR sonucu, hastanın acil serviste sonlanım durumu (taburcu, servis yatış, yoğun bakım yatış, eksitus) gibi verilere ulaşılmıştır. Ayrıca hastalarda 30 gün içerisinde mortalite gelişip gelişmediği takip edildi.

Çalışma tamamlandıktan sonra, çalışma formlarındaki veriler istatistik analizlerinin yapılabilmesi için elektronik formatta kaydedildi.

İSTATİSTİKSEL YÖNTEM

İstatistiksel analizler için IBM SPSS Statistics for Windows, Version21.0. (IBM Corp. Armonk, NY: USA. Released 2012) paket programı kullanıldı. Verilerin normallik dağılımı için Kolmogorov-Smirnov testi kullanıldı. Varyansların homojenliği varsayımının sağlanıp sağlanmadığı ise Levene testiyle araştırıldı. Gruplar arasında parametrik test istatistiği varsayımlarının sağlandığı sürekli sayısal değişkenler yönünden farkın önemliliği Student's t testi ile incelenirken parametrik test istatistiği varsayımlarının sağlanmadığı sürekli sayısal değişkenler yönünden farkın önemliliği ise Mann Whitney U testiyle değerlendirildi. D-dimer/Lenfosit oranının 30 günlük mortalite tanısal değerlerinin araştırılması için ROC eğrisi çizildi. Mortalite üzerinde etkili olan faktörleri belirlemek için lojistik regresyon analizi yapıldı. Sonuçlar %95 güven aralığında verildi. $p<0.05$ istatiksel olarak anlamlı kabul edildi.

BULGULAR

Çalışmaya toplam 248 hasta dahil edildi. Hastaların ortanca yaşı 63 (IQR 25-75:51-74) yıl olarak saptandı. Hastaların 125'i (%50.4) erkek olarak saptanırken 150'sinde (%60.5) ise ek hastalık öyküsü vardı. En fazla görülen ek hastalıklar sırası ile hipertansiyon (HT) (%33.9) ve diyabetes mellitus (DM) (%27.8) idi. Hastalarda en fazla görülen semptom ve bulgu sırası ile 101 kişide (%40.7) nefes darlığı ve 97 kişide (%39.1) öksürük idi. Hastaların 183'üne (%73.8) servis yatışı, 24'üne (%9.68) yoğun bakıma yatışı yapıldı.

Hastaların ortanca CURB-65 skoru 1.0 (IQR 25-75: 0-2.0), ortalama D-Dimer düzeyi 2,27±7,50 µg/ml, ortalama lenfosit sayısı 2,05±8,61 10^3/ml ve ortalama DLO düzeyi ise 2,47±6,03 olarak saptandı.

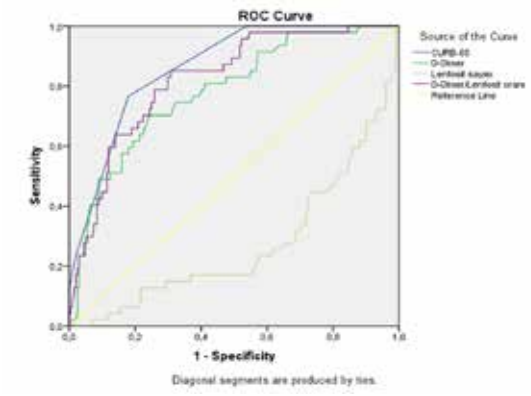
Hastaların, ortanca CURB-65 skoru, D-dimer düzeyi, lenfosit sayısı ve DLO oranları ile 30 günlük mortalite arasında farklılık olup olmadığını araştırmak için Mann Whitney U testi yapıldı. Bu test sonucunda 30 günlük mortalite gelişen hastaların ortanca CURB-65 skoru, D-dimer düzeyi, lenfosit sayısı ve DLO oranlarının mortalite gelişmeyen hastalara göre istatistiksel olarak anlamlı derecede farklı olduğu görüldü ($p<0,001$) (Şekil 1).

	30 günlük mortalite	n	Ortanca (IQR: 25-75)	p değeri*
CURB-65	Hayır	201	1.0 (0-1.0)	<0.001
	Evet	47	2.0(2.0-2.0)	
	Toplam	248	1.0(0-2.0)	
D-dimer	Hayır	201	0.67 (0.38-1.08)	<0.001
	Evet	47	1.97(0.87-4.46)	
	Toplam	248	0.77(0.42-1.35)	
Lenfosit	Hayır	201	1.40(0.95-1.95)	<0.001
	Evet	47	0.80(0.52-1.25)	
	Toplam	248	1.31(0.80-1.87)	
DLO	Hayır	201	0.44 (0.24-0.87)	<0.001
	Evet	47	2.41(0.82-6.21)	
	Toplam	248	0.54(0.29-1.57)	

n : Frekans
DLO: D-dimer / Lenfosit oranı
* Mann Whitney U testi

Şekil 1. Değişkenlerin 30 Günlük Mortalite Analiz Tablosu

CURB-65 skoru, d-dimer düzeyi, lenfosit sayısı ve DLO'nın30 günlük mortalite tanısal değeri için yapılan ROC analizinde; CURB-65'in eğri altındaki alan (AUC) değeri 0,862 [(%95 GA 0,812-0,912), (p<0.001)] ve DLO'nun AUC değeri ise 0,820 [(%95 GA 0,758-0,882), (p<0.001)] olarak bulundu (Şekil 2).



Şekil 2. CURB-65, D-Dimer, Lenfosit sayısı ve DLO'nın ROC eğrileri

CURB-65'in 30 günlük mortalitede kesim değeri 1,5 olduğunda sensitivitesi %76.6, spesifisitesi %82.1, D-dimer'in 30 günlük mortalitede kesim değeri 0.945 olduğunda ise sensitivitesi %70.2, spesifisitesi %70.1, Lenfosit sayısının 30 günlük mortalitede kesim değeri 0.675 olduğunda sensitivitesi %61.7 spesifisitesi %10.4 ve DLO'nun 30 günlük mortalitedekesim değeri 0.830 olduğunda ise sensitivitesi %74.5, spesifisitesi %74.6 olarak saptandı.

Servis yatışı yapılan hastaların, ortanca CURB-65, D-dimer, lenfosit sayısı ve DLO oranları ile bu hastaların bir haftalık süre içerisinde YBÜ'ne yatış ihtiyacı arasında bir farklılık olup olmadığını araştırmak için Mann Whitney U testi yapıldı. Bu test sonucunda YBÜ ihtiyacı olan hastaların ortanca CURB-65, D-dimer, lenfosit sayısı ve DLO oranlarının anlamlı derecede farklı olduğu görüldü (p<0,001).

30 günlük mortalite üzerinde etkili olabilecek olan yaş, cinsiyet ve ek hastalık öyküsü değişkenleri ile logistik regresyon analizi yapıldı. 30 günlük mortalite tanısı için etkili faktör olarak yaş [Exp beta=1,051 (%95 GA 1,026-1,077), p<0,001] bulundu.

TARTIŞMA

Acil servise başvuran ve acil serviste tanı alan Covid-19 pnömoni hastalarında prognoz tahmini için hızlı ve güvenilir biyobelirteçler ve skorlama sistemleri kritik öneme sahiptir. Böylece hastanın ayaktan veya hastaneye yatırılarak takip edilmesi ile ilgili karar verilirken zamanında doğru kararlar vermek ve ölüm riski yüksek olan hastaların erken tanınması önemlidir. Ayrıca kısıtlı yatak sayısı ve personel ile çalışan aşırı yoğun acil servislerde hasta yönetiminin daha verimli olması için önemlidir.

Bu çalışmada acil serviste Covid-19 pnömoni hastalığının prognozunun tahmininde etkin olarak kullanılabilecek CURB-65, d-dimer düzeyi, lenfosit sayısı ve DLO incelenmiştir.

CURB-65 skoru, pnömoni hastalarının 30 günlük mortalitesini öngörmek için kullanılan ve hastaların düşük, orta ve yüksek riskli olarak sınıflandırıp ayaktan takip, hastanede servis veya yoğun bakım yatışına karar vermek için kullanılan bir skorlamadır. CURB-65 skoru arttıkça mortalite oranı artar. Satıcı ve ark.'nın yaptığı çalışmada, CURB-65 skorunun 2 ve üzerinde olması 30 günlük mortalite tahmininde %73 sensitivite, %85 spesifisite, %31 PPV, %97 NPV (AUC=%79; %95 GA=72-86, p<0.001) ile oldukça ayırt edici olarak bulunmuştur [14]. Yapılan başka bir çalışmada CURB-65 skorunun kötü prognozla güçlü bir şekilde ilişkili olduğu bu açıdan ciddiyet skoru olarak umut verdiğini belirtilmiştir. Ama düşük risk grubu olarak kabul edilen CURB-65 skoru 0-1 olan 171 hastadan 36'sının prognozunun kötü seyretmesi nedeni ile COVID-19 hastalarının ayaktan takip kararını vermede güvenilir olmayacağı ifade edilmiştir [15]. COVID-19 pnömonisinde şiddet indekslerinin değerlendirildiği, çok merkezli, retrospektif bir kohortta, CURB-65 skorunun mortalite tahmininde AUC=0.825 (%95 GA 0.815-0.835) olarak bulunmuştur. CURB-65 skoru hastaların yoğun bakıma ihtiyacını öngörmede suboptimal performansa sahiptir [16].

Çalışmamızda hastaların ortanca CURB-65 skoru 1.0 olarak ölçülmüştür. 30 gün içinde mortalite gelişen hastaların ortanca CURB-65 skoru istatistiksel olarak anlamlı derecede yüksek olduğu görüldü (p<0,001). CURB-65 skorunun 30 günlük mortalite tanısal değeri için yapılan ROC analizinde AUC değeri 0,862 [(%95 GA 0,812-0,912) (p<0.001)] olarak bulundu. CURB-65 skorunun 30 günlük mortalitede kesim değeri 1,5 olduğunda sensitivite %76.6spesifite %82.1olarak saptandı. Servis yatışı yapılan hastalarda, ortanca CURB-65 skoru bir hafta içerisinde YBÜ ihtiyacı olanlarda, YBÜ ihtiyacı olmayanlara göre istatistiksel olarak anlamlı derecede yüksek saptandı (p<0,001).CURB-65 skoru ile mortalite tahmininde elde ettiğimiz sonuçların literatür ile uyumlu olduğunu düşünüyoruz. Ama CURB-65 skorunun 1 hafta içinde yoğun bakım ihtiyacını öngörmede elde ettiği sonuçların da, literatürden farklı olarak, kabul edilebilir performansa sahip olduğunu düşünmekteyiz.

SARS-CoV infeksiyonu, fibrinojen gibi prokoagülan faktörlerin ve ağırlıklı olarak yüksek D-dimer seviyeleri ile karakterize mortaliteyi arttıran bir koagülopati problemiyle karşımıza çıkmaktadırlar [17,18]. D-dimer düzeyinin yüksekliği birçok çalışmada kötü prognozu ve mortaliteyi öngörmede güvenilir olduğu gösterilmiş bir koagülasyon parametresidir. 343 hastanın incelendiği retrospektif bir çalışmada d-dimer kesim değeri 2.0 µg/ml olarak alındığında hastane içi mortalite %92.3 sensitivite, %83.0 spesifisite ile belirlenmiştir. Bu çalışmada aynı kesim değerinde ROC analizi yapıldığında AUC değeri 0.89 olarak saptanmıştır [19]. Çin'de yapılan ve 41 hastanın incelendiği bir çalışmada yoğun bakım ihtiyacı olan hastalarda d-dimer düzeyinin, yoğun bakım ihtiyacı olmayan hastalara göre istatistiksel olarak anlamlı düzeyde yüksek bulunmuştur (p=0.0042) [20]. COVID-19 hastalarında prognostik faktörlerin incelendiği sistematik bir gözden geçirmede d-dimer yüksekliğinin hem şiddetli hastalıkla hem de mortalite ile ilişkili olduğu saptanmıştır [10].

Çalışmamızdahastaların D-dimer düzeyi ile 30 günlük mortalite arasında ilişki saptandı. (p<0,001). D-dimer düzeyinin 30 günlük mortalite tanısal değeri için yapılan ROC analizinde AUC değeri ise 0,780 (%95 GA= 0,708-0,852; p<0.001) olarak bulundu. D-dimer'in 30 günlük mortalitede kesim değeri 0.945 olduğunda ise sensitivitesi % 70.2spesifitesi %70.1 olarak saptanmıştır. Servise yatışı yapılan hastalar arasında, bir hafta içerisinde YBÜ ihtiyacı olanlarda, YBÜ ihtiyacı olmayanlara göre d-dimer düzeyinin daha yüksek olduğu saptandı (p<0,001).Çalışmamızda 1 hafta içinde YBÜ ihtiyacı ve mortalite ile d-dimer düzeyinin ilişkisi literatür ile uyumlu bulunmuştur.

Lenfopeni birçok çalışmada COVID-19 şiddeti ile ilişkili bulunmuştur. Aynı zamanda COVID-19'un seyrinde bir prognostik faktör olarak kabul edilmiş ve mortalite belirteci olabileceği gös-

terilmiştir [21, 22].Deng ve ark.'nın çalışmasında lenfosit sayısının mortaliteyle ilişkili olduğu tespit edilmiştir. Non-survival hastaların lenfosit sayısı ve oranı survival hastalara göre anlamlı düşük saptanmıştır. Kesim (cut-off) lenfosit sayısı ≤0.65 10^9/L olarak bulunmuştur. Lenfosit sayısı özgüllüğü (%92.3) duyarlılığı (%40.3) tespit edilmiştir [23]. Yapılan bir meta-analizde, 4969 hastanın incelendiği, başvuru anında lenfopeni varlığının şiddetli hastalığa progresyon (OR= 4.20; %95 GA= 3.45 – 5.09) ve ölüm (OR= 3.71; %95 GA= 1.63 – 8.44) ile ilişkili olduğu gösterilmiştir. Aynı çalışmada ciddi lenfopeni (0.5x10^9/L) saptanan hasta alt grubunda mortalite oranının 12 kat arttığı saptanmıştır [24]. Huang ve arkadaşlarının yaptığı bir meta-analizde lenfosit sayısını düşüklüğü ile COVID-19 ciddiyeti arasında ilişki saptanmıştır (OR 3.70 [%95 GA= 2.44-5.63], p <0.001). Aynı meta-analizde yoğun bakım ihtiyacı olan, ARDS gelişen ve ölüm ile sonuçlanan hasta gruplarında lenfosit sayısının daha düşük olduğu saptanmıştır [25].

COVID-19 hastalarındaki azalmış lenfosit sayısı ile sitokin salınım sendromu ilişkili bulunmuştur [26]. Bazı çalışmalarda toplam lenfosit sayısında önemli bir azalmanın, koronavirüsün birçok bağışıklık hücresi tükettiğini ve vücudun hücresel bağışıklık fonksiyonunu inhibe ettiğini göstermektedir [27]. Lenfopeni T hücrelerinde (özellikle CD8) belirgin bir azalma ile ilişkilendirilmiş ve T lenfosit alt kümesinin bu anlamlı azalması hastane içi ölüm ve hastalık şiddeti ile pozitif korele olduğu gösterilmiştir[28].

Çalışmamızda hastaların lenfosit sayısı düşüklüğü ile 30 günlük mortalite arasında istatistiksel olarak anlamlı bir ilişki saptadık (p<0,001). Lenfosit sayısının 30 günlük mortaliteyi öngörmede kesim değeri 0.675 olduğunda sensitivitesi %61.7, spesifisitesi %10.4; kesim değeri 1.095 olduğunda ise sensitivitesi %31.9, spesifisitesi %29.9 olarak saptandı. Yapılan ROC analizinde AUC değeri0,270 (%95 GA=0,186-0,354); p<0,001 olarak bulunmuştur. Çalışmamızda 1 hafta içinde yoğun bakım ihtiyacı olan ve non-survivor hasta gruplarında, literatür ile uyumlu olarak, lenfopeni daha düşük bulunmuştur.

DLO, SARS-CoV-2 infeksiyonun hem bağışıklık hücrelerine etkilerini, hem de neden olduğu koagulopatiyi değerlendirmek üzere tarafımızca tasarlanmış bir indekstir. Yapılan literatür taramasında henüz bu konu ile ilişkili bir çalışmaya rastlanmamıştır. Hastaların, 30 günlük mortalite ile DLO yüksekliği arasında ilişki saptandı (p<0,001). DLO'nın30 günlük mortalitetanısal değeri için yapılan ROC analizinde; AUC değeri ise 0,820 [(%95 GA 0,758-0,882), (p<0.001)] olarak bulundu. DLO'nun 30 günlük mortalitede kesim değeri 0.701 olduğunda sensitivitesi %85.1spesifisitesi % 69.2; kesim değeri 0.830 olduğunda ise sensitivitesi %74.5 spesifisitesi %74.6 olarak saptandı. Servis yatışı yapılan hastalar arasında 1 hafta içinde yoğun bakım ihtiyacı olan hastalarda olmayanlara göre DLO'nın daha yüksek olduğu bulundu (p<0,001).

Bu çalışmanın bazı kısıtlılıkları mevcuttur. Çalışmaya dahil edilen hastalar acil servise triyaj noktasından veya polikliniklerden yönlendirilen hastalardı. Çalışmanın tek merkezli ve retrospektif olması diğer önemli kısıtlılıklarıdır. Ayrıca birçok hasta veri eksiği olması nedeni ile çalışma dışı bırakılmıştır. Bu durum çalışma popülasyonunun istenilen sayıda olmamasına neden olmuştur.

SONUÇ

Bu çalışmada COVID-19 pnömonisinin prognozunu öngörmek için çalışılan parametrelerden lenfosit sayısı, CURB-65 skoru, d-dimer düzeyi ve DLO'nın hastaların 1 hafta içinde yoğun bakım ünitesine yatış ihtiyacını ve 30 gün içinde mortaliteyi öngörmede istatistisel olarak anlamlı olduğu saptandı. Ancak CURB-65 skoru ile DLO'nun 30 günlük mortaliteyi öngörmedeki AUC değerlerinin hem D-dimer'den hem de lenfositten daha yüksek olduğunu saptadık. Sonuç olarak, COVID-19 pnömoni hastalarında acil servise başvuru anında ölçülen CURB-65 skoru ile basit ve etkin bir parametre olan DLO'nın hastaların prognozunu öngörmede kullanışlı olabileceğini düşünüyoruz.

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EVALUATION OF INTERHOSPITAL PATIENT TRANSFERS FROM HOSPITAL EMERGENCY DEPARTMENTS IN ANKARA BY USING 112 REFERRAL SYSTEM IN 2020

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INTRODUCTION

Investigation of the reasons for interhospital patient transfers from emergency departments and the types of patients referred; it is important to guiding future healthcare plans, realizing the best way to present emergency health services and increasing the quality of patient care.

MATERIAL METHOD

In the current study all interhospital patient transfers which were transferred from emergency departments in Ankara to another hospital emergency departments or inpatient clinics by 112 ambulances were analyzed retrospectively between 01.01.2020-31.12.2020. Patients were grouped as internal and trauma diseases according to their diagnosis. Age, gender, triage code, diagnosis, reason for patient transfer, hospital requesting transfer and transfferred hospital information of the patients were analyzed. Ankara City Hospital Clinic No. 2 Ethics Committee approval was obtained from the Research Ethics Commitee (Number: E2-21-175 Date: 10.03.21)

RESULTS

Data of 42220 patients were analyzed between the dates of the study.25132 patients (59.53%) triage code was yellow, 8686 patients (20.57%) triage code was red, 8304 patients (19.67%) triage code was green. 37356 (88.48%) patients transferred due to internal diseases, and 4088 (9.68%) patients transferred due to trauma. The most common reasons for interhospital transfers are need for further examination and treatment/specialist physician (24199 patients, 57.3%) and the need for intensive care unit (7697 patients, 18.24%).

DISCUSSION

It has been reported that 69% of interhospital patient transfers are composed of very urgent and emergency patients (1). In the current study, the majority of transferred patients consisted of patients with high disease severity. In previous studies, it was reported that the most common reason for interhospital transfers was internal diseases, which is consistent with our study (2). The lack of critical treatment departments in hospitals, insuffiency in intensive care patient beds and personnel capacity of referrer hospital were reported as the most common reasons for secondary patient transfers (3,4). Similarly, according to our study, the most common reason for secondary patient transfers was the need for further examination and treatment/specialist physician and the need intensive care, respectively.

CONCLUSION

Internal diseases constitute the most common secondary patient transfers from hospital emergency services. The most common reason for patient transfers is the need for further examination and treatment/specialist physician and intensive care,respectively. Patients with high disease severity are most frequently transferred. Identifying the resources that may be needed during primary patient transfers from the scene and transferring them to the most appropriate hospital may reduce the number of secondary transfers. Increasing the capacity of special treatment areas such as intensive care unit, dialysis unit, angiography unit according to the needs of population and homogeneous distribution of specialist physicians to all hospitals may be beneficial in reducing transfers between hospitals.

KEYWORDS: Emergency department, emergency health services, interhospital patient transfers

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GİRİŞ

Omuz çıkıkları acil servise başvuran majör eklem çıkıklarının yaklaşık %45'ini oluşturan ortopedik acillerdir. Omuz çıkıklarının %97'si anteriora doğru olmaktadır. Anterior omuz eklem çıkığının kapalı redüksiyonu için onlarca metod bulunmaktadır. Bu metodları kaldıraç metodları, traksiyon, counter-traksiyon ve manipülasyon metodları olarak sınıflandırmak mümkündür. Omuz eklemi anterior çıkıklarında kapalı redüksiyon metodlarının başarı oranları %68 ila %100 arasında değişmektedir. Kapalı redüksiyon metodlarının bazılarında tek sağlık profesyoneli işlem için yeterli olabilirken, bazılarında birden fazla sağlık profesyoneli gerekebilir.

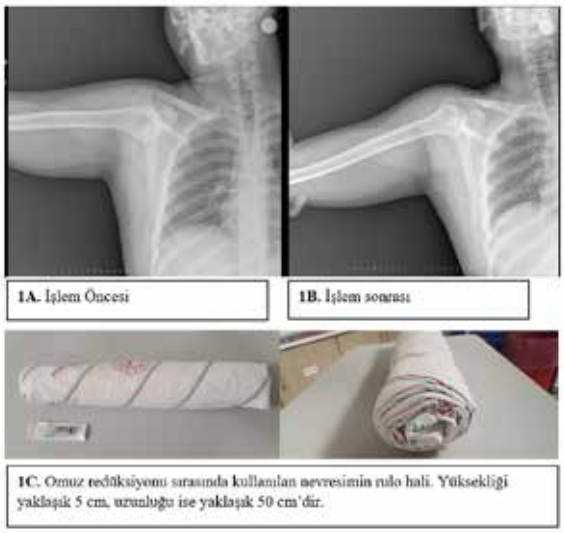
Acil servislerin yoğunluğunda ve mevcut personel iş gücü azlığında hızlıca uygulanabilecek, minimum uygulayıcı ihtiyacı olan hasta için konforlu ve minimum miktarda analjezi sedasyon ihtiyacı olacak, minimum komplikasyona neden olacak omuz çıkığı kapalı redüksiyon yöntemleri tercih edilen metodlardır.

Size bir vaka eşliğinde yeni tanımladığımız anterior omuz çıkığı kapalı redüksiyon metodunu sunmayı amaçlamaktayız.

VAKA SUNUMU

29 yaşında erkek hasta, ani bir hareket sonrası omuz ağrısı olması nedeni ile acil servise başvurdu. Başvuru anında hasta kol yaklaşık 60-75 derece abduksiyonda idi. Apolet bulgusu pozitifti. Sağlam üst ekstremitesi ile etkilenen tarafı sabit tutuyordu. Ağrı skoru 6 olarak değerlendirildi. Humerus proksimalinde fraktür olup olmadığını netleştirmek için kişinin direkt grafisi istendi. Grafide omuz eklem çıkığı doğrulandı ve fraktür saptanmadı (Şekil 1A).

Hastaya yapılacak işlem hakkında bilgi verildi. Aydınlatılmış onam alındı. Video ve ses kaydı için onam alındı.



1A. İşlem Öncesi

1B. İşlem sonrası

1C. Omuz redüksiyonu sırasında kullanılan nevresimin rulo hali. Yüksekliği yaklaşık 5 cm, uzunluğu ise yaklaşık 50 cm'dir.

Hastaya aşağıda ayrıntıları anlatılan metod ile kapalı redüksiyon işlemi uygulandı. Hasta analjezi ve sedasyona ihtiyaç duymadı. Redüksiyon işlemi yaklaşık 45 saniye sürdü.

İşlem sonrası hastanın kontrol grafisi görülmüştür (Şekil 1B). Uygulanan redüksiyon işleminin video kaydı alınmıştır.

Hastanın işlem öncesi yada sonrasında nörovasküler muayenesinde patoloji saptanmadı.

İşlem sonrası hastada herhangi bir komplikasyon saptanmadı.

Yeni tanımlanan kapalı redüksiyon metodunda, omuz eklemi anterior çıkığı tanısı alan hasta sedyede, oturur, yarı oturur ya da uzanmış pozisyonda iken uygulanabilir. Hasta kendini rahat hissettiği pozisyonu belirler ve işlem öncesi hazırlıklar tamamlanır. Hastanın aksiller fossasına yatay seyredecek şekilde, yaklaşık 5 cm kalınlığında, 50 cm genişlikte rulo haline getirilmiş nevresim konur (Şekil 1C). Uygulayıcı bir eli ile hastanın dirsek eklemini, diğer eli ile de aynı tarafın el bileğini kavrar. Hastanın kolu gövdesine doğru adduksiyona nazikçe ve yavaşça zorlanır. Hastanın uyumunun artması için bu aşamada ağrısının artacağı belirtilmelidir. Hastanın kolu gövdesine göre paralel pozisyona gelinceye kadar yavaşça adduksiyon hareketine devam edilmelidir. Omuz ekleminin bu süreç içinde oturması beklenir. Hastanın omuz eklemi redükte olduğu düşünüldükten sonra kola göğüs duvarına doğru iç rotasyon yaptırılır ve göğüs duvarına temas eden kol uygun bir yöntem ile sabitlenir.

SONUÇ

Omuz ekleminin çıkıkları acil servise başvuran eklem çıkıklarının büyük çoğunluğunu oluşturur. Omuz eklemi anterior çıkılarının redüksiyonu için birçok metod uygulanmaktadır. Uygulanacak metod seçiminde, özellikle acil servis koşullarında, metodun hızlı, tek kişinin uygulayabileceği, minimum sedo-analjezi ihtiyacı olan metod olması tercih edilir.

Bu yeni kapalı redüksiyon metodun acil servis koşullarında kolayca uygulanabilecek güvenilir ve uygun bir metod olabileceğini düşünmekteyiz.

ANAHTAR KELİMELER: yeni redüksiyon metodu, anterior omuz eklem çıkığı, ortopedik acil

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NADİR BİR PLEVRAL EFÜZYON NEDENİ: ÜRİNOTORAKS

GİRİŞ:

Ürinotoraks, plevral efüzyonun alışılmadık bir türüdür. En sık obstürktif üropati nedeniyle görülse de iatrojenik olarak da ortaya çıkabilmektedir. Literatürde penetran travma sonrası olgulardan da bahsedilmektedir. Efüzyon transüda vasfında olup asidotiktir (pH < 7,40). Plevral sıvı/serum kreatin oranı > 1'dir.

OLGU 1:

31 yaşındaki erkek hasta nefes darlığı ve sağ yan ağrısı nedeniyle acil servise başvurdu. Hastaya 4 gün önce sağ böbreğindeki taş nedeniyle perkütan nefrolitotripsi (PNL) işlemi yapıldığı, daha sonrasında taburcu edildiği, ağrılarının geçmemesi üzerine bir gün önce de ESWL yapıldığı öğrenildi. Genel durumu iyi, bilinci açık, oryante ve koopere olan hastanın vital bulguları TA:115/75, nb:105/dk, solunum sayısı 22/dk, ateş 36,8 °C ve spO_2 %91 (oda havasında) olarak ölçüldü. Muayenesinde sağ hemitoraksta solunum seslerinin azaldığı, sağ böbrek lojunda 1 cm büyüklüğünde sütüre edilmiş temiz yara olduğu görüldü. Hastanın çekilen PA akciğer grafisinde sağ hemitoraksta plevral efüzyon görünümü izlendi (resim 1). Göğüs cerrahisine konsülte edilen hastaya toraks BT çekildi (resim 2). Hastaya yapılan iğne ile plevral mayi aspirasyonunda transüda görünümlü geleni oldu. Plevral mayiden gönderilen kreatinin sonucu 10,95 mg/dL (serum kreatinin: 1,92 mg/dL) olan hastada ürinotoraks tanısı konularak hastaya tüp torakostomi yapıldı. 3000cc drenaj yapılan hasta göğüs cerrahisi tarafından yatırıldı. Hastaya daha sonra yapılan VATS işleminde diafragma yaralanması görüldüğü ve onarım yapıldığı öğrenildi.

OLGU 2:

62 yaşındaki, daha önceden hipertansiyon ve böbrek taşı düşürme öyküsü olan erkek hastaya başvurduğu dış merkezde PNL yapılmış. İşlem sonrası dispne ve karın ağrısı gelişmesi üzerine yakınları tarafında acil servisimize getirildi. Bilinci açık, oryante ve koopere olan hastanın TA 85/50, nabız 128/dk, solunum sayısı 30/dk, spO_2 %85 (nazal kanül ile 3lt oksijen desteği altında), ateş 37,9 °C olarak ölçüldü. Hastanın bilateral alt zonlarda solunum sesleri azalmış, sol böbrek lojunda nefrostomi katateri mevcuttu. Abdomen muayenesi tahta karın ile uyumluydu. Çekilen tomografisinde sol hemitoraksta pnömotoraks ve bilateral hemotoraks görüldü (resim 3). Abdomen tomografisinde sol böbrekte katater, sol böbrek çevresinde kirlenme, serbest sıvı ve hava dansiteleri görüldü (resim 4). Hastaya göğüs cerrahisi tarafından tüp torakostomi yapıldı. Eksüda vasfında geleni oldu. Hasta göğüs cerrahisi, genel cerrahi ve üroloji tarafından acil ameliyata alındı. Torakotomide üro-fekalotoraks görüldü. İki haftası yoğun bakımda olmak üzere toplam altı hafta hastane yatışı olan hasta şifa ile taburcu oldu.

SONUÇ:

Ürinotoraks nadir bir plevral efüzyon nedenidir. Obstruktif üropatisi olan hastalarda, ürolojik girişim yapılan hastalarda, üst üriner sisteme perkütan travması olan hastalarda gelişen solunum sıkıntısı ve plevral efüzyonlarda ürinotoraks açısından şüpheci olunmalıdır. Tedavisi altta yatan ürolojik patolojiyi tedavi etmektir.

Yabancı cisim aspirasyonu nefes alma esnasında ağız ya da burun yolu ile alınan bir cismin trakeobronşial sisteme kaçmasıdır. Trakeobronşial yabancı cisim aspirasyonu ani gelişen üst solunum yolu tıkanıklıklarının en sık nedenidir. Trakeobronşiyal yabancı cisim aspirasyonu erişkinlerde nadir görülen ancak potansiyel olarak yaşamı tehdit eden bir olaydır. Bu yazımızda hastanemize arrest olarak getirilen ve endotrakeal entübasyon sırasında yabancı cisim aspirasyonu tanısı konulan bir vakayı sunmayı amaçladık.

Bilinen koroner arter hastalığı, hipertansiyon ve alzheimer tanısı olan 72 yaşında erkek hasta, 112 ekipleri tarafından acil servisimize arrest olarak getirildi. Hasta evde yakınları tarafından mutfak masasının yanında soluksuz bir şekilde bulunduktan sonra acil çağrı servisi aranmış. Acil çağrı servisi çalışanları tarafından hasta evde soluksuz ve nabızsız bir şekilde bulunduktan sonra kardiyopulmoner resüsitasyona (KPR) başlanmış. Kardiyopulmoner resüsitasyonun 15'inci dakikasında acil serviste tarafımızca devralındı. KPR devam edilip hastada endotrakeal entübasyona geçildiğinde trakea proximalini ve orofarinksin bir kısmını kapatan yabancı cisim görüldü. Yabancı cisim, Magill forceps ile çıkarıldı. Yabancı cisim çıkarıldıktan sonra hastada endotrakeal entübasyon ile hava yolu güvenliği sağlandı. Entübasyondan 4 dakika sonra spontan geri dönüş sağlandı. Acil serviste stabilazasyonu sağlandıktan sonra yoğun bakım ünitesine yatırılan hasta toplamda 8 gün takip edildikten sonra sağlıkla hastaneden taburcu edilmiştir.

Yabancı cisim aspirasyonları tüm yaşlarda görülmekle beraber özellikle çocukluk çağında daha sık gözlenir. Yetişkinlerde ise proksimal hava yollarında obstrüksiyon ve asfiksi şeklinde sık karşımıza çıkmaktadır. Erken tanı olanakları çok gelişmiş olmasına rağmen yine de distale yerleşen yabancı cisimlerin tanısı güçlük arz ermektedir.

Aspire edilen yabancı cisimlerin cinsi; yaş, cinsiyet, mesleki grubu, kültür, sosyal duruma göre değişiklikler göstermektedir. Trakeobronşiyal yabancı cisim aspirasyonuna yaklaşımda bronkoskopi çok önemli bir yere sahiptir. Bizim olgumuzda yabancı cisim proximale yerleşimli vaziyette olduğu için Magill forceps seçeneği daha hızlı ve kompikasyonsuz olacağı için seçilmiştir.

Sonuç olarak, hastalarda resüsitasyon işlemlere başlarken işlem sırasına her zaman dikkat edilmelidir. Soluk vermeden önce her zaman hava yolu kontrol edilmelidir. Yabancı cisim aspirasyonlarında her ne kadar kesin tanı bronkoskopi ile konulsa da birçok seçenek vardır.

Although foreign body aspirations are seen at all ages, they are more common especially in childhood. In adults, it occurs when patients develop symptoms in the form of obstruction and asphyxia in the proximal airways or foreign bodies descending into the distal airways. Although the early diagnosis possibilities are very advanced, the diagnosis of distally localized foreign bodies is still difficult. Type and rate of aspirated foreign bodies; age, gender, occupational group, culture, social and economic situation, diet, society customs and traditions vary from country to country.

Rigid bronchoscopy has a very important place in the approach to tracheobronchial foreign body aspiration. In our case, since the patient was in a state of arrest and the foreign body was visible proximal, the Magill forceps option was chosen because it would be faster and without complications.

As a result, attention should always be paid to the sequence of procedures when starting resuscitation procedures in patients. The airway should always be checked before exhaling. The definitive diagnosis of foreign body aspiration is made by bronchoscopy. One of the most important criteria for bronchoscopy indication is suspicion.

Arrest As A Result Of Foreign Body Aspiration

ÜST GASTROİNTESTİNAL KANAMASI OLAN HASTALARDA KLİNİK SONUÇLARI TAHMİN ETMEK İÇİN GLASGOW-BLATCHFORD SKORU VE FULL ROCKALL RİSK SKORUNUN KULLANIMI

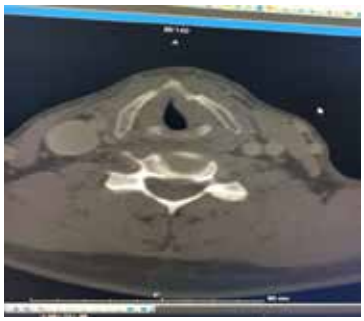
Üst gastrointestinal kanamalı (UGK) hastalarda klinik sonuçları tahmin etmek için son zamanlarda çeşitli risk skorlama sistemleri geliştirilmiştir. Yaygın olarak full Rockall skoru (RS) ve Glasgow-Blatchford skoru (GBS) hastaları değerlendirmek için kullanılan skorlama sistemlerindendir. UGK 'li hastalarda klinik mortalite, tekrar kanama, transfüzyon ihtiyacı açısından bu iki skorlama sistemi karşılaştırıldı.

Son 5 yıl içerisinde UGK tanısı ile acil servise kabul edilen iki yüz kırk üç hasta retrospektif olarak çalışmaya alındı. Bu hastalardan otuz yedisi çeşitli sebeplerden dolayı dışlandı. Kalan hastaların RS ve GBS skorları hesaplandı.

Hastaların %6,79 (n=14) bir ay içinde tekrar kanama ile başvururken hastane içi mortalite %2,42'ydi (n=5). Rockrall skoru bir aylık mortalite tahmininde daha başarılıyken GBS kan transfüzyonu ihtiyacı, tekrar kanama ve yoğun bakım ihtiyacı riskini belirlemede daha başarılıydı.

GİRİŞ:

Larengeal travmalar mandibula, sternum ve sternokleidomastoid kasın korumasından dolayı ender görülen ancak ciddi ölümcül olabilecek yaralanmalardır. Kün larengeal travma ortalama %1 sıklıkta görülen, kıkırdak çatının sağlam olması nedeniyle şüphelenilmediğinde kolaylıkla gözden kaçabilen nadir bir durumdur. Travmanın şekil ve şiddetine, yaşla birlikte larenks elastikiyet ve kemikleşmesine bağlı olarak bu yaralanmalar, tiroid kıkırdağın basit kırıklarından, kıkırdak ayrılmaları, endolaringeal mukozal yırtıklar veya larengotrakeal ayrışmalar, bunlara eşlik eden ödem hematom ve üst hava yolunun bütünlüğünün kaybına kadar değişen aralıkta olabilir. Servikal subkutanöz amfizem, üst hava yolu bütünlüğünün kaybı ile ilişkilidir. Hava miktarı hafif bir yumuşak doku amfizeminden masif pnömomediastinuma kadar değişebilir. Klinisyen minimal ses değişikliği ve hafif ağrı şikayeti ile gelen laringeal travmalı hastada çok dikkatli olmalı; dakikalar, saatler içinde olası meydana gelebilecek solunum sıkıntısı açısından hastayı yakından takip etmelidir. Larengeal travmadan şüphe edilen hastada öncelikle hava yolunun stabilitesi sağlanmalı, fonksiyonun kazanılması ile hayatın korunması amaçlanmalıdır. Tedavi seçenekleri konservatif yaklaşımlardan cerrahi girişime kadar uzanan çeşitli öğeleri içermektedir.OLGU: Bisikletten düşme sonrası boyun ön yüzünde travma sonrası acil servise başvuran, solunumsal semptomu ve bulgusu olmayan, seste çatallanma şikayeti ile acile başvurdu.Genel Durumu İyi vitalleir stabil olan hatanın inspeksiyonda boyun orta sol alt altta hafif ödemli görünüm dikkat çekti. Abeslang muayenesinde patoloji saptanmadı. Ses kısıklığı / çatallaşması olan mevcut durumda hava yolu açıklığı olağandı. Stridoru yoktu. Hastadan Boyun Bt görüntülemesi istendi ve yumuşak dokuda ödem ve thyroid kartilaj fraktürü saptandı. Hastaya iv ve inhaler steroid yapıldı. Kulak-burun-boğaz bölümü ile konsülte edildi. Fleksibl nazolaringoskopide havayolu açık, rima açıklığı doğal izlendi. sol piriform sinüste küntleşme, bu bölgede minimal endolaringeal ödem izlendi. Sağ vk hareketi olağan, sol vk paramedianda fikse izlendi. Boyun 6. bölge solunda şişlik izlendi. Schaeffer Fuhrman evre 2 larenks travması olarak değerlendirilen hastaya acil KBB girişimi düşünülmedi. Semptomatik tedavi ve takip amacıyla servise yatırıdı.



Grade	Laryngeal findings	Airway	Management
1	No fractures/minor lacerations/ minimal oedema	Minimal airway symptoms	Observation Medical supportive care
2	Undisplaced fractures/mucosal disruption without cartilage exposure	Mild airway compromise	Tracheostomy Microlaryngoscopy Bronchoscopy Oesophagoscopy
3	Displaced fractures/vocal cord immobility	Significant airway compromise	Tracheostomy Microlaryngoscopy Bronchoscopy Oesophagoscopy Open laryngeal exploration
4	Multiple fractures with instability	Significant airway compromise	Tracheostomy Microlaryngoscopy Bronchoscopy Oesophagoscopy Open laryngeal exploration
5	Laryngotracheal separation	Catastrophic airway obstruction	Tracheostomy Microlaryngoscopy Bronchoscopy Oesophagoscopy Open laryngeal exploration

KAYNAKÇA

(1)Classification of laryngeal injuries (Schaefer, 1982; Fuhrman et al., 1990)

(2) KÜNT BOYUN TRAVMASINA BAĞLI AÇIK LARENGEAL FRAKTÜR(Yrd. Doç. Dr. Burak Ülkümen, Prof. Dr. Onur Çelik, Dr. Nevin ŞahinCelal Bayar Üniversitesi KBB Hastalıkları Anabilim Dalı)

(3) Kulak Burun Boğaz Hastalıkları El Kitabı, W.Becker, H.H.Naumann, C.R.Pfaltz, Çeviri editörü: B.Cevanşir, İstanbul, 1993.

(4) Management of Laryngeal Trauma Nadir Elias, DMDa , James Thomas, MDb , Allen Cheng, MD, DDSc, *

EOZİNOFİLİK KOLİT

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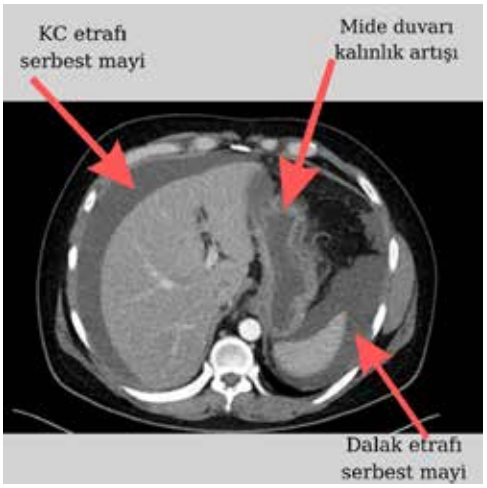
GİRİŞ: Eozinofilik gastrointestinal hastalıklar (EGID), histolojik olarak eozinofil baskın doku inflamasyonunda patolojik bir artış ve klinik olarak gastrointestinal semptomlarla karakterize kronik, immün aracılı bozukluklardır. EGID, toplu olarak eozinofilik özofajit (EoE), eozinofilik gastrit (EoG), eozinofilik enterit (EoN) ve eozinofilik kolit (EoC) dahil olmak üzere bir grup duruma atıfta bulunan bir şemsiye terimdir. "Eozinofilik gastroenterit" terimi, bazıları tarafından EoE dışı tüm EGID'ler için her şeyi kapsayan bir ifade olarak kullanıldığından, EGID terminolojisi uluslararası bir konsensüs tarafından revize edilmiştir. Patogenezi daha önce iyi anlaşılmamıştı. Çoklu epidemiyolojik ve klinik özellikler, hastaların yüzde 50 ila 70'inde eşlik eden atopik durumlara sahip alerjik bir bileşen olduğunu düşündürür. Bu çalışmada, nadir görülün bir durum olan EoC'i sunmayı amaçladık.

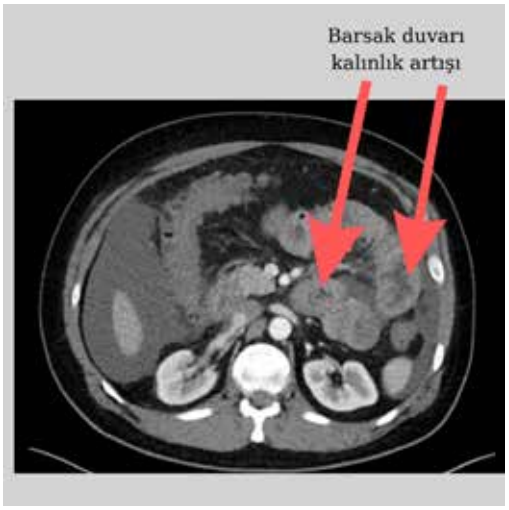
VAKA: 47 erkek hasta tarafımıza yaklaşık 1 aydır olan karın ağrısı, ishal, bulantı ve kusma şikayetleri ile başvurdu. Bilinen sistemik bir hastalığı olmayan hastanın vitalleri doğal idi. Yapılan fizik muayenede batın dört kadranda yaygın minimal hassasiyet mevcuttu. Hasta tetkik edildi. Tetkik sonuçlarında eozinofil hakimiyetinde 46 bin beyaz küre mevcuttu. Diğer tetkikleri doğal idi. Hastaya periferik yayma istendi. Periferik yayma sonucu yaygın eozinofil dışında atipik hücre görülmedi. Hastaya yapılan batın bilgisayarlı tomografi görüntülemesinde, batında yaygın mayii, intestinal anslarda ve mide duvarında kalınlık artışı görüldü (Şekil 1 ve 2). Hastaya istenen gaita tetkikinde parazit de üretememesi üzerine hastadan ön planda EoC düşünüldü ve hasta gastroenteroloji kliniğine tetkik ve tedavi amacıyla yatırıldı.

SONUÇ: EoC nadir görülen gastroentertolojik hastalıklardandır. Özellikle kronik karın ağrısı ishal şikayetleri ile başvuran ve laboratuvarda eozinofil hakimiyetinde beyaz küre yüksekliği olan hastalarda EoC akılda bulundurulmalıdır.

ANAHTAR KELİMELER: Eozinofilik gastrointestinal hastalıklar, Eozinofilik kolit, İshal



Şekil 1. Hastanın batın bilgisayarlı tomografi bulguları



Şekil 2. Hastanın batın bilgisayarlı tomografi bulguları

PELVİK TRAVAMADA SAKRAL DİASTAZ

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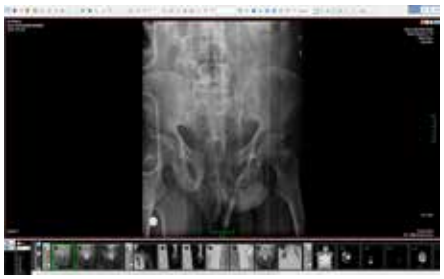
GİRİŞ: Pelvik kırıklar, iskelet yaralanmalarının yaklaşık yüzde 3›ünü temsil eder. Pelvik kırıklardan kaynaklanan genel ölüm oranı yüzde 5 ila 16 arasında değişirken, stabil olmayan pelvik kırıkların oranı yaklaşık yüzde 8›dir. Tanı anında şokta olan pelvik kırıklı hastalarda mortalite yüksektir. Pelvik kırıklar için risk faktörleri arasında düşük kemik kütlesi, sigara kullanımı, histerektomi, ileri yaş ve düşme eğilimi yer alır. Önemli bir pelvik yaralanma bulunursa veya pelvik kırığı olan bir hasta hemodinamik olarak dengesiz kalırsa, pelvis bir çarşaf veya ticari bir pelvik bağlayıcı ile "sarılmalıdır". Pelvisin "sarılması" pelvik hacmi azaltır (bir tamponad etkisi yaratır), kırık parçalarını stabilize eder (kırık bölgelerinden kanamayı azaltır) ve hasta konforunu artırır. Pelvik travmaya sakroiliak diastaz eşlik edebilir. Beraberinde l4-5 lateral transvers proçes fraktürü eşlik edebilir. Pelvik diastaz en sık postpartum kadınlarda görülür ve en sık başvuru şikayetleri pelvik ağrı ve yürüyememedir. Pelvis diastazın 2. sık nedeni ise travmadır. Travmaya genellikle pelvik kırıklar eşlik eder. Bu çalışmada, pelvik diastazı ile birlikte vertebra transver proçeslerdeki avülsiyonu sunmayı amaçladık.

VAKA: 67 yaşında erkek hasta tarafımıza araç içi trafik kazası olarak 112 ile travma tahtasında getirildi. Hastanın sol kalçasında ve belinde ağrısı mevcuttu. Hastanın gelişinde vitalleri stabil, fizik muayenesinde sol pelviste ve sol lomber bölgede hassasiyet mevcuttu. Batın muayenesi rahat olan hastaya pelvik stabilizasyon için pelvik bandaj uygulandı. Gerekli tetkikleri istenen hastanın yapılan görüntülemelerinde sol sakroiliak eklemde diastaz ve sol L4-5 vertebra transver proçeslerde avülsiyon fraktürü tesbit edildi (Şekil 1 ve 2). Ortopedi kliniğine konsülte edilen hasta ortopedi kliniğince opersyona alındı.

SONUÇ: Pelvik travmalar hayati tehlike arz eden travmalar arasındadır. Eşlik eden sakroiliak diastaz ve beraberinde L4-5 tarnsver proçes fraktürü görülebilir. Bu sebeple hastaların pelvik stabilizasyonu ve eşlik edebilecek diğer kemik patolojileri açısından dikkatli değerlendirilmesi gerekir.

ANAHTAR KELİMELER: Pelvik Travma. Sakroiliak Diastaz, Pelvik Bandaj



Şekil 1. Hastanın pelvis direk grafi görüntüsü

Şekil 2. Hastanın pelvis bilgisayarlı tomografi görüntüsü

KÜNT TRAVMALARDA HEMOPNÖMOTORAKS

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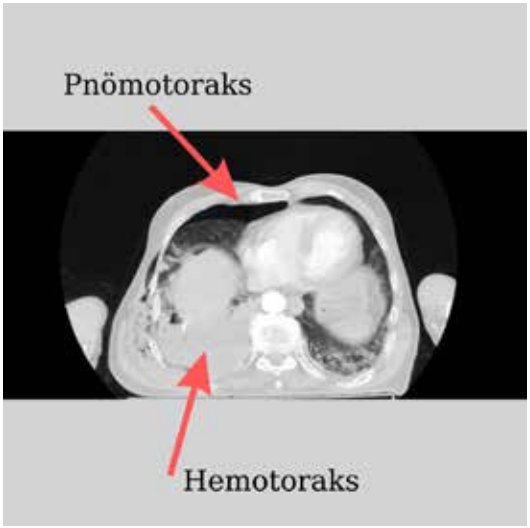
GİRİŞ: Künt göğüs travması, birden fazla yapıyı yaralanma riskine sokar. Direkt travmaya ek olarak, hızlı yavaşlama ve diğer mekanizmalar göğüs yapılarında yaralanmaya neden olabilir. Künt travmaya bağlı kot kırıkları ve yelken göğüs gibi göğüs duvarı yaralanmaları ile akciğer kontüzyonu ve laserasyonu gibi pulmoner hasarlar görülebilir. Ayrıca künt aort yaralanması, kalp kontüzyonu gibi kardiyovasküler yaralanmalar görülebilir. Travmanın şiddetine bağlı olarak çoklu kot fraktürüyle beraber hemopnömotoraks da görülebilir. Bu vakada künt göğüs travmasına sekonder hemopnömotoraksı sunmayı amaçladık.

VAKA: 82 yaşında erkek hasta tarafımıza 112 ile yüksekten düşme sebebiyle getirildi. Hastanın nefes darlığı, göğüste batma ve yan ağrısı şikayetleri mevcuttu. Vitallerinde oksijen satürasyonu %85-89 diğer vitalleri doğaldı. Fizik muayenede sağ yan hemitoraksda ciddi hassasiyet, akciğer dinlemesinde sağ apekste solunum sesleri azalmış ve sağ akciğer bazalinde solunum sesleri alınamadı. Hastadan ön planda pnömotoraks düşünüldü. Hastaya oksijen desteği başlandı. Yapılan görüntülemelerinde hastada, sağ akciğerde hemopnömotoraks ve çoklu deplase kot fraktürleri saptandı (Şekil 1). Hızlı bir şekilde hastaya tüp totakostomi uygulanmış olup uygun aneljezik tedavi başlandı. Hasta göğüs cerrahi kliniğine yatırıldı.

SONUÇ: Künt göğüs travmaları ciddi hayati tehlike arz eder. Hastaya olası pulmoner hasar yönünden oksijen desteği ve uygun ağrı kesici yapılmalı ve uygun stabilizasyon sağlandıktan sonra hızlıca görüntüleme yapılmalıdır. Bizim vakamızda olduğu gibi çoklu kot fraktürü olan hastalarda pnömotoraksla beraber eşlik eden hemotoraksta görülebilir. Böyle vakalarda uygun stabilizasyon sağlandıktan sonra hızlı bir şekilde tüp torakostomi yapılmalıdır.

ANAHTAR KELİMELER: künt göğüs travması, pnömotoraks, hemotoraks, tüp torakostomi



Şekil 1: Hastanın torak bilgisayarlı tomografi görüntüsü

UYGUNSUZ ADH SENDROMU

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GİRİŞ: Antidiüretik hormonun uygunsuz salgılanması sendromu (SIADH), antidiüretik hormonun (ADH) salgılanmasını baskılayamamanın neden olduğu bozulmuş su atılımı bozukluğudur. Hiponatremi, hipoozmolalite ve 100 mosmol/kg'ın üzerinde idrar ozmolalitesi olan herhangi bir hastada SIADH'den şüphelenilmelidir. SIADH'de idrar sodyum konsantrasyonu genellikle 40 mEq/L'nin üzerindedir, serum potasyum konsantrasyonu normaldir, asit-baz bozukluğu yoktur ve serum ürik asit konsantrasyonu sıklıkla düşüktür. Bu vakada ilaç kullanımı sonrası SIADH gelişimini sunmayı amaçladık.

VAKA: 60 yaşında kadın hasta tarafımıza, yaklaşık iki haftadır bulantı, kusma, baş ağrısı ve halsizlik ile başvurdu. Bilinen hipertansiyon sebebiyle tiazid diüretik kullanmaktaydı. Hastanın vital bulguları doğaldı. Yapılan fizik muayenesinde akut patoloji saptanmadı. Hasta ajite ve uykuya meyilliydi. Bakılan parmak ucu kan şekeri normal sınırlardaydı. Hastanın kan tahlilleri istendi. Santral görüntüleme yapıldı ve semptomatik tedavi başlandı. Santral görüntülemede akut patoloji olmayan hastanın biyokimya tahlilinde Na düzeyi 118 mEq/L (135-145 mEq/L) olarak görüldü. Hastadan bu hali ile tiazid diüretüğe bağlı uygunsuz SIADH düşünüldü.

SONUÇ: SIADH'nın sık görülen bir sebebi de tiazid diüretik kullanımıdır. Bundan dolayı acil servise başvuran hastaların kullandıkları ilaçlar olası hastalık ve etiyolojiler açısından dikkatli sorgulamalıdır.

ANAHTAR KELİMELER: uygunsuz ADH sendromu, hiponatremi, tiazid

SEIZURE AFTER A BEE STICK

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INTRODUCTION: Allergy to bee stings is one of the most common allergen factors. The most common reaction is a local reaction, which is temporary pain and redness at the sting site that lasts for several hours. Local reactions usually do not require treatment. Applying a cold compress may help. There are many complications of allergy due to bee sting. The most feared complications are anaphylaxis and kounis syndrome. In the literature, it has been determined that seizures are seen in 2-3 cases. Apart from these, hemolysis, renal failure and rhabdomyolysis have also been reported. In addition, Hymenoptera stings sometimes cause delayed-onset, immunological or idiosyncratic reactions such as serum sickness, nephritis, or cold-induced urticaria. In this case, we aimed to present convulsion, which is one of the rare findings related to bee sting.

CASE: A 50-year-old male patient was brought to us due to regression in consciousness, agitation and convulsions after a bee sting with 112. On admission, the patient's vitals were stable, non-oriented, non-cooperative, and GCS: 13. On examination, there was laceration in the tongue. Other system examinations were normal. Routine examinations of the patient were requested. Intravenous vascular access was opened and hydration was started. Brain computed tomography was taken. In the studied venous blood gas of the patient, the pH was 7.33, lactate: 21 mmol/L. Other blood tests and imaging were unremarkable. Seizure due to bee sting was considered in the foreground in the patient. The patient was observed for recurrent seizures. After the observation period, the patient with stable vitals and no active complaints was discharged with the recommendation of a neurology outpatient clinic control.

CONCLUSION: Bee stings are common. Patients may apply to us with a clinical picture ranging from minor local reactions to anaphylaxis. At the same time, a rare condition after a bee sting is seizure. Therefore, seizures should be considered in patients who do not meet the criteria for agitated and confused anaphylaxis, who are brought to us after a bee sting.

KEYWORDS: Seizure, Anaphylaxis, Lactate.

THE RELATIONSHIP BETWEEN MORTALITY AND END TİDAL CARBONDİOXİDE VALUE IN HOSPITAL AND IN ONE MONTH PERIOD FOR THE PATIENTS WITH ACUTE CORONARY SYNDROME WHO APPLIED TO EMERGENCY SERVICE DUE TO CHEST PAIN

Nazim Onur CAN
Erzurum Şehir Hastanesi Acil Servis Kliniği

İNTRODUCTİON

The Pupose Of This Study İs To Predict The Mortality Rate Of The Patients With Acute Coronary Syndome Both On The First Visit To Clinic And Within The First Month After Visit Using Etco2 As A Non-İnvasive And Fast Procedure

Material metod

Study İs Done Propectively İn Atatürk Üniversity Medicine Facülty Hospital Emergency Ward. The Study İs Done With The Patients Who Has Chast Paint And Have Been Elected According To A Exculding Createria. The Data Of Patients Who Are İncluded İn This Study Has Collected Which Contains The İnformation Vitals Etco2 Value Electrocardiography Characteristics Troponin Values Biochemical Data And The Final Prognosis Etco2 Measuring İs Done Using Fda Approved Capnostream®20p Bedside Monitör. The Collected Data Has Been Analyzed Using İbm Spss Program.

RESULT

İt's Found That There Has Been A Corrospondance Between Grace Scorring And Etco2 Scorring Within The Prediction Of Mortality Of Patient Who Took Health Chare İn Hospital. İt's Also Found That This Corrospondance İs A Negatively Corralated And Statistically Meaningful Using Spearman's Rho Test (R:-0,376**)

When The Mortality Of Patients Within The Hospital, Who Dided İn Hospital, İş Evalueted Another Corrospondance Found Between Timi Score And Etco2 Scorring Which İs Also Proved That This Rerelation İs Corolated And Statistically Meaningful By Spearman's Rho Test (R:0,387) When The Mortality Within The First Month Of Patients, Who Didn't Died At Hospital, Has Been Analyzed A Corrospondance İs Found Between Grace Score And Etco2 Scorring And İts Proved To Be A Corralated And Statistically Meaningful By Using Spearman's Rho Test (R:0,376)

İn Roc Analysis The Patients, Who Get Prognosed As Acute Coronary Syndrome Using Etco2 Value Are Related According To Sensitivity And Specifity.When The Cutoff Value Are Related According To Sensitivity And Specifity. When The Cuttoff Value For Prognosing The Patient With Acute Coronary Syndrome Using Etco2 Value For Prog Nosing The Patient With Acuteco-ronarysyndrome İs 20 The

Sensitivity İs 18% And Specifity İs 95%. When The Cutoff Value İs 25 For Prognosing The Sensitivity İs 55 And Specifity İs%88. When The Cutoff Value İs 35 For Prognosing The Sensitivity İs Raised To %100. A Relation İs Found Between Etco2 Value And Predicting Mortality Of Patient Within The First Month According To Sensitivity And Specifity.When The Cutoff Value Of Etco2 İs Taken As 20 The Sensitivity İs 11% And Specifity İs 94%.When The Cutoff Value İs Determined As 35 The Sensitivity İs Raised To %100.,

DİSCUSSİON

In our study, in terms of whether ETCO2 predicts mortality in the diagnosis of ACS.

The results of the analysis were in the direction we expected. ACS diagnosis with ETCO2 in ROC analysis

It was determined that there was a relationship between the patients receiving the drug in terms of sensitivity and specificity. ETCO2

score can be used to predict mortality in patients diagnosed with ACS.

When the cut-off value is accepted as 20 in predicting in-hospital death, its sensitivity is 18%,

When the specificity was accepted as 95% cut-off value of 25, the sensitivity was 55% and the specificity was 88%. ETCO2

When cut-off was accepted for 35, the sensitivity increased to 100%. ETCO2 and one month

There is a relationship between mortality in terms of specificity (specificity) and sensitivity (sensitivity).

detected. Accordingly, the cut-off value of ETCO2 in predicting one month of death is accepted as 20.

Sensitivity is 11%, specificity is 94%, cut-off value is accepted as 25.

46%, specificity was 86%. Sensitivity e to 100% when cut-off 35 is accepted for ETCO2

There was also a strong positive correlation between ETCO2 and discharged patients.

was one of the findings. According to these findings, ETCO2 can be associated with chest pain and emergency.

It is a strong indicator for the decision to be discharged in patients admitted to the service.

detected.

CONCLUSION

In-Hospital And One-Month Period İn Patients With Suspected Acs

Etco 2 As An Effective Method To Determine Mortality İn The Emergency Room.

We Recommend İts Use.

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ACİL SERVİSTE ST ELEVASYONSUZ MİYOKARD ENFARKTÜSÜ TANISI ALAN HASTALARDA HASTANE İÇİ MORTALİTEYE ETKİ EDEN FAKTÖRLER

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GİRİŞ: Günümüzde diyabet,hipertansiyon ve obezitenin görülme sıklığı ile sigara tüketiminin artması ve beklenen yaşam ömrünün uzamasıyla ST elevasyonsuz miyokard enfarktüsü (NSTEMI) popülasyonunda belirgin artış gözlenmektedir (1,2). Bu çalışmada, ST elevasyonsuz miyokard enfarktüsü (NSTEMI) ile acil servise basvuran hastalarda hastane içi mortaliteyi etkileyen faktörleri araştırmayı amaçladık.

YÖNTEM: Karaman Eğitim ve Araştırma Hastanesi Koroner Yoğun Bakım Ünitesi'nde NSTEMI tanısı ile Ocak 2022-Ağustos 2022 tarihleri arasında takip edilen 114 ardışık hastanın kayıtları geriye dönük tarandı. NSTEMI şüphesi olan hastalar öncelikle acil ekibi ve kardiyologlar ile birlikte değerlendirildi. Hastaların demografik ve labarotuvar verileri ilk başvuruda kaydedildi. Açlık kan şekeri, böbrek ve karaciğer fonksiyon testleri, hemoglobin, C-reaktif protein ve düşük yoğunluklu lipoprotein kolesterol, yüksek yoğunluklu lipoprotein kolesterol içeren bir lipit paneli serum seviyeleri ve ilk 24 saat içinde elde edilen trigliserit seviyesi ölçümleri de kaydedildi. Hipertansiyon; anti hipertansif ajan kullanıyor olması ya da tansiyon arteriyel değerlerinin en az iki ölçümde 140-90 mmhg ve üzerinde olması şeklinde tanımlandı (3). Diabetes mellitus, herhangi bir ölçümde açlık plazma glukoz düzeyinin 126 mg/dL'nin üzerinde olması veya glukoz düzeyinin 200 mg/dL'nin üzerinde veya glikolize hemoglobin düzeyinin %6.5'in üzerinde olması veya bir antidiyabetik ajanın aktif kullanımı olarak tanımlandı (4). Hastaların semptom süreleri, başvuru kalp hızı kaydedildi. Her hastanın GRACE risk skoru hesaplandı.

SONUÇ: Hastane içi mortalite 18 hastada (%15.7) görüldü. Ölüm nedenleri arasında en sık görülenler; akut böbrek yetersizliği (n=3, %16.6), artimi (7, %38.8), kalp yetersizliği (5, %27.7) idi. Ölen hastaların yaş ortalaması 73,67 iken yaşayan hastaların 63.77 (p=0,001) idi (Tablo 1). Sol ventrikül ejeksiyon fraksiyonu (SVEF) ölen grupta 43,06 iken yaşayan grupta 59.64 (p=0,044) saptandı (Tablo 1). Ölen grupta sigara tüketimi (%54,2; %22,2 p=0,019), Kalp yetersizliği (%33,3; %5,2 p=0,002) ve koroner arter hastalığı (%67,3; %52,9 p=0,049) istatiksel olarak daha yüksek saptandı(Tablo 1). GRACE risk skoru da istatiksel olarak anlamlı yüksekti (146,83; 106,58, p=0,001) (Tablo 1). Labarotuvar değerleri incelendiğinde de Kreatinin (1,62 mg/dl; 1,00 mg/dl, p=0,017), Total Kolesterol (192,19 mg/dl ; 160,72 mg/dl, p=0,007) Ldl Kolesterol (119,11mg/dl; 96,78 mg/dl, p=0,021) değeri ölen grupta istatiksel açıdan anlamlı yüksekti (Tablo 2). Logistik regresyon analizinde yüksek GRACE risk skoru [OR (odds oranı): 0,882, GA (güven aralığı) %95 (0,801-0,971), p=0,010], ejeksiyon fraksiyonunun ≤%40 olması [OR: 1,066, GA %95 (1,004-1,130), p=0.035], sigara tüketimi [OR: 0,319, GA %95 (0,108-0,945), p=0.039] ve kalp yetersizliği [OR: 0,012, GA %95 (0,000-0,529), p=0.022] ölüm ile ilişkili bulunmuştur (Tablo 3).

Tablo 1: Çalışma popülasyonunun temel klinik ve demografik özellikleri

Tablo 1: Çalışma popülasyonunun temel klinik ve demografik özellikleri				
Değişkenler		Ölüm		
Var		Yok	p Değeri	
YAŞ		73,67	63,77	0,001
CİNSİYET (ERKEK) (%)		66,7	78,1	0,365
HT (%)		77,8	52,1	0,068
DM(%)		61,1	40,6	0,126
HL(%)		5,6	6,3	1,000
SVEF		45,78	51,00	0,044
SİGARA (%)		54,2	22,2	0,019
KY(%)		33,3	5,2	0,002
KAH		67,3	52,9	0,049
KOAH-ASTIM		5,6	8,3	1,000
Malignite		11,1	1,0	0,064
Semptomsüresi (Saat)		37,25	22,98	0,094
Başvuru Sistolik Tansiyon (mmhg)		131,17	133,66	0,994
Başvuru Diyastolik Tansiyon (mmhg)		74,17	76,29	0,619
Başvuru Kalp Hizi (/dakika)		77,94	79,23	0,906
GRACE Risk Skoru		146,83	106,58	0,001
Medikasyon	Antiagregan(%)	55,6	33,3	0,109
	Beta bloker(%)	61,1	28,1	0,012
	ACEI/ARB(%)	50,0	39,6	0,443
	Sprinolakton(%)	22,2	2,1	0,006
	OAK (%)	0,0	1,0	1,000
	Nitrat ve türevleri (%)	11,1	9,4	0,684
Başvuruda Kardiyojenik Şok (%)		11,1	1,0	0,064

Kısaltmalar; HT; Hipertansiyon, DM: Diabetus Mellitus, SVEF: Sol Ventrikül Ejeksiyon Fraksiyonu, KY:Kalp Yetersizliği, KAH:Koroner Arter Hastalığı, KOAH: Kronik Obsrüktif Akciğer Hastalığı, ACEI:Anjiotensin Converting Enzim Inhibitörü, ARB: Anjiotensin Reseptör Blokeri, OAK: Oral Antikoagülan

Tablo 2: Çalışma popülasyonunun labarotuvar özellikleri			
Değişkenler	Ölüm		
	Var	Yok	p Değeri
Glukoz (mg/dl)	175,33	162,52	0,189
Kreatinin (mg/dl)	1,62	1,00	0,017
Total Kolesterol (mg/dl)	192,19	160,72	0,007
Ldl Kolesterol (mg/dl)	119,11	96,78	0,021
Hdl Kolesterol (mg/dl)	38,72	41,21	0,453
Trigliserid (mg/dl)	139,94	163,08	0,327
Crp (mg/L)	4,63	2,09	0,120
Ürikasit (mg/dl)	6,27	5,54	0,458
Hgb(g/dL)	12,49	13,58	0,011
WBC (µl/ml)	20,37	10,03	0,789
Başvuru Troponin(ng/L)	1,09	0,51	0,284
Başvuru CK-MB(U/L)	15,71	35,46	0,069

Kısaltmalar; CRP: C-reaktif protein, HGB;Hemoglobin, WBC: White Blood Cell, CK-MB; Creatinin Kinaz-Miyokard Binding

Tablo 3: Çoklu Lojistik Regresyon Analizine Göre Mortaliteye Etki Eden Faktörler			
Değişkenler	OR	95% CI	p değeri
GRACE Risk Skoru	0,882	0,801-0,971	0,010
Sigara	0,319	0,108-0,945	0,039
SVEF	1,066	1,004-1,130	0,035
Semptomsüresi (Saat)	0, 931	0,876-0,989	0,021
Başvuru Kalp Hizi (/Dakika)	1,115	1,015-1,226	0,024
Kalp Yetersizliği	0,012	0,000-0,529	0,022
Glukoz (mg/dl)	1,005	0,995-1,015	>0,05
Kreatinin (Mg/dl)	1,104	0,674-1,808	>0,05
WBC (µl/ml)	0,938	0,759-1,158	>0,05

Kısaltmalar; CK-MB; Creatinin Kinaz-Miyokard Binding, WBC: White Blood Cell

SONUÇ: ST elevasyonsuz miyokard enfarktüsü ile acil servise basvuran hastalarda yüksek GRACE risk skoru, düşük SVEF, kalp yetersizliğinin varlığı ve sigara tüketimi hastane içi mortaliteyi olumsuz yönde etkilemektedir.

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SESSİZ AMA ÖLÜMCÜL SEYİRLİ AORT DİSEKSİYONU VAKASI

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GİRİŞ

Aort diseksiyonu, kan basıncı ve aort duvarının yapısal anomalileri başta olmak üzere, çeşitli mekanizmaların katkısıyla, aort intimasında meydana gelen yırtık sonucu aortun tunika mediasının ayrılması ve kanın aort duvarının içine dolması olarak tanımlanır(1). En sık kullanılan sınıflandırma, De Bakey ve arkadaşlarının sınıflandırmasıdır. Proksimal aortadan başlayıp tüm aortayı tutan diseksiyonlar Tip I olarak adlandırılır. İzole asendan aortayı tutanlar Tip II ve izole desenden aortayı tutanlar ise Tip III olarak sınıflanır (2) . Stanford sınıflandırmasına göre distal yayılım ne olursa olsun, asendan ve arkusu tutan diseksiyonlar Tip A, desenden aortayı tutanlar ise Tip B olarak adlandırılır (3).

VAKA

77 yaşında kadın hasta yaklaşık 6 saat önce başlayan ,yaklaşık bir saat sürerek sonrasında tamamen gerileyen sağ bacağında uyuşma ve güçsüzlük şikayeti dış merkeze başvuran hasta acil servisimize ileri tetkik için yönlendirilmiş. Bilinen Hipertansiyon öyküsü mevcut. Ek şikayeti bulunmayan hastanın vital parametreleri; Ateş: 36.5°C Arterial Kan Basıncı: SAĞ :140/70 mm/Hg SOL : 130/70 mm/Hg Nabız:82 atım/dakika, O2 Saturasyonu: %98 olarak ölçüldü. Fizik muayenede solunum sesleri doğal ve ek patoloji yok .Batın bölgesinde defans - rebund yok.Periferik nabızları sağ femoral nabız zayıf hissedildi ancak sol femoral nabız vurusu doğaldı.Akut miyokard enfarktüsünün ekarte edilmesi için yapılan seri EKG tetkiklerinde akut patoloji saptanmadı ve iskemik değişiklik görülmedi.Yapılan laboratuvar çalışmaları Beyaz kan hücresi : 11,45/ mm³ (%85 nötrofil hakimiyetinde) hemogram :10,8 g/dl C- Reaktif Protein : 177 mg/dL Platellet : 155/mm³ INR: 1,12 Kreatin :1 mg/dl üre :65 mg/dl d dimer :8.7 µg/ml olarak sonuçlandı. Hastaya şikayetleri gereği nörogörüntüleme ve torakoabdominal bt anjiografi istendi. Kranial beyin bilgisayarlı tomografide akut patoloji görülmedi.Kranial diffuzyon manyetik rezonans görüntülemede (MRG) sağ caudat nucleus başında milimetrik enfarkt bulguları saptandı. BT anjiografide çıkan aorta, arkus aorta ve inen aortayı da içine alarak iliak-common ve iliak artere kadar uzanım gösteren diseksiyon bulguları görüldü.Hasta Kalp damar cerrahisi bölümü ve nöroloji birimi ile danışılarak başka merkeze sevk edildi. Kalp damar cerrahisi tarafından operasyona alınan hasta operasyon sonrasında takiplerinde kaybedildi.

TARTIŞMA

Aort diseksiyonu, yaşamı tehdit eden, ani göğüs ve/veya sırt ağrısı ile karakterize bir hastalıktır. Hastalık erkeklerde kadınlara oranla iki kat daha sık olarak saptanmaktadır (4).Ancak vakaların %10-%55'inde aort diseksiyonunun ağrısız olabileceği de akılda tutulmalıdır (5-7). Bu vakalar sıklıkla inme, koma veya spinal kord iskemisi, akut renal yetmezlik, miyokard enfarktüsü, mezenterik iskemi bulguları ile baş gösterebilir (8,9). Akut aort diseksiyonu tanısında en önemli faktör diseksiyonun akla gelmesidir (10). Bu nedenle acil servise senkop, bilinç değişikliği, hipotansiyon, atipik karın ağrısı, ekstremitelerde güç kaybı gibi aort diseksiyonu için beklenmedik belirtilerle başvuran hastalarda aort diseksiyonu tanısı akılda tutularak fizik muayene ayrıntılı olarak değerlendirilip gerekli tetkikler yapılmalıdır.

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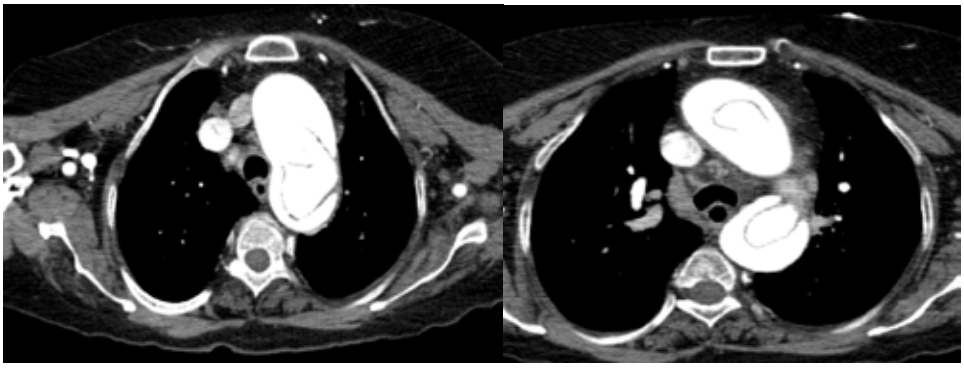

OFTALMİK TUTULUMLU ZONA ZOSTER

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GİRİŞ

Herpes virüs ailesinin bir üyesi olan VARİSELLA ZOSTER VİRUS (VZV) suçiçeği ve zona etkeni olarak acil servislerde sıklıkla karşımıza çıkan bir tanıdır. Suçiçeği ; genellikle çocukluk çağında görülen vücutta kaşıntılı, kırmızı döküntüler ve ateş ile kendini gösteren bulaşıcı bir formudur . Zona formu ise virüsün dorsal kökte saklı kalarak yeniden aktivasyon kazanması ile genellikle ağrılı ve belirli bir dermatoma uygun yerde döküntülü olarak ortaya çıkmasıdır. Varisella Zoster tutulum yerlerine göre en sık göğüs bölgesinde daha sonra servikal ve oftalmik dermatomlarda olarak yerleşim gösterir daha nadir olmakla birlikte alt ve üst ekstremitede bacaklarda, ayaklarda yer alabilir. VZ, kendi kendini sınırlayan bir hastalık olmasıyla birlikte bazı hastalarda sistemik, oküler,nörolojik komplikasyonlar gelişebilir. Posherpetik nevralji ve keratit en sık görülen komplikasyonlardandır (1, 2). Trigeminal sinirin ilk dalı olan oftalmik dalı tutulduğunda herpes zoster oftalmikus ile kendini gösterir.Komplikasyon olarak; blefarit, keratokonjonktivit, sklerit ve akut retinal nekrozu gelişebilir(3).

VAKA

20 yaşında erkek hasta acil servisimize sol gözde ağrı , kaşıntı, ışık duyarlılığı ve görme bulanıklığı ile başvurdu. Şikayetleri bir gün önce başlamış. İlk olarak gözde ve etrafında ağrı olan hasta göz etrafındaki lezyonların bugün oluşması üzerine gelmiş. Sorgulamakla hastanın lens kullanımı , göze herhangi bir travma maruziyeti, kimyasal madde teması ,yabancı cisim öyküsü yok. Diğer sistemik muayeneler doğal . Tanılı ek hastalık yok. Kullandığı ilaç mevcut değil. Bilinen alerjisi yok. Geçirilmiş operasyon yok. Hasta çocukluk çağında suçiçeği geçirdiğini beyan etti. Hastanın diğer tüm sistemik muayeneleri doğal olarak değerlendirildi. Vitalleri : kalp atış hızı 80 atım / dakika, kan basıncı 125/86 mm Hg, solunum 14 solunum/dakika, vücut sıcaklığı 36.8 ° C ve oda havasında oksijen satürasyonu % 98 olarak saptandı.

Göz muayenesinde hafif sol taraflı konjunktival iritasyon mevcuttu. Hastanın göz kapağı özellikle lateral uç kısımda yoğun olarak veziküler lezyonlar vardı .Pupiller refleksleri, ipsilateral ve kontralateral pupiller testinde hafif rahatsızlık mevcuttu.

Hastaya göz hastalıklarından konsültasyon istendi. Değerlendirme acildeki muayenemizle uyumluydu. Hastaya göz kliniğinde antiviral ve topikal steroid başlandı ve erken/sıkı takip önerileri ile evine taburcu edildi.

SONUÇ:

Herpes zoster oftalmicus , trigeminal sinirin oftalmik bölümünün dağılımında tehlikeli ve ciddi bir reaktivasyonudur. Sıklıkla alışılmış bulgularla karşımıza çıksa da gözün daha sık görülen ve benign patolojileriyle kolaylıkla karışabilir. Görme azalması veya göz kızarıklığı olan tüm hastada tam oftalmolajik muayene gereklidir. Tanıyı konulduktan sonra, uygun antiviral ve yardımcı tedavi başlatılmalı ve sık görülen komplikasyonların değerlendirilmesi ve tedavisi için göz konsültasyonu ve sıkı göz hekimi takibi gerekmektedir.

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Resim 1. Hastaya ait Varisella Zoster Virus (Vzv) OftalmiK Tutulum

BU İLAÇ BAŞKA!

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Antimalaryal ilaçlar; yavaş salınımlı anti romatizmal ilaç grubuna dahil, zayıf anti inflamatuar ve immunmodülatuar ajanlardır. Hidroksiklorokin ve klorokin; penisilamin, altın, levamizol ve sistemik steroidlerden daha az toksik etkiye sahip olduklarından ve daha iyi tolere edildiği için romatoloji ve dermatoloji kliniklerinde yaygın olarak kullanılmaktadır. Bu ilaçlar, özellikle son 40 - 50 yıldır romatoid artrit (RA), diskoid lupus eritematozus (DLE), sistemik lupus eritematozus (SLE) ve diğer otoimmün hastalıkların tedavisinde yaygın olarak kullanılmaktadırlar.6.5mg/kg üzeri alımlar toksik kabul edilmektedir.

Acil servise suisid amaçlı 300mg metoklopramid,6 gram hidroksiklorokin alan 22 yaşında kadın hasta 112 ekipleriyle getirildi. Bilinen romatoid artriti olan hastanın başka ek bir hastalığı yoktu. Hasta ortalama 50kg ağırlığındaydı. Gelişinde tansiyon arteriyel:40/20 mmHg, solunum sayısı 10, ateş 36.2 C, nabız:77 atım/dk idi. Glaskow koma skoru 10 olan hasta monitörize edildikten sonra hidrasyon başlandı ve inotrop desteği(norepinefrin)sağlandı. Ekg'si sinüs ritmi, hız 78atım/dk, düzeltilmiş qt si 530ms olarak gözlendi. 114 Ulusal Zehir Danışma Merkezi'ne danışılan hastada potasyum ve magnezyum desteği kan ph değerinin 7.45-7.55 arasında tutulması, methemoglobinemi gelişmesi durumunda metilen mavisi uygulanma önerildi. Hastanın ilk kan gazında ph:7.33, bikarbonat 16mmol/l, potasyum 3.1mmol/l idi. Hastanın takiplerinde hipotansiyonu devam etmesi üzerine adneralin infüzyonu tedaviye eklendi. Santral yol açıldıktan sonra potasyum replasmanı magnezyum replasmanı ve aralıklarla bikarbonat infüzyonu yapıldı. Hemodinamik stabilite sağlanan hasta anestezi ve reanimasyon bölümüne yatırıldı.

Hidroksiklorokinin Kardiyovasküler yan etkileri: Bazen ölümcül kalp yetmezliğine neden olan kardiyomiyopati bildirilmiştir. Kardiyomiyopati belirti ve semptomları ortaya çıkarsa tedaviyi derhal bırakınız. Amerikan Kalp Derneği'nden yapılan bilimsel bir açıklamada, hidroksiklorokin ya doğrudan miyokardiyal toksisiteye neden olabilen ya da altta yatan miyokardiyal disfonksiyonu şiddetlendiren bir ajan olarak belirlenmiştir (AHA 2016]). İletim bozuklukları ve biventriküler hipertrofi teşhisi konulursa kronik toksisiteyi düşününüz. QT aralığını uzatabilir; ventriküler aritmi ve torsades de pointes bildirilmiştir.

Bizim hastamızda da EKG'de uzamış qt aralığı görülmüş olup hastaya semptomlara yönelik tedavi uygulanmıştır. Yüksek dozda Hidroksiklorokin alan hastalarda ölümcül kalp ritimleri görülebileceği unutulmamalı ve hasta yakın takip edilmeli, semptomatik ve koruyucu tedavileri hızlı bir şekilde verilmelidir.

Hidroksiklorokin,İntoksikasyon, EKG.

THIS MEDICINE IS DIFFERENT!

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Antimalarial drugs; they are weak anti-inflammatory and immunomodulatory agents included in the slow-release anti-rheumatic drug group. Hydroxychloroquine and chloroquine; They are widely used in rheumatology and dermatology clinics as they are less toxic and better tolerated than penicillamine, gold, levamisole and systemic steroids. These drugs have been widely used in the treatment of rheumatoid arthritis (RA), discoid lupus erythematosus (DLE), systemic lupus erythematosus (SLE) and other autoimmune diseases, especially in the last 40-50 years. Intakes over 6.5mg/kg are considered toxic.

A 22-year-old female patient who intaken 300 mg metoclopramide and 6 grams of hydroxychloroquine for suicidal purpose was brought to the emergency department by 112 teams. The patient has rheumatoid arthritis and had no other additional disease.

The patient weighted an average of 50 kg. On arrival, her arterial blood pressure was: 40/20 mmHg, respiratory rate was 10, fever was 36,2 C, and pulse was 77 beats/min. The patient with a Glasgow coma score of 10 was monitored, hydrated and supported with inotrope (norepinephrine). ECG was Rhythm, rate was 78 beats/min, and corrected QT was 530ms. The patient has been consulted 114 national poison information center. Potassium and magnesium support, keeping the blood pH value between 7.45-7.55, and applying methylene blue if methemoglobinemia develops were recommended. The patient's first blood gas analysis results were: ph: 7,33 bicarbonate: 16mmol/l, K: 3,1 mmol/l. Adrenalin infusion was added to the treatment beceuse of the continued hypotension during the follow-ups. After the central line was established, potassium replacement, magnesium replacement and intermittent bicarbonate infusion were applied. The patient was admitted to anesthesia and reanimation department after stabilised hemodynamically.

Cardiovascular side effects of hydroxychloroquine : Sometimes, cardiomyopathy which can cause fatal heart failure has been reported. Discontinue treatment immediately if signs and symptoms of cardiomyopathy occur.

In a scientific statement from the American Heart Association, hydroxychloroquine has been identified as an agent that can either directly cause myocardial toxicity or aggravate underlying myocardial dysfunction (AHA 2016). Consider chronic toxicity if diagnosed with conduction disorders and biventricular hypertrophy. Hydoxychloroquinine may prolong QT interval. It has been reported that ventricular aritmia and torsades de pointes may be seen. Prolonged QT interval was also observed in our patient, and the patient was treated symptomatically. It should be kept in mind that fatal heart rhythms can be seen in patients receiving high doses of hydroxychloroquine, and the patient should be followed closely, and symptomatic and preventive treatments should be given quickly.

Hydroxychloroquine, Intoxication, ECG.

GLUTEAL NECROSIS AFTER DICLOFENAC SODIUM INJECTION

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ABSTRACT

Objective: Intramuscular administration of painkillers is very common in emergency clinics. Diclofenac sodium is among the most commonly used analgesics for this purpose. We wanted to emphasize that there is a possibility of necrosis after intra-muscular use of diclofenac sodium and that caution should be exercised when using it.

MATERIALS AND METHODS: A 64-year-old female patient was admitted to the emergency department of our hospital with the complaints of pain, swelling, redness in the right hip, blackening of the skin of the hip and limp in walking. She stated in her story that she used medication for joint pain, that she had an injection in her hips once a day, that she brought the medication she used with her, that she had diabetes for 15 years and that she used oral antidiabetic. The patient, who was determined to have had intramuscular diclofenac sodium for ten days due to joint pain, had a 12x7 cm necrotic tissue area in the right gluteal region. It was immediately debrided. Routine laboratory tests were sent. She stated that her pain decreased immediately after debridement. The patient was then hospitalized to be followed in the plastic surgery clinic. Serial debridements and wound care were performed in the following days. The defect area was repaired with a fasciocutaneous flap due to the formation of sufficient granulation tissue in the wound area of the patient.

RESULTS: There was no abnormality in her vital signs when she applied to the emergency clinic. As a result of the routine laboratory examinations of the patient, leukocytosis, mild elevation in liver function tests, elevated CRP, elevated blood sugar level and slightly elevated urea, creatinine levels were detected. Among the clinical findings, there were edema, erythema, black necrotic area (12x7 cm) in the right gluteal region and limited right lower extremity movements. After the repairing with flap, both clinical and laboratory findings of the patient improved.

CONCLUSION: Patients with swelling, redness, bruising, tenderness, and dark discoloration in the gluteal region after injection should be given careful attention, they should be questioned for diclofenac sodium, and worse outcomes should be prevented by debridement as early as possible. It should be kept in mind that early debridement will both help improve the patient's complaint of pain and contribute positively to recovery, as it will remove drug residues and fat necrosis at the injection site.

KEYWORDS: Diclofenac sodium, gluteal region, intramuscular injection, necrosis.

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BIOTERRORISM AND HEALTH WORKERS

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Bioterrorism is the deliberate use or threat of using biological agents to cause disease or death among humans or other living things. Plants, animals, and the human population are considered possible bioterrorist targets. Attacks targeting military structures are considered 'biological warfare', while attacks targeting civilians are considered 'bioterrorism' (1). The use of biological weapons is as old as human history. The first known war with biological weapons was fought by the Tatars in the 14th century, during the siege of Kaffa (2). Biological weapons were also used in World Wars (I. and II.). Biological weapons are accepted as the weapon of the future by all the countries of the world and studies are carried out on these weapons (3). Weapons used for bioterrorism; It consists of four important components: biological agents, mail, and transport systems (rockets, air, rail) (4). The most effective way to use biological warfare agents is the aerosol route. Decontamination of contaminated agents is one of the preventive measures that should be given top priority. Using a protective mask that can be easily worn and carried with them for personal protection will be effective against biological attacks. The use of N-95 masks and Level-D Personal Protective Equipment (long gowns, closed shoes, safety glasses, ear protection, surgical mask, suitable gloves) for the decontamination of contaminated persons may provide adequate protection. If the biological agent is unknown, Level-C Personal Protective Equipment containing a mask with a HEPA filter cartridge should be used (5). Before encountering bioterrorism, health personnel should be given training on the clinical, diagnosis, prophylaxis, treatment, transport of samples, prevention and precautions, approach to the patient and protection of healthy individuals of diseases that will occur with biological agents. (6). Considering the geographical and geopolitical position of our country, it is imperative to take measures for the risk of bioterrorism. In a study conducted on bioterrorism awareness and in which healthcare professionals participated, it was seen that 87% did not have enough information about the subject. Considering the magnitude of the destructive dimension that biological weapons can cause in society, it is surprising that the people who will fight are not adequately trained. Healthcare professionals should be included in the discussions on defense strategies, and necessary support should be given to planning and exercises. It is important to raise the awareness of those working in the health field first and then the public appropriately.

KEYWORDS: Bioterrorism, Health Workers, Biological agents

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INVESTIGATION OF THE EFFECTIVENESS OF THE GRACE AND QSOFA-T SCORES FOR MORTALITY PREDICTION IN ACUTE CORONARY SYNDROME

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ABSTRACT

Objective: Chest pain constitutes a significant portion of all emergency department admissions. Approximately 5%–20% of patients who enter the emergency department with chest pain are diagnosed with acute coronary syndrome. A reliable predictor is needed for ACS patients with high mortality risk. Therefore, we investigated its contribution to prognostic accuracy by adding cTnI concentration (as a fourth parameter) to the qSOFA score. The precision of the qSOFA-T score obtained by adding Troponin to the qSOFA score has never been investigated in any previous study. This study aimed to evaluate the effectiveness of the GRACE score and qSOFA-T score for in-hospital mortality estimation in ACS Patients (1,2)

METHODS: Patients admitted to the emergency department with acute coronary syndrome were evaluated consecutively. After the exclusion criteria, 914 patients with non-STEMI were included in the study. The GRACE and qSOFA scores were calculated and investigated its contribution to prognostic accuracy by adding cTnI concentration to the qSOFA score. This is an observational and retrospective study. The threshold value of the investigated prognostic markers was calculated by receiver operating characteristic curve analysis.

RESULTS: Of the 914 patients, 628 (68.7%) were male. The mean age was 52.95 years. The number of in-hospital deaths was 31 (3.4%). The mean GRACE score in the in-hospital deceased group was 149.77. In the survivor group, it was found to be 103.3. The mean qSOFA-T score for the in-hospital-deaths group was 2.03. It was calculated as 1.09 for the survivor group. In our study, the area under the ROC curve was 0.840 and the cut-off value was 139.5. The area under the ROC curve was found to be 0.826, with a cut-off value of 1.5.

CONCLUSION: The qSOFA-T score, obtained by adding cTnI level to the qSOFA score, had excellent discriminatory power for predicting in-hospital mortality. The AUC of the GRACE score was 0.840, and the AUC of the qSOFA-T score was 0.826; both scores had excellent discriminatory power for predicting in-hospital mortality. (0.8 ≤ AUC <0.9, an excellent). In estimating the qSOFA-T score as a predictor of in-hospital mortality, the cut-off value was 1.5, and the mean value was 2.03. Care should be taken if the calculated qSOFA-T score is two or higher. This study concludes that patients with a high qSOFA-T score, which can be calculated easily, quickly, and inexpensively, are at a higher risk of short-term Mortality (3-5).

KEYWORDS: Acute coronary syndrome, qSOFA score, Mortality, GRACE score, cTnI

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Table

Table. ROC analysis comparison of scores

Variable	AUC	%95 CI	Sensitivity	Specificity	Threshold
GRACE Score	0,840	(0.782-0.899)	0,710	0,831	139,5
qSOFA-T Score	0,826	(0.743-0.91)	0,710	0,928	1,5

Figure:

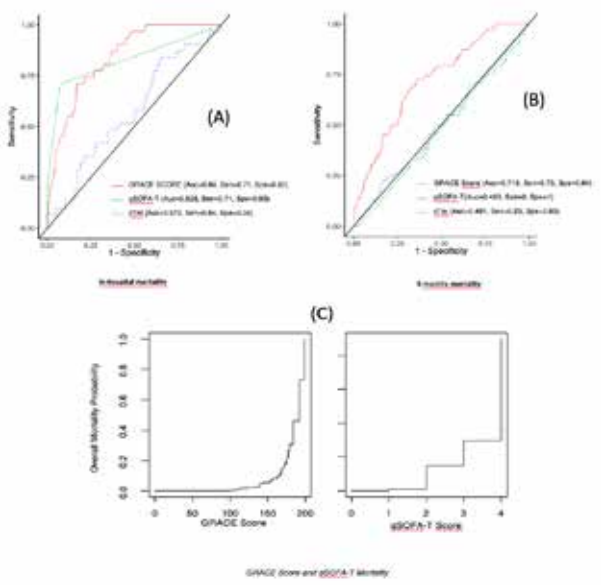


Figure. ROC curve for GRACE and qSOFA-T score

FRACTURE OF THE HYOID BONE DUE TO A HANGING OF ROPE SUSPENSION; CASE REPORT

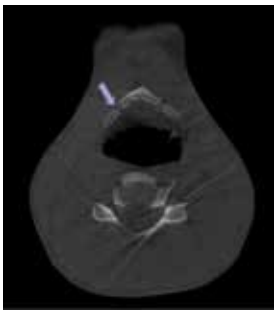
İNTRODUCTION

The hyoid bone is a "U" shaped mobile bone located in the anterior aspect of the neck at the level of the cervical third vertebra, between the mandible and the thyroid cartilage (1). Isolated hyoid bone fracture due to blunt trauma is rare, except for hanging and strangulation, and accounts for 0.002% of all fractures (2).

CASE REPORT

A 29-year-old male patient was brought to our emergency department due to respiratory distress after hanging with a rope. On arrival, there was gcs:3 unconscious gasping breathing. On physical examination, there was a 15 cm telem trace on the anterior face of the neck (pictures 1). Monitoring was provided and endotracheal intubation was performed. Blood gas was determined as pH:7.11 pco2:78 lac:9.8. The blood gas table was compatible with upper airway obstruction. After the airway was established and vital signs were stabilized, imaging was performed. In the neck and cervical CT, there was a fracture appearance in the hyoid bone (pictures 2). Emergency surgery was not considered for the patient who was consulted with otolaryngology. He was followed up in the intensive care unit.

Pictures 1: telem trace on the anterior face of the neck



Pictures 2: Fracture appearance in the hyoid bone in CT

DISCUSSION

Hyoid bone fracture typically occurs in association with drowning or hanging (3). Diagnosis is typically made by evaluating clinical findings with plain X-ray, computed tomography, direct laryngoscope, or surgical observation (4). It is clinically characterized by signs of upper airway obstruction. Especially respiratory acidosis and concomitant lactic acidosis are seen in blood gas.

CONCLUSSION

If there is a risk of not protecting the airway in hyoid bone fractures due to blunt trauma, considering the patient's clinical condition, a permanent airway should be established first. Then, he should be followed up in the intensive care unit with mechanical ventilation support. Conservative treatment is generally recommended in closed hyoid fractures.

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BİRİNCİ BASAMAKTA TEDAVİ EDİLEBİLECEK HASTALARIN ACİL YEŞİL ALANDA TEDAVİ EDİLMESİYLE OLUŞAN MALİYET KIYASLAMASI

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ÖZET

Acil servis, acil tıbbi yardım ve tedavi gerektiren hastaların başvurduğu ve bu birimdeki hekim ve diğer sağlık personellerinden hizmet aldığı, sağlık kuruluşlarının içinde en çabuk ulaşım sağlanabileceği yerde konumlandırılan ve 365 gün 24 saat hizmet veren sağlık birimleridir. Birinci basamak hekiminin; yaş, cinsiyet ve hastalık ayırt etmeksizin bireysel, kapsamlı, sürekli ve bütüncül sağlık hizmeti vermesidir. Dolayısıyla bireylerin sağlık sistemiyle ilk temas noktası olarak planlanmıştır. Malatya Eğitim ve Araştırma hastanesine 20.09.2022 tarihinde (1 gün) gelen tüm hastalar değerlendirilmiştir. Acil servise 1510 hasta başvurmuştur. Yeşil alandan hizmet alanların içinden 239 hasta acil yeşil alanda çalışmakta olan aile hekimliği uzmanı tarafından muayene edilip değerlendirilmiştir. Bu 239 hastanın içinden vital bulguları stabil olup, pansuman, sütürasyon, tıbbi görüntüleme ve laboratuvar tetkikleri ve benzeri acil müdahalelere ihtiyacı olmayan ve semptom itibari ile en hafif kliniğe sahip, muayene sonrası reçete yazılarak taburcu edilecek 197 hasta belirlenmiştir. Yeşil alana başvuran hastaların yaklaşık olarak %82,4'ü birinci basamakta alacakları tıbbi bakım ve sağlık hizmeti ile iyileşme sağlayabileceklerdir. Yaptığımız çalışmada da yapılan değerlendirmeler sonucunda 197 hastanın kişi başı 48,17 TL olarak tespit edilmiştir.

GİRİŞ

Acil servis, acil tıbbi yardım ve tedavi gerektiren hastaların başvurduğu ve bu birimdeki hekim ve diğer sağlık personellerinden hizmet aldığı, sağlık kuruluşlarının içinde en çabuk ulaşım sağlanabileceği yerde konumlandırılan ve 365 gün 24 saat hizmet veren sağlık birimleridir (1). Acil servislerde müdahale edilmediği taktirde hayati tehlike oluşturan semptomlar ve durumlara ek olarak kaza, travma ve adli durumlara da sağlık hizmeti verilir. Yani acil servisteki verilen tıbbi bakımın esas amacı, hastada yeni ve ani gelişen beklenmedik bir hastalık ve/veya yaralanma durumlarında hastayı sakatlık ve ölümden korumaktır (2). Hastalar acil servislere kendi istekleriyle başvurabildiği gibi ambulans ve diğer acil yollarla da kendi iradeleri dışında da başvurabilirler. Dolayısıyla acil servise başvuru süre ve sıklığı kısıtlanamaz (3)which addressed their reasons for consultation and any previous consultation with a general practitioner (GP. Bu durum acil sağlık hizmetine gerçekte ihtiyacı olmayan hastaların başvurmalarına sebep olmakta ve acil servislerin yoğunluğunu arttırmaktadır.

Birinci basamak sağlık hizmetlerinin görev ve stratejileri ise, 1978 Alma ata bildirgesiyle belirlenmiş ve zaman içinde geliştirilmiştir. Bunlardan en önemlileri, birinci basamak hekiminin; yaş, cinsiyet ve hastalık ayırt etmeksizin bireysel, kapsamlı, sürekli ve bütüncül sağlık hizmeti vermesidir. Dolayısıyla bireylerin sağlık sistemiyle ilk temas noktası olarak planlanmıştır (4). Birinci basamağın ilk temas noktası olması hem hasta için hem de sağlık sistemi için ciddi önem taşır. Güçlü ve etkin birinci basamak hizmeti kişinin tedaviye ve sağlık bakımına daha kısa yoldan ulaşmasını sağlayarak ileri hastalık evresinden kurtarır. Bununla beraber bir diğer önemli faydası da sağlık sistemine maliyet etkin bir yol oluşturmasıdır (5)health care services are organized in form of primary, secondary and tertiary care. The primary care services are located at center of the health services. The international researchs show that health care services which in well trained family physicians worked, provides more efficient health care both economicly and clinically success than passive ones. Primary health care services are multidimensional systems. The public health problems are resolved more quickly and easily in countries which had strong primary care infrastructure, so that health inequalities are prevented. In general, transfer rates to secondary and tertiary care fall and family physicians provide satisfactory answers to the majority of patients in countries with strong primary care. In addition, the countries which have strong primary care and lowest share of health expenditures in GNP are more cost-effective. The performance of countries' primary health care systems are evaluated according to quality, equality and cost, in study named as \"The Quality And Cost Of Primary Care İn Europe\" (QUALICOPC. Birinci basamağı güçlü olan ülkeler değerlendirildiğinde, bu ülkelerde birinci basamaktan ikinci ve üçüncü basamağa sevk oranları %15 kadar azdır. Ayrıca bu ülkelerde önlenebilir hastalıklara bağlı hastaneye yatış oranlarının çok daha düşük olduğu, anne-bebek ölümlerinin daha az olduğu, başta kanserler olmak üzere solunumsal ve kardiyolojik hastalıklara bağlı ölümlerin önemli ölçüde azaldığı bir çok araştırma ile doğrulanmıştır (6–9)cross-sectional, time-series analysis of secondary data using fixed effects regression.\nDATA COLLECTION/EXTRACTION METHODS: Secondary analysis of public-use datasets. Primary care system characteristics were assessed using a common set of indicators derived from secondary datasets, published literature, technical documents, and consultation with in-country experts.\nPRINCIPAL FINDINGS: The strength of a country's primary care system was negatively associated with (a.

Yapılan çalışmada acil servise başvuran hastaların birinci basamakta değerlendirilip sağlık hizmeti alıp alamayacağını incelemektir. Acil servislerde var olan yoğunluğun sebebini incelemek için başvuran hastalar değerlendirilmiştir. Birinci basamakta sağlık hizmeti alarak iyileşebilecek hastaların acil servisi seçmelerinin acilin yoğunluğunu arttırması kaçınılmaz gerçekken, maliyet açısından hem bireylere hem de sağlık sistemine yükü yaklaşık olarak değerlendirilmiştir.

GEREÇ VE YÖNTEM

Malatya Eğitim ve Araştırma hastanesine 20.09.2022 tarihinde (1 gün) gelen tüm hastalar değerlendirilmiştir. Acil servise 1510 hasta başvurmuştur. Bu hastaların ayaktan başvuranlar olduğu gibi sevk, ambulans ve adli birimlerce başvuranlarda dahildir. Ayaktan başvuran hastaların hepsine acil triaj değerlendirilmesi yapılmıştır. Başvuran hastaların 639 tanesi acil yeşil alan triaj kodu ile değerlendirilmiş ve tıbbi hizmetini yeşil alandan almıştır. Yeşil alandan hizmet alanların içinden 239 hasta acil yeşil alanda çalışmakta olan aile hekimliği uzmanı tarafından muayene edilip değerlendirilmiştir. Bu 239 hastanın içinden vital bulguları stabil olup, pansuman, sütürasyon, tıbbi görüntüleme ve laboratuvar tetkikleri ve benzeri acil müdahalelere ihtiyacı olmayan ve semptom itibari ile en hafif kliniğe sahip, muayene sonrası reçete yazılarak taburcu edilecek 197 hasta belirlenmiştir. Bu hastaların intramüsküler veya intravenöz tedaviye ihtiyacı olacak akut şiddetli ağrı, vitalleri bozacak sıvı kaybı gibi klinik tabloları mevcut değildir.

Çalışmanın evrensel kümesi: 20.09.2022'de MEAH acil servise başvuran tüm hastalar.

Dahil edilme kriterleri: Acil yeşil alan koduna sahip olup muayene ve reçete tedavisi ile iyileşecek vital bulguları stabil, laboratuvar ve görüntülemeye ihtiyacı olmayan ve yeşil alanda aile hekimliği uzmanı tarafından muayene edilen hastalar.

Dışlanma kriterleri: Acil sarı, kırmızı, sarı travma koduna sahip olan, vitalleri stabil olmayan, laboratuvar veya görüntülemeye ihtiyacı olan, intramüsküler veya intravenöz tedavi ihtiyacı tüm hastalar.

BULGULAR

Tablo 1. 20.09.2022 tarihinde acile başvuran tüm hastaların triaj gruplaması.

TRİAJ KODU	HASTA SAYISI	HASTA YÜZDESİ
YEŞİL	639	%42,31
SARI / SARI TRAVMA	835	%55,29
KIRMIZI	36	%2,38
SİYAH	0	%0
TOPLAM	1510	%100

MEAH acil servise 20.09.2022 tarihinde başvuran tüm hastaların %42,31'u yeşil alan triaj koduna sahiptir.

Tablo 2. En hafif kliniğe sahip olduğu tespit edilen hastaların demografik bilgileri.

Yaş (ortalama)	36,8 (min:18, max:77)
Cinsiyet	
Erkek	108 (%54,8)
Kadın	89 (%45,2)
Alınan tanı	
Akut sistit	6 (%3)
Alerjik rinit	3 (%1,5)
Baş ağrısı	9 (%4,5)
Bel ağrısı	25 (%12,7)
Dismenore	5 (%2,5)
Eklem ağrısı, miyalji	17 (%8,6)
Hafif ishal	21 (%10,7)
Karın ağrısı	8 (%4)
Konjonktivit	2 (%1)
Reçete için başvuru	27 (%13,7)
Üst solunum yolu enfeksiyonu	74 (%37,5)

Tablo 3. Akgün HBYS sgk maliyet verileri ve 1. Basamak ortalama sgk maliyet tahmini

	Sosyal güvenlik kurumundaki maliyet
Acil Yeşil Alanda belirlenen 197 hasta	9489,78 TL (ortalama kişi başı:48,17 TL)
1. Basamakta herhangi 197 hasta	0 TL (ortalama kişi başı:0 TL)

Çalışmaya dahil olan hastaların %54,8'i erkek olup (n=108), %45,2'si kadındır (n=89). Hastaların yaş ortalaması 36,8'dır (min:18, max:77). Aldıkları tanıya göre incelendiğinde en çok izlenen tanı Üst solunum yolu enfeksiyonu olup %37,5'dir (n=74). İkinci olarak en çok başvuran hasta ise kronik veya kronik olmayan ilaçlarını yazdırmak için başvuran hastalar olup %13,7'dir (n=27). Üçüncü en çok izlenen tanı ise bel ağrısıdır %12,7 (n=25).

Bu hastaların acil yeşil alanda bakıldığı zaman Sosyal güvenlik kurumu'na maliyeti çalışmanın yapıldığı tarih itibariyle toplamda yaklaşık 9489,78 TL olup kişi başı maliyet ortalama 48,17 TL olarak tespit edilmiştir. Bunun yanısıra 1. Basamakta muayene edilen hastaların muayene ücretleri Sosyal güvenlik kurumu ödemesi ise 0 olarak tespit edilmiştir. Sosyal güvenlik kurumu birinci basamakta hekim muayenesine karşılık ödeme yapmamaktadır (10).

TARTIŞMA

Sağlık hizmeti ve sağlık sistemi her ülkede olduğu gibi ülkemizde de sosyal yaşamı ve ekonomik durumu yakından etkileyen en önemli faktörlerdendir. Ülkelerin sağlık hizmeti için ayırdıkları bütçenin büyüklüğünün önemli olması kadar ayrılan bütçenin kendi içinde en uygun koşullarda kullanılması da ayrıca önem taşımaktadır.

Çalışmada acile başvuran hastaların %36,9'u acil yeşil alan triaj koduyla değerlendirilmiştir. Yapılan bir çalışmada Civaner ve ark. acile başvuran gerçek acil hastaları %52,3 olarak saptadı (11). Bir başka çalışmada, başvuran hastaların yaklaşık %19,5'inin acil hasta kriterlerine uygun olmadığı bulunmuştur (12). Atabek ve ark'nın çocuk acilde yaptıkları başka bir çalışmada ise hastaların %37'sinin acil olmayan durumlar olduğu tespit edilmiştir (13). Hastaların acil servise uygun olup olmadığını belirleyen kriterlerde dikkatli olunmalıdır çünkü bazı kriterleri doğru değerlendirememek yanlış sonuç verebilir.

Aldıkları tanıya göre incelendiğinde en çok izlenen tanı Üst solunum yolu enfeksiyonu olup %37,5'dir (n=74). İkinci olarak en çok başvuran hasta ise kronik veya kronik olmayan ilaçlarını yazdırmak için başvuran hastalar olup %13,7'dir (n=27). Üçüncü en çok izlenen tanı ise bel ağrısıdır %12,7 (n=25). Tanıya göre yapılan bir çalışmada acile başvuran hastalardan en çok tanı alan reçete yenileme sebebi olup bizim çalışmamıza benzer bir orana sahiptir (11). Fakat bizim çalışmamızda reçete yenilemeden daha fazla oranda başvuru yapan tanı üst solunum yolu enfeksiyonudur.

Çalışmadaki en önemli amaç ikinci basamaktaki acil yeşil alanlara yapılan başvuruların birinci basamakta çözülebileceğini tespit etmek ve bu iki durumun maliyet kıyaslamasını yapmak olduğundan çalışmaya ikinci basamakta çalışan birinci basamak uzman hekiminin değerlendirilmesi üzerine temellendirilmiştir. Yeşil alana başvuran hastaların yaklaşık olarak %82,4'ü birinci basamakta alacakları tıbbi bakım ve sağlık hizmeti ile iyileşme sağlayabileceklerdir. 2020'de yapılan acile başvuran 1026 hastayla yapılan bir çalışmada bizim çalışmamızdan daha düşük bir sonuç bularak hastaların yaklaşık %70,3'ü acil olmayan hasta olarak değerlendirilmiştir (14).

Birinci basamak ve ikinci basamak sosyal güvenlik kurumu ödeme yönetmenliğine göre birinci basamakta muayene ücreti yoktur fakat ikinci basamakta acil servis yeşil alan (müdahalesiz) muayene ücretleri yaklaşık 40-50 TL arasında değerlendirilmektedir, birinci basamakta sadece yazılan reçete için ücret çıkmaktadır (reçete ücreti=3TL) (10). Yaptığımız çalışmada da yapılan değerlendirmeler sonucunda 197 hastanın kişi başı 48,17 TL olarak tespit edilmiştir. Fakat bu 197 hasta birinci basamakta muayene olsa muayene ücreti çıkmayacaktır. Bu durum sosyal güvenlik kurumu üzerinde ciddi bir yük oluşturmaktadır. Sadece 1 günde sadece 1 uzman hekimin baktığı belirlenen 197 hastanın sosyal güvenlik kurumu üzerine toplam yükü yaklaşık 9489,78 TL'dir. Bu durum genellenince oluşabilecek yükün büyüklüğü tahmin edilebilmektedir. Yukarıdaki verilere göre acile başvuran hasta sayısı ve sosyal güvenlik kurumu üzerindeki maddi yükün %70-80'i bilinçli yönlendirme ile azaltılabilir.

SONUÇ

Sosyal güvenlik kurumu üzerindeki maddi yükün düzelmesi için en önemli faktörler; toplumun sağlık okuryazarlık düzeyini arttırmak, bu profildeki hastaların birinci basamağa yönlenmesini sağlamak, birinci basamağın daha etkin ve efektif olmasını sağlamaktır. Bu durum hem maliyet etkin hem de acillerin hasta sayılarının azalmasına ve gerçek acil hastalarının daha iyi hizmet almasını sağlayacaktır.

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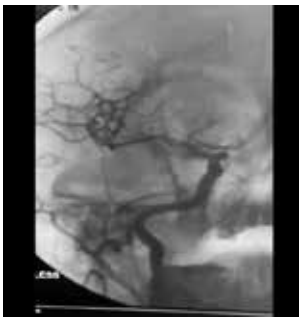
AKUT INTERNAL KAROTİS ARTER (ICA) OKLÜZYONUNA BAĞLI GELİŞEN İNMENİN ENDOVASKÜLER TEDAVİSİ

Mustafa Uçar , Muhammed İkbal Şaşmaz

GİRİŞ: Serebrovasküler hastalıklar mortalite ve morbiditenin en önemli sebeplerinden olup Avrupa İnme Organizasyonu (ESO) verilerine göre her yıl Avrupa'da 1.1 milyon insan inme yaşamaktadır (1). Girişimsel yöntemlerin gelişmesi ile akut iskemik inme tedavisinde mortalite ve morbidite üzerinde olumlu sonuçlar elde edilmeye başlanmıştır.Vakamızda aniden bayılan hastada sağ İCA oklüzyonu saptanması ve endovasküler tedavisinden bahsedilmektedir.

VAKA: 63 yaşında erkek hasta kahvehanede otururken aniden bayılmış.112 hastaya ulaştığında hastanın bilinci konfü ve sol hemiplejisi varmış. Acil serviste yapılan FM ve nörolojik değerlendirme sonrasında santral görüntüleme istendi. Difüzyon MR'da beyin sağ hemisferde, MCA sulama alanında yaygın difüzyon kısıtlılığı saptandı. Büyük damar oklüzyonu düşünülen hasta endovasküler tedavi amacıyla merkezimize yönlendirildi. Hastamız önceden bilinen bir hastalığı olmayan aktif sigara içicisidir. Acil serviste değerlendirilen hastanın bilinci konfü olup sol hemiplejisi mevcuttu. EKG' de SR anterior derivasyonlarda nonspesifik t negatifliği vardı. Acil serviste yapılan yatakbaşı Eko da belirgin patoloji saptanmadı ancak yapılan doppler USG de sağ karotis internada akım saptanmadı. Şikayet başlangıcından yaklaşık 150 dk sonra acil kateter laba alındı ve yapılan karotis anjiografide sağ carotis internanın proksimalden oklüde olduğu saptandı (resim 1). Trombüs aspirasyon kateteri ile mükerrer aspirasyonlar sonrası İCA ve MCA da tam açıklık saptandı (resim 2) ve işlem sonlandırıldı. Kontrol beyin BT çekildi. Kanama izlenmedi. 2 gün yoğun bakımda 3 gün serviste takip edilen hasta MRS:0 olarak taburcu edildi.



Resim 1: ICA total tıkanıklığı **Resim 2: İşlem sonrası İCA ve MCA da tam açıklık**

TARTIŞMA: İnme tüm dünyada olduğu gibi ülkemizde de önemli bir mortalite ve morbidite nedenidir. Tedavisinde uzun yıllar trombolitik ajanlar kullanılmıştır ancak hastamızda olduğu gibi büyük damar oklüzyonlarında tedavinin etkinliği maalesef düşüktür. Günümüzde endovasküler tedavi yöntemlerinin de kullanımının artması ile daha fazla yüz güldürücü sonuçlar elde edilmektedir, güncel kılavuzlar da özellikle anterior dolaşımın etkilendiği büyük damar oklüzyonlarında mekanik trombektomiyi güçlü bir şekilde önermektedirler (2). Özellikle semptom başlangıcından 6 saat içinde gerçekleştirilen işlemlerle daha düşük MRS elde edilmektedir. Ancak uygun hastalarda işlem semptomların başlangıcından 6-24 saat sonrada gerçekleştirilebilir (3). Bu hastada acil serviste yatakbaşı eko ve usg yapılmış olması hastamızın ayırıcı tanısında büyük rol almıştır. Bu tanı yöntemlerinin acil serviste uygulanabilirliliğinin arttırılması ile hastaların uygun tedaviye daha hızlı sevk edilmesi sağlanacaktır.

KAYNAKLAR

1-)European Stroke Organisation (ESO) guidelines on mobile stroke units for prehospital stroke management

2-)European Stroke Organisation – European Society for Minimally Invasive Neurological Therapy expedited recommendation on indication for intravenous thrombolysis before mechanical thrombectomy in patients with acute ischaemic stroke and anterior circulation large vessel occlusion

3-)European Stroke Organisation (ESO) – European Society for Minimally Invasive Neurological Therapy (ESMINT) Guidelines on Mechanical Thrombectomy in Acute Ischaemic StrokeEndorsed by Stroke Alliance for Europe (SAFE)

GASTROİNTESTİNAL SİSTEM KANAMALARININ NADİR BİR SEBEBİ: KIRIM KONGO KANAMALI ATEŞİ

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ÖZET

Kırım-Kongo kanamalı ateşi (KKKA) ülkemizde özellikle Mayıs-Eylül ayları arasında görülebilen keneler tarafından bulaştırılan viral hemorajik bir hastalıktır. Ani başlayan yaygın vücut ağrısı ateş karaciğer fonksiyon testleri (KCFT) bozuklukları, bulantı, kusma, ekimoz peteşi ve kanama bulguları, trombositopeni ve lökopeni ile seyreder. Asıl olarak destek tedavisi uygulanmakla beraber bir antiviral olan ribavirin de kullanılmaktadır. Bu vakamızda dış merkezden gastrointestinal sistem (GİS) kanaması ön tanısıyla sevk edilen hastada görülen KKKA enfeksiyonu inceleyeceğiz.

GİRİŞ

Kırım-Kongo kanamalı ateşi(KKKA) keneler tarafından taşınılan ateş ve kanama ile karaterize bir zoonotik hastalıktır. İlk olarak 1944 yılında kırım bölgesinde bulunan Sovyet askerlerinde görülmüş ve Kırım ateşi olarak adlandırılmıştır. İlerleyen yıllarda Kongo'da benzer şikayetleri olan bir hastadan virüs izole edilmiş, Kongo virüs olarak adlandırılmıştır. Sonrasında iki hastalığın aynı olduğu anlaşılmış ve Kırım-Kongo Kanamalı Ateş (KKKA) adını almıştır(1).

Enfeksiyonun klinik yansıması, halsizlik kırgınlık gibi semptomlardan(%88) hemoraji ve multi organ yetmezliğine kadar değişmektedir. Ülkemizde 2002-2007 arasında görülen 1820 vaka ile yapılan analizde hastaların %89 unda ateş %68 inde baş ağrısı %92 oranda halsizlik, %70 oranda miyalji %65 bulantı % 43 kusma % 23 hemoraji görülmüş(2). Bunların yanında nörolojik semptomlar, dispne(genelde pulmoner hemorajiye sokonder), hepatomegali, diyare, eklem ağrıları, ciltte peteşi ve ekimozlar da görülebilmektedir.(3)

Laboratuvar bulgularında; ilk göze çarpan patolojiler trombositopeni, lökopeni ve artmış karaciğer enzim değerleridir. Kreatinkinaz ve LDH değerlerinde yükseklik, retikülositopeni indirekt biluribin artışı da izlenebilir.

KKKA primer olarak hastalıklı kenelerin konak insanı ısırması ile veya hasta insanın kan/vucut sıvıları ile doğrudan temas ile bulaşır. Hastalığın enkübasyon periyodu bulaş yoluna göre 1 ila 13 gün arasında değişmektedir.

Tedavi olarak kanıtlanmış bir antiviral tedavi bulunmamaktadır. Öncelikle destek tedavi önerilmektedir. Antiviral tedavi olarak in-vitro olarak ribavirin tedavisi olumlu gözükse de(4) hastalarda viral yükü düşürmede ve mortalite üstüne olumlu bir fayda görülmemiştir(5).

VAKA SUNUMU

62 Y bilinen ek hastalığı olmayan erkek hasta 15 Temmuz 2022 tarihinde ilçe devlet hastanesinden gastrointestinal sistem kanaması ön tanısıyla Kütahya Sağlık Bilimleri Üniversitesi Evliya Çelebi EAH Acil Servisine gönderildi. Hasta geldiğinde vitallerinde: Kan basıncı 100/60 mmHg vücut sıcaklığı 38.3 santigrat derece solunum sayısı 22/dk nabız 105 vuru/dk izlendi. Bilinç açık basit emirleri yerine getirebiliyor ancak hafif konfüzyonu mevcuttu. Batın muayenesi olağan, karında hassasiyeti yoktu. Yapılan batın görüntülemesinde hepatosplenomegali bulgusu izlenmedi. Hastanın yapılan rektal tuşesinde diyare ile uyumlu gaita bulaşı şeklinde izlendi. Hastanın dış merkezde takılan nazogastrik sonrasında az miktarda siyah kahve telvesi şeklinde geleni vardı. Hastaya dış merkezde pantoprozol 80 mg IV bolus şeklinde verilmiş ve eritrosit süspansiyonu takılı şekilde tarafımıza teslim edildi.

Hastanın öyküsü alındığında herhangi bir antikoagülan veya non steroid anti enflamatuar (NSAİ) kullanım öyküsü bulunmadığı öğrenildi. Ailesinde veya yakınlarında benzer şikayetleri olan kimse yoktu. Kanama diyatezi ile ilgili bilinen bir hastalık tarif etmiyordu. Daha önce hastaneye başvurup başvurmadığı sorgulandığında yaklaşık 5 gün önce ilçe hastanesi acil servise halsizlik kas ağrısı şikayetleriyle gittiği öğrenildi. 5 gün önceki değerlerinde ALT olağan AST 80IU/L, lenfopenisi mevcut ayrıca trombosit değeri de 147 bin izlenmiş. Crp 100 olarak görülmüş. O süreçte herhangi bir rektal hemoraji tarif etmiyormuş. Oral amoksisilin-klavulanik asit ve parasetamol ile hasta taburcu edilimiş.

5 gün sonra 15 Temmuz 2022'de şikayetleri arttığında kanlı kusma ve siyah renkte ishal şikayeti başladığında hasta tekrardan ilçe devlet hastanesi acil servise başvurmuş. Hastanın GIS kanama hikayesi ve rektal tuşesinde melena görülmesi üzerine nazogastrik takılarak GIS kanaması ön tanısı ile tarafımıza sevk edilmiş.

Hastadan alınan kan tetkiklerinde pansitopenisi (Hb:11.5 gr/dL, lökosit sayısı: 3530/mm3 , trombosit sayısı: 22000/mm3) izlendi. ALT: 559IU/L(ref:10-40) AST: 1439IU/L (ref:10-40) LDH: 3388IU/L izlendi. APTT değeri hafif uzamış olarak 48.8 sn (ref25-40) olarak izlendi. Hastanın konfüzyonu ve trombositopenisi olması üzerine trombotik trombositopenik purpura(TTP) ve diğer hemolitik anemileri ve trombositopeni sebeplerini araştırmak için direkt ve indirekt coombs ve retikülosit sayısı testi istendi. Coombs testi negatif ve retikülositopeni izlendi. . Toksoplazma CMV ve Rubella seroloji sonuçları da negatif izlendi. Sonrasında istenen Kreatin Kinaz (CK) değeri1720 IU/L olarak izlenmesi üzerine hastaya kendisinde kene görüp görmediği soruldu. Hastanın yaklaşık 5 gün önce uyluk iç yüzünden kendi çabası ile kene çıkardığı öğrenildi. Uyluk iç bölge incelendiğinde 1cm çapında kızarıklık dışında anormal patoloji izlenmedi.

Kene öyküsünün olması klinik ve laboratuvar bulguları ile hastaya KKKA ön tanısı konuldu. İç hastalıları ve enfeksiyon hastalıkları konsültasyonu sonucu hastaya acil serviste 2 gr Ribavirin oral olarak başlandı. Hasta için trombosit süspansiyonu istemleri yapıldı. IV hidrasyona devam edildi. Hastanın KKKA tedavisi için kan merkezi bulunan daha büyük bir merkeze sevki sağlandı.

Hastanın sevk edildiği Bursa Şehir Hastanesindeki ilgili hekim ile görüşüldüğünde hastanın Bursa Şehir Hastanesinde 1 ünite trombosit ve 1 ünite Eritrosit Süspansiyonu(ES) aldığı, 10 günlük ribavirin ve tedavisi devam ettiği, 2 gün sora GIS kanamasının durduğu ve yatışının 11. Günü şifahen taburcu olduğu öğrenildi.

TARTIŞMA

KKKA ülkemizin de içinde bulunduğu geniş bir coğrafyada görülen, yüksek mortalite oranına sahip olan sert kabuklu Hyalomma cins keneler tarafından taşınan yaklaşık %30 oranında mortalitesi olan viral hemorajik bir hastalıktır(6). Kuzey yarımkürede mayıs ile eylül ayları arasında ılıman bölgelerde daha yoğun olarak izlenmektedir.

Hastalığın primer bulaşma şekli bunyavirüs ile enfekte olan kenelerin insanları ısırması ile olur. Çıplak elle kenelerin çıkarılması ve ezilmesi ile de enfeksiyon bulaşabilmektedir. Ayrıca vücut sıvıları ve kan ile de insandan insana geçiş de izlenmektedir. Vakamızda hayvancılık ile uğraşan hastanın ne zaman yapıştığını bilmediği keneyi vücudundan kendisinin çıkarması sonrası şikayetleri yoğunlaştığı izlenmektedir.

Hastalık Afrika, Batı Asya, Ortadoğu ve Güneydoğu Avrupa'da izlenmektedir(7). Küresel iklim değişikliği, canlı hayvan taşımacılığı, göç eden kuşlar sebebiyle yayılım alanı artmıştır. Ülkemizde ilk vakalar daha çok Orta Karadeniz ile Kuzey İç Anadolu bölgesinde görülürken günümüzde Ege illerine kadar yayılmıştır.

KKKA klinik bulguları izlendiğinde grip benzeri semptomlardan multi organ yetmezliğine kadar geniş bir skala görülmektedir. KCFT ve LDH yüksekliği, kanama bulgularının olması, pansitopeni tablosu hastalık için alert edici olmalıdır. Olgumuzda görüldüğü gibi GİS kanama ön tanısı ile sevk edilen hastanın laboratuvar bulguları ve anamnezi beraber incelendiğinde KKKA ön tansı konulmuş, acil serviste hemen Ribavirin tedavisi başlanıp hasta birkaç saat içinde ileri merkeze sevki sağlanmıştır. Her ne kadar ribavirin tedavisinin etkinliği kanıtlanmamış olsa da bu hastada erken tanı erken tedavi ve erken sevkin mortalite ve morbidite üzerindeki etkisi yadsınamaz.

Herhangi bir kanamada eşlik eden trombositopeni/ pansitopeni varlığında trombositopeni yapan İTP-TTP gibi immunhemolitik anemiler ve lösemiler atlanmamalıdır. Bu vakamızda hafif uzamış APTT değeri bilinç değişikliği olması kanama ve trombositopeni olması LDH yüksekliği ve sınırda indirekt biluribin yüksekliği sebebiyle TTP de düşünülmüş olup hastadan coombs testleri ve retikülosit sayması alındı. Direkt ve indirekt coombs testi negatif ve retikülositopeni olan hastanın(Ret: % 0.01 (ref: 0.1-1) immunhemolitik anemi dışlanmış oldu. Eş zamanlı periferik yayma da gönderilen vakada trombositopeni dışında yaymada akut patoloji izlenmedi.

Hastanın ateşi olması sebebiyle diğer viral hemorajik ateş etkenleri de düşünülebilirdi. Hastamızın Kütahya'nın Simav ilçesinden gelmesi yurtdışı seyahat öyküsünün olmaması şikayetlerinin 5 gündür şiddetlenmiş olması ateşinin sürekli olması sebebiyle Q ateşi-Sıtma-Deng ateşi gibi endemik hastalıklar düşünülmedi. Kırsal kesimden geldiği için ve ateş kas eklem ağrıları baş ağrısı şikayetleri olduğundan Bruselloz için ayırıcı tanı yapılabilirdi ancak pansitopeni tablosu ve GIS hemorajisinin olması bu tanıdan da uzaklaştırdı. Hastaya kendisinden kene çıkartıp çıkarmadığı sorusuna olumlu cevap vermesi tanımızı KKKA olarak bir nevi teke indirmiş oldu.

Hastalığın kesin tanısı KKKA Virüs RNA sının RT-PCR testi veya ELISA testi ile spesifik IgG ve IgM görülmesi ile konulmaktadır. Oluşan antikorlar serolojik yöntemlerden en hızlı ELISA ile saptanabilmektedir. İmmünglobulin (Ig) M antikorları hastalığın 5-7. gününden itibaren ve Ig G antikorları ise hastalığın yaklaşık 10. gününden itibaren serumda belirlenebilir(8)(9)

Hastalığın spesifik bir tedavisi olmamakla beraber öncelikle destek tedavisi önerilmektedir. Ribavirin invitro viral RNA düzeyini düşürmekte iken olarak etkinliği net kanıtlanmamıştır(4)(5)(10). Hastamız acil serviste ön tanısı konulduktan sonra enfeksiyon hastalıklarının önerisi ile birkaç saat içinde 2 gr ribavirin oral yükleme dozunu almış, sevk edildiği merkezde 4 x1 gr 4 gün boyunca ve 4x500 mg takip eden 6 gün boyunca kullanmıştır. Hastalığın ön tanısının acil serviste konulup erken dönemde ribavirin tedavisinin gene acil serviste başlanmış olması bu vakada morbidite ve mortalite üstünde olumlu etki yaratmış olabilir. Hastaya ribavirine ek olarak kan ürünü transfüzyonları ve GIS kanama için destek tedavileri uygulanmış, hasta tedavisinin bitmesinin ardından 11. Gün taburcu olmuştur. Hastanın taburculuğundan 1 hafta sonraki kontrol kanlarında KCFT normal sınırlarda trombosit sayısı 619000 /mm3 hemoglobini 11,7 g/dL lökosit sayısı 6480/mm3 izlenmiş.

SONUÇ:

Küresel iklim değişikliği, avcılık, ve besi hayvanlarının başka şehirlere nakli sebebiyle KKKA özellikle kırsal kesimdeki insanlar, veterinerler ve kasaplar için bulunduğu şehirden bağımsız olarak bir risk faktörü oluşturmaktadır. Mayıs-Eylül ayları arasında gelen non travmatik kanama olgularında KCFT yüksekliği ve trombositopeni izleniyorsa KKKA tanısı mutlaka gözden geçirilmelidir. Acil serviste erken tanı ve tedavinin başlanması ile mortalite ve morbiditede düşüş görülebilir.

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STEVEN JOHNSON SYNDROME DUE TO CIPROFLOXACIN

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ABSTRACT:

INTRODUCTION: Steven Johnson Syndrome (SJS) is a hypersensitivity reaction that affects the skin and mucosa. Cutaneous lesions start as erythematous macules resulting in vesicles and bullae. These vesiculobullous lesions are desquamated after a while. We present a case of SJS due to ciprofloxacin started after a urinary tract infection.

CASE: An 85-year-old female patient admitted to the emergency department with the complaint of rush and swelling in both legs. There were epidermal separation areas in the sacral region, between the toe fingers, surface of the tibia anterior, and feet, and hemorrhagic vesicular lesions in the lip vermilion. SJS was considered because the skin and mucous membrane involvement area was less than 10%. The patient, who was started on 60 mg methylprednisolone intravenously in the emergency department, was admitted to the intensive care unit.

DISCUSSION: SJS is often induced by drugs. It due to ciprofloxacin has been reported very rarely. SJS can cause mortality due to visceral complications and secondary infections. Severe vesiculobullous lesions on the mucosa and skin are characterized by separation of the epidermis. In the treatment of SJS, high-dose prednisolone is used and wound care is performed. In conclusion, although SJS is rare, early diagnosis and treatment should be given in the emergency department when mortality may develop.

KEYWORDS: Steven Johnson Syndrome, Toxic Epidermal Necrolysis, Ciprofloxacin

INTRODUCTION: Steven Johnson Syndrome (SJS) or Toxic Epidermal Necrolysis (TEN) is a life-threatening immune-complex-mediated hypersensitivity reaction that primarily affects the skin and mucosa. SJS/TEN is rare, with an incidence of 2-7 cases per million per year. (1) SJS or TEN is often induced by drugs and infections. (2) The relationship of SJS with the use of allopurinol, carbamazepine, and cephalosporins have been proven. It has been shown that SJS can develop due to ciprofloxacin, but it is a rare cause of SJS. However, as far as we know, the occurrence of SJS due to ciprofloxacin has been mentioned in only one case report in the literature. Cutaneous lesions in SJS start as erythematous macules and rapidly develop in the middle of necrosis, resulting in vesicles and bullae. Then, these vesicles and bullae are peeled off. If not treated properly, it can be mortal. Herein, we present a case of SJS due to ciprofloxacin started after a urinary tract infection.

CASE REPORT: An 85-year-old female patient applied to the emergency department with the complaint of rush and swelling in both legs. Two days after starting using oral ciprofloxacin 500 milligrams twice a day due to urinary tract infection, rashes began to appear on patient's skin. The patient had no chronic disease or allergy except known hypertension. On physical examination, the general condition of the patient was found to be well cooperatively oriented. Vital signs are as follows; fever: 37.1°C, pulse: 102 bpm, saturation: 97%, blood pressure: 110/60 mmHg. There were epidermal separation areas in the sacral region, between the toe fingers, surface of the tibia anterior, and feet, and hemorrhagic vesicular lesions in the lip vermilion (figure 1). Genital mucosa and ophthalmic examinations were normal. No significant feature was detected in the laboratory tests.

SJS was considered because the skin and mucous membrane involvement area was less than 10%. The patient was started on 60 mg methylprednisolone intravenously (IV) in the emergency department. Sixty milligrams of methylprednisolone IV daily was given as maintenance therapy. The patient was started on 15 mg mepiramine maleate cream for itching. For wound care, dressings were made with mometasone furoate and Hydrocortisone 17 Butyrate. The patient was admitted to the intensive care unit so that she receives the necessary treatment. The patient was discharged with full recovery after 5 days of intensive care treatment.

DISCUSSION:

SJS/TEN due to ciprofloxacin is rare. Ciprofloxacin is metabolized by CYP1A2 and CYP3A4. The deficiency or dysfunction of these enzymes results in increased plasma drug levels. An abnormal elevation of the plasma level of ciprofloxacin is thought to cause SJS. However, this hypothesis has not yet been proven conclusively. (4)

Although the first symptoms of SJS and TEN usually appear 4-14 days after the start of drug intake, this period can sometimes extend up to 3-8 weeks. Severe vesiculobullous lesions on the mucosa and skin, characterized by separation of the epidermis, are seen in SJS. In our patient, two days after the appearance of the rash and vesiculobullous lesions, the lesions began to peel off. Involvement of the mucous membranes is usually in the form of affecting different regions, namely the ocular, oral, and genital regions. Our patient did not have genital and eye lesions but had lesions on the lip mucosa.

SJS and TEN distinctions are made according to the involvement of body surface area. If it is below 10% it is considered SJS, if it is in the range of 10-30% SJS-TEN, if it is above 30% considered TEN. We diagnosed SJS because our patient had a body involvement area of less than 10 percent.

SJS-TEN can cause mortal visceral complications and mortal secondary infections. For this reason, early recognition and referral for appropriate treatment are important. The treatment of SJS is nonspecific. Supportive therapy in a burn unit or intensive care unit and wound care form the basis of treatment. What should be done at the beginning of the treatment is the withdrawal of the causative drugs. IV methylprednisolone is first started as a medical treatment. Although methylprednisolone does not provide the main treatment, it is administered at a high dose because it has an anti-apoptotic effect on the skin in SJS.

The vital thing in wound care is to prevent secondary infections, which are one of the common causes of mortality in SJS. Wound care in SJS is similar to severe burn patients. If the wounds are infective, antibiotics are added to the treatment. Wet dressing with non-adhesive silver nitrates can be used in wound care. In addition, biologic or biosynthetic skin, which is a new treatment modality can be applied.

Plasmapheresis, intravenous immunoglobulin (IVIG), and cyclosporine therapies can be applied as other medical treatments in SJS/TEN. IVIG can be safely administered in patients with severe cutaneous reactions, even in children. Plasmapheresis is aimed at removing the drugs and cytokines that cause the reaction.

In conclusion, although SJS is rare, it can be fatal. Therefore, early recognition in the emergency department and referral for appropriate treatment is most important.

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Figure 1.Skin and mucosal lesions in the patient

Figure 1a. Desquamation areas of epidermal separation on the gluteus maximus in the sacral region

Figure 1b. Areas of epidermal separation between both toes and on the feet

Figure 1c. Vesicular lesions with hemorrhagic crusts on the lip vermilion

ANGIOMIOLIPOM RUPTURE: A CASE REPORT

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INTRODUCTION: Angiomyolipoma is a benign mesenchymal tumor that begins to appear in the postpubertal period and originates from perivascular epithelioid cells. It is usually detected incidentally and is asymptomatic. Diagnosis is made by demonstrating fat tissue in a solid mass in the kidney on computed tomography or Magnetic Resonance Imaging. The risk of bleeding increases in angiomyolipomas larger than 4 centimeters. The most serious complication are bleeding due to rupture. Rupture can also cause hemorrhagic shock and disseminated intravascular coagulopathy

With this case report, we wanted to draw attention to the fact that in patients with flank pain and costovertebral angle tenderness, life-threatening pathologies such as angiomyolipoma rupture may occur, apart from common conditions such as renal colic and pyelonephritis.

CASE: A 43-year-old female patient presented to the emergency department with a complaint of right flank pain that started a few hours ago She hadn't been traumatized and had no characteristic history. In her vital signs, arterial blood pressure was 90/40 mmHg, SaO2 was 96%, pulse rate was 115 beats/min, and fever was 36.5 °C. On physical examination, Respiratory sounds were normal. S1 and S2 was rhythmic. There was no additional sound or murmur. On abdominal examination, there was tenderness and rebound in the right upper quadrant. Right costovertebral angle tenderness was positive. In the complete blood count, white blood cell count was 22.56 10*3/uL hemoglobin was 9.9 g/dL Platelet count was 172 10*3/uL. In blood biochemistry, glucose level, liver function tests, kidney function tests and electrolyte levels were within the normal range. Contrast-enhanced abdominal tomography was performed because the patient was hypotensive, had pain in the right upper quadrant, and had tenderness on physical examination. On tomography, approximately 8 cm of fat density in the upper pole of the right kidney and approximately 5 cm of hemorrhage in the perirenal area were detected and it was evaluated as ruptured angiomyolipoma. The patient was diagnosed with spontaneous angiomyolipoma rupture and underwent fluid resuscitation and blood replacement. The patient was referred to an advanced center for further examination and treatment.

DISCUSSION: In patients who apply to Emergency Departments with complaints such as flank pain and low back pain; Apart from clinical conditions such as renal colic, pyelonephritis and lumbalgia, it should be kept in mind that there may be life-threatening pathologies such as rupture of angiomyolipoma, and in case of clinical suspicion, these pathologies should be ruled out with further investigations.

AKUPUNKTUR SONRASI PNÖMOTORAKS

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Giriş

Pnömotoraks, plevral boşlukta serbest hava birikmesi olarak tanımlanır. Nispeten sık görülen, çeşitli klinik özellikleri olan ve herhangi bir yaşta ortaya çıkabilen solunumsal bir bozukluktur. Pnömotoraksın klinik prezentasyonu; minimal bir nefes darlığı ve göğüs rahatsızlığından, hemen girişim gerektiren kardiyo-respiratuar kollapsa neden olan hayatı tehdit eden duruma kadar değişmektedir. Kuru iğneleme, yaygın olarak kullanılan tamamlayıcı ve alternatif bir tıbbi tedavi olan bir akupunktur şeklidir.Yaygın olmasa da, pnömotoraks vaka raporları da dahil olmak üzere akupunkturla ilgili bilinen ciddi yan etkiler vardır. Olumsuz olayların kötü teknikle veya uygun eğitimin yokluğunda daha olası olduğu bulunmuştur.

Bu vakada, akupunktur tedavisi sonrası pnömotoraks tanısı konan sağlıklı 36 yaşında erkek hasta sunuyoruz. Bu vakada, nadir görülen bir pnömotoraks nedeni ve risk faktörleri olmayan sağlıklı bir popülasyonda akupunktur tedavisi sonrası gelişebildiği anlatılmaktadır.

OLGU

36 yaşında kadın hasta, göğüs ağrısı ve nefes darlığı şikayeti ile acil servisimize başvurdu.

Tıbbi özgeçmişinde özellik yoktu. Acil servise başvurmadan önce sırt ağrısı nedeniyle sırt bölgesine akupunktur iğne tedavisi uygulandığı öğrenildi. Hastanın oskültasyonunda, sağ hemitoraksta sol tarafa göre solunum sesleri azalmış olarak duyuldu. Diğer sistem muayenelerinde özellik yoktu. İğne uygulama yerinde hematom veya lokal bir patoloji görülmedi. Hastaya oksijen tedavisi başlandı. Laboratuvar değerlerinde tam kan sayımında hemoglobin 11.9 g/dl, hemotokrit %36.2, oksijen tedavisi altında arter kan gazında pH 7.43, pCO2 32 mmHg, pO2 120 mmHg, sO2 99.0 olarak tespit edildi. Hastanın vital bulguları; tansiyon arteryel basıncı 114/73 mmHg, nabız sayısı 81/dk, oda havasında oksijen saturasyonu % 94 olup stabil idi. Hastanın PA akciğer grafisinde sağda yaklaşık %35 oranında pnömotoraks saptandı (Resim 1). Aynı zamanda Toraks BT sonucuna göre Pnömotoraks saptandı (Resim 2) Bunun üzerine hastaya sağ tüp torakostomi uygulanarak kapalı sualtı drenajı yapıldı. Hastaneye yatırılıp takip altına alınan hastanın ikinci günde pnömotoraksı düzeldi, göğüs tüpü çıkarıldı. Vital bulguları stabil seyreden hasta yatışının 2., günde önerilerle taburcu edildi.

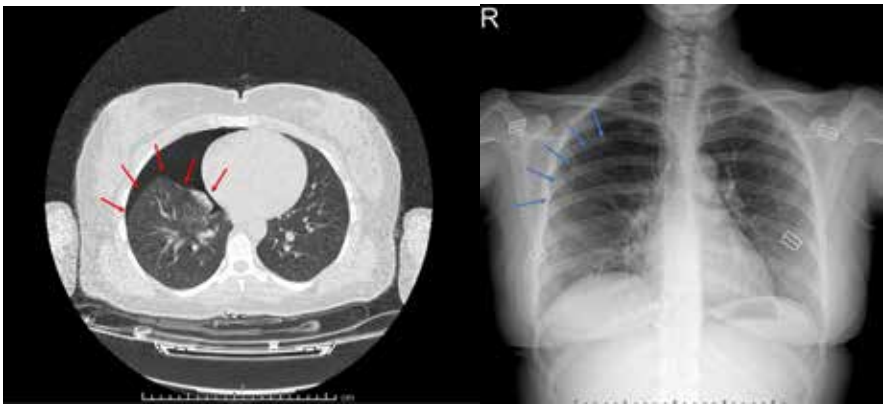
TARTIŞMA

Tamamlayıcı ve alternatif tedaviler yetişkinler tarafından geniş ölçüde kullanılmaktadır. Amerika Birleşik Devletleri'nde yetişkinlerle yapılan çalışmada, son bir yıl süresince tamamlayıcı tedavilerden en az birini kullanmış olan bireylerin oranı 1990 yılında %33.8 iken, bu oranın 1997 yılında %42.1'e yükseldiği saptanmıştır.(1) Akupunktur ve kuru iğneleme kanıta dayalı bir tamamlayıcı tedavi tekniğidir ve 1979 yılında Dünya Sağlık Örgütü akupunkturun bilimselliğini kabul etmiştir.(2) Pnömotoraks, akupunktur ve kuru iğnelemeden doğabilecek ciddi komplikasyonlar arasında yer almaktadır. Bronşiyal astım , artrit, boyun ve omuz ağrısı, bel ağrısı veya diğer şikayetlerin tedavisinde akupunktur kullanımının bir komplikasyonu olarak pnömotoraks ile ilgili birkaç vaka raporunun yanında , Avustralya'da 3700 uygulayıcıyla yapılan büyük bir anket, 3222 advers olayın 64'ünde bir pnömotoraks meydana geldiğini ortaya koydu.(3) Genellikle pnömotoraks tek taraflıdır; bununla birlikte, akupunktura sekonder bilateral pnömotoraks ve hatta ölüme yol açabilen bazı raporlar vardır.(4,5,6,7,8,9) Juss ve arkadaşlarının yaptığı çalışmada ise pnömotoraksın tek veya iki taraflı olabileceği ve nadir olarak ölümle sonuçlanabileceği ortaya koyulmuştur.(10) İğnelerin çok derinlemesine dikkatsizce yerleştirilmesi veya anatomik bilgi eksikliği nedeniyle yanlış açıyla yerleştirilmesine bağlı olarak ciddi komplikasyonlara yol açılabileceğini Demir ve arkadaşları çalışmalarında belirtmişlerdir.(11)

SONUÇ

Akupunktur uygulayıcılarının bu işlemin uygulanması ve komplikasyonları hakkında yeterli tıbbi eğitim almış olması gerekmektedir. Akupunktur işlemini yapan alanında uzman kişiler tarafından yürütülmesi akupunkturun güvenilirliğini artıracaktır.

Acil hekimleri, kuru iğneleme ve akupunktur gibi tamamlayıcı ve alternatif tıbbi prosedürlerin potansiyel ciddi bir komplikasyonu olarak pnömotoraksın farkında olmalı ve ayırıcı tanıda bu durumun dikkate alınmasını garanti etmelidir.



Resim 1

Resim 2

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CELIAC TRUNCUS DISSECTION: A CASE REPORT

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INTRODUCTION: Vascular diseases of intra-abdominal organs are clinical pathologies with high mortality and morbidity, which come to the minds of emergency clinicians less frequently due to their rarity. Symptoms and clinical process can be very variable depending on the affected vessel and intra-abdominal organ.

In this case report, we wanted to draw attention to the possibility of vascular pathologies in patients with abdomen in the epigastric region through a patient with celiac truncus dissection.

CASE: A 41-year-old male patient presented to the emergency department with the complaint of abdominal pain in the epigastric region that started abruptly a few hours ago. He hadn't been traumatized and had no characteristic history. In his vital signs, arterial blood pressure was 150/90 mmHg, SaO2 was 96%, pulse rate was 115 beats/min, and fever was 36.5 °C. On physical examination, his general condition was moderate, he was awake, oriented and cooperative. Respiratory sounds were normal. S1 and S2 was rhythmic. There was no additional sound or murmur. Abdominal examination revealed tenderness and rebound in the epigastric region. Right costovertebral angle tenderness was positive. In the complete blood count, white blood cell count was 13.17 10*3/uL, hemoglobin was 15.2 g/dL, platelet count was 301 10*3/uL. In blood biochemistry, glucose level, liver function tests, kidney function tests and electrolyte levels were within the normal range. CRP level was 14 mg/L (Reference range: 0-5). Troponin level was <0.01. Contrast-enhanced abdominal tomography was performed because the patient's symptoms did not respond to symptomatic treatment and he had sensitivity on physical examination. In his tomography, thickening of the vessel wall in the celiac trunk, hyperdense contamination in the perivascular area, and an intimal flap extending into the lumen were observed, and a diagnosis of celiac trunk dissection was made. The patient was referred to an advanced center for further examination and treatment.

DISCUSSION: Epigastric region pain is one of the common reasons for admission to emergency services. Apart from the common conditions such as peptic ulcus, acute cholecystitis and pancreatitis in these patients, it should be kept in mind that there may be vascular pathologies as in our case, and these pathologies should be ruled out with further investigations in case of clinical suspicion. Intra-abdominal vascular pathologies should be excluded, especially in patients who are incompatible with physical examination, do not respond to symptomatic treatment, and have risk factors.

KEYWORDS: Celiac trunk, Dissection, epigastric pain

INFECTIVE ENDOCARDITIS: A CASE REPORT

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INTRODUCTION: Infective endocarditis is an infection of the endocardial surface of the heart. It is an important clinical diagnosis that is rarely encountered in the emergency department, but should not be missed when encountered due to its mortal process. Although the most common reason for admission is fever, nonspecific symptoms such as fatigue, muscle aches, and joint pain can also be observed. Physical examination may reveal a cardiac murmur, Janeway lesions on the hands and feet, painful osler nodules on the fingers, and Roth spots on the retina. Conditions such as structural heart disease, valve disease, chronic hemodialysis, intravenous drug addiction and intravenous device use are predisposing factors.

We aimed to remind about infective endocarditis, which is a condition with high mortality, with the case we presented.

CASE: A 23-year-old male patient presented to the emergency department with complaints of fever, fatigue and dyspnea. He had a history of intravenous amphetamine use up to 1 month ago. Arterial blood pressure was 120/80 mmHg, SaO2 was 96%, pulse rate was 102 beats/min, and fever was 39°C. ECG was normal sinus rhythm. On physical examination, respiratory sounds were bilaterally coarse. S1 and S2 were rhythmic. There were no additional sounds or murmurs. There were extensive macular lesions on the bilateral legs. In complete blood count, white blood cell count was 11.11 10*3/uL, hemoglobin was 10.9 g/dL, Platelet count was 218 10*3/uL. His troponin level was 1.99 pg/mL (Reference range: 14-42.9). In his blood biochemistry, glucose level, liver function tests, kidney function tests and electrolyte levels were within the normal range. CRP level was 83 mg/L (Reference range: 0-5). Echocardiography was performed because the macular lesions on the patient's leg were compatible with Janeway lesions and he had a history of intravenous drug addiction. There was evidence of endocarditis compatible with vegetation on the right heart tricuspid valve. Many irregularly circumscribed cavitary nodules consistent with septic embolism were observed in the thorax tomography taken due to dyspnea. The patient was diagnosed with infective endocarditis and referred to an advanced center.

DISCUSSION: Infective endocarditis is a clinical condition with a high probability of being missed among intensive emergency department admissions, but also with a mortal process. It should be kept in mind in the presence of fever for which the cause cannot be found, especially in patients with risk factors, and treatment should be started by performing the necessary diagnostic tests in suspected patients.

KEYWORDS: Infective Endocarditis, Septic Embolism, Drug Use

ISOLATED TRAUMATIC ADRENAL HEMATOMA: A CASE REPORT

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INTRODUCTION: Trauma patients occupy an important place among the patient groups admitted to the emergency department. Injury mechanisms of these patients may be blunt or penetrating injury. Mortality and morbidity vary according to the type and severity of the injury. In blunt traumas, especially retroperitoneal injuries may not show any obvious findings on physical examination, so they are traumas with a high risk of being missed. Additional common pathology among retroperitoneal injuries is kidney injuries. Surrenal gland injuries are very rare and are usually accompanied by other solid organ lacerations.

With this case report, we wanted to draw attention to isolated adrenal gland hematoma, which is a rare retroperitoneal injury.

CASE: A 35-year-old male patient presented to the emergency service with the complaint of pain in the left upper quadrant after falling from a height of approximately 1 meter a few hours ago He had no characteristic historyIn the vital signs of the patient, arterial blood pressure was 120/80 mmHg, SaO2 was 96%, pulse rate was 93 beats/min, and fever was 36.5 °C. On physical examination, his general condition was moderate, he was awake, oriented and cooperative. Respiratory sounds were normal. S1 and S2 was rhythmic. There was no additional sound or murmur. There was tenderness in the left upper quadrant in the abdominal examination. There was no defense or rebound. In complete blood count, white blood cell count was 12.37 10*3/uL, hemoglobin was 15.9 g/dL, Platelet count was 243 10*3/uL. In his blood biochemistry, glucose level, liver function tests, kidney function tests and electrolyte levels were within the normal range. Contrast-enhanced abdominal tomography was performed because the patient had pain in the left upper quadrant and tenderness on physical examination. On the tomography, increased contrast enhancement in the left surrenal gland and approximately 6x3 cm high-density fluid increase around it were evaluated as left surrenal hematoma. The patient diagnosed with isolated traumatic surrenal hematoma was hospitalized for observation and follow-up. During the follow-up, the patient whose hematoma was self-limiting and stable within days was discharged.

DISCUSSION: Retroperitoneal injuries are injuries with a high probability of being missed, especially in patients with blunt trauma. Among retroperitoneal injuries, surrenal gland injuries can be overlooked in blunt trauma patients because they are rare. These injuries should be kept in mind in blunt traumas of the abdomen and flank region.

KEYWORDS: trauma, surrenal hematoma, retroperitoneal injury

OBTURATORY HERNIA, A RARE CAUSE OF ILEUS: A CASE REPORT

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INTRODUCTION: Abdominal hernias are one of the causes of acute abdomen requiring surgical treatment in emergency department admissions. Although inguinal, incisional and umbilical hernias are frequently encountered, obturator hernia can be encountered as a rare type. Pain radiating from the inner thigh to the knee is a symptom specific to obturator hernias. In addition, symptoms related to secondary pathologies such as strangulation and ileus may occur. It usually has a high mortality rate due to delays in diagnosis due to difficulties in diagnosis.

With this case, we tried to draw attention to obturator hernias as a rare but mortal type of abdominal hernia.

CASE: A 75-year-old female patient applied to the emergency department with complaints of pain radiating from the left thigh to the knee, abdominal pain and nausea that started on the same day. The patient, who did not have stool protrusion for a few hours, had no known chronic disease or history of surgery other than primary hypertension. The patient's vital signs (blood pressure: 140/80 mm/Hg, pulse: 82 beats/min, oxygen saturation: 96%, fever: 36.5 °C) were stable. On physical examination, diffuse tenderness, defense and rebound were present in the abdomen. In laboratory examinations, kidney and liver function tests, electrolyte levels, cardiac parameters and blood gas levels were within normal limits. Leukocyte count was 13.9 10^3/uL, Neutrophil count was 11.5 10^3/uL Hemoglobin was 11.4 g/dL. Complete urinalysis was normal. Diffuse dilated small bowel loops were detected in the standing direct abdominal X-ray of the patient with suspected acute abdomen. Intravenous contrast enhanced abdominal tomography was performed on the patient. On tomography, herniated small bowel loop from the left obturator canal, dilatation and air-fluid levels were observed in the small bowel loops secondary to hernia. The patient underwent surgery with the diagnosis of ileus secondary to obturator hernia.

DISCUSSION: Obturator hernias are a rare type of abdominal hernia, but they are mortal due to delays in diagnosis. It is important to keep in mind in patients with abdominal and inner thigh pain complaints, early diagnosis and reduction of mortality.

Keyword: Obturator hernia, Ileus, Abdominal pain

EVALUATION OF COMORBIDITIES IN HOSPITALIZED PATIENTS WITH COPD EXACERBATION

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INTRODUCTION

Although chronic obstructive pulmonary disease (COPD) is a benign disease, it has a rather poor prognosis due to progressive airway obstruction[1]. Smoking is largely responsible for the development of the disease. Systemic inflammation induced by smoking also causes chronic heart failure, metabolic syndrome and other chronic diseases. These comorbid diseases can affect mortality and hospitalizations. Systemic effects of COPD and comorbid diseases accompanying COPD should be considered in assessing the severity of the disease, quality of life, and determining the appropriate treatment in COPD[2].

Our aim in this study is to determine the frequency of comorbidities and to determine the most common comorbidities in patients hospitalized with retrospective COPD exacerbation.

MATERIALS AND METHODS

In this study, patients hospitalized with the diagnosis of COPD exacerbation by the Chest Diseases Clinic in Şanlıurfa Viranşehir State Hospital between 01.12.2020-30.12.2021 were examined in terms of age, gender and comorbidities. As a statistical method; mean, frequency and ratio values were used in the descriptive statistics of the data.

RESULTS

Between 01.12.2020-30.12.2021, 70 patients hospitalized with the diagnosis of COPD exacerbation by the pulmonology clinic were examined. 72.85% (n=51) of the patients were male and 21.15% (n=19) were female. The mean age of the patients was 66.9, and the age range was between 46-81.

All of the patients were smokers. There was no additional disease in 48.57% (n=34) of the patients. Additional disease was present in 51.43% (n=36) of the patients. While 41.66% (n=15) of the patients with comorbidity had one comorbidity, 58.33% (n=21) had more than one comorbidity. Hypertension in 32.85% (n=23) of the patients, diabetes mellitus in 15.71% (n=11), coronary artery disease in 8.57% (n=6), heart failure in 8.57% (n=6), % 5.71 (n=4) had chronic liver diseases, 4.28% (n=3) had cerebrovascular diseases, 4.28% (n=3) had malignancy, and 4.28% (n=3) had major depression. 60% (n=42) of the patients were hospitalized in the intensive care unit and 40% (n=28) were hospitalized. Endotracheal intubation was applied to 14.28% (n=10) of the patients, and noninvasive mechanical ventilation was applied to the other 85.72% (n=60) patients. The mean hospital stay was determined as 6±1 days. In intensive care hospitalizations, this period was determined as 10±2 days. Additional disease was present in 76.19% (n=32) of the patients hospitalized in the intensive care unit. There was no additional disease in 23.8% (n=10) of the patients hospitalized in the intensive care unit. All of the patients included in the study were discharged with full recovery.

DISCUSSION

COPD; It is characterized by progressive airflow limitation that is not fully reversible. The disease develops as a result of an inflammatory process against smoking, harmful gases and particles[3]. All of the patients included in our study had a history of smoking.

The prevalence of COPD is 20% in adults over 40 years of age in the world[4]. In our study, the mean age of the patients hospitalized with the diagnosis of COPD exacerbation by the pulmonology clinic was 66.9 years, and the age range was between 46-81 years.

Systemic effects of COPD and comorbid diseases accompanying COPD should be considered in assessing the severity of the disease, quality of life, and determining the appropriate treatment in COPD. In our study, it was observed that the number of patients with additional disease (n=36) was higher, and there was not much difference between the number of patients without additional disease (n=34).It was observed that the majority of patients with comorbidity had more than one comorbidity (n=21). It was determined that the most common additional diseases in the patients included in our study were hypertension, diabetes mellitus, coronary artery disease and heart failure, respectively. Additional disease was present in 76.19% (n=32) of the patients who were hospitalized in the intensive care unit.

If intubation and invasive mechanical ventilation are required, the mortality is around 50% [3]. Endotracheal intubation was applied to 14.28% (n=10) of the patients included in our study, and noninvasive mechanical ventilation was applied to the other 85.72% (n=10). All of the patients were discharged with recovery.

CONCLUSION

Smoking is largely responsible for the development of COPD. Systemic inflammation induced by smoking also causes chronic heart failure, metabolic syndrome and other chronic diseases. These comorbid diseases can affect mortality and hospitalizations.Systemic effects of COPD and comorbid diseases accompanying COPD should be considered in assessing the severity of the disease, quality of life and determining the appropriate treatment in COPD.

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FACTORS AFFECTING MORTALITY AND MORBIDITY IN TRAUMATIC CERVİCAL SPINAL CORD INJURY PATIENTS

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ABSTRACT

OBJECTIVE: This study aimed to contribute to the literature by investigating the risk factors of mortality and demographics in patients admitted to the emergency department with traumatic cervical spinal cord injury (CSCI), and identifying methods of reducing mortality through necessary precautions.

METHODS: We retrospectively evaluated the hospital records and data of the patients diagnosed with CSCI among blunt trauma patients admitted to the adult emergency department of the medical faculty hospital of İnönü University between April 1, 2014 and July 31, 2022.

RESULTS: Among 212 patients in our sample, 156 were male. The age group most commonly affected by CSCI was 18 to 58 years of age. The most common etiological cause was fall. Category A was the most common American Spinal Injury Association (ASIA) impairment scale score. There was an increased risk of mortality associated with older age, complete injury and pneumonia complications.

CONCLUSION: This study shows the demographics of CSCI patients, the mortality rate in CSCI patients in our center, and the factors that may affect mortality. KEYWORDS: Emergency, mortality, cervical, spinal cord, injury

INTRODUCTION: Spinal cord injury (SCI) is a serious health problem that causes temporary or permanent loss of motor, sensory and autonomic functions (1). Especially, because of the anatomical structure of the cervical region, it carries a serious risk in terms of permanent disability or mortality after injury. In addition, CSCI patients suffer from economic losses due to the care and treatments they receive, as they are not physically and psychosocially active enough (2). Epidemiological data on SCI may differ according to the socioeconomic, geographical and cultural characteristics of the region where life is lived. While motor vehicle accidents rank first in the etiology of traumatic SCI in developed countries, falling from a height has been reported as the main cause in developing countries (3). According to the current literature, the mortality in spinal cord injuries varies between 4.4% and 16.7% (3). The main risk factors for post-SCI mortality are; advanced age, comorbid diseases, high levels of spinal cord injury, infections and acute pulmonary embolism (4). In the literature, studies on the factors affecting mortality in patients with cervical spinal cord injury have been focused on (2,5). In this study, we aimed to identify the factors affecting mortality in our patients diagnosed with CSCI, to identify patients with this risk in the early period, and to reveal the defining features so that necessary care and medical treatments can be applied faster.

MATERIAL AND METHOD: We retrospectively evaluated the hospital records and data of the patients diagnosed with CSCI among blunt trauma patients admitted to the adult emergency department of the medical faculty hospital of İnönü University between April 1, 2014 and July 31, 2022. Inclusion criteria; 18 years and older age, blunt trauma, diagnosed CSCI with MRI. Exclusion criteria; younger than 18 years, non traumatic SCI, penetran injury, and the level of consciousness has declined so as not to allow the neurological examination to be performed reliably. Mild trauma was defined ISS ≥16. Patients who had; ASIA A grade (complete injury) was defined group 1, ASIA B,C,D grades (incomplete injury) were defined group 2, ASIA E grade was defined group 3. The patients were divided into groups according to; the trauma mechanism: motor vehicle accidents, sports injuries and other causes; the age: 18-44, 45-64, and older than 64 years.

RESULTS:

Among 212 patients in our sample, 156 (73,58%) of the patients were male and 46 (26.4%) were female The age group most commonly affected by CSCI was 18 to 58 years of age. Distribution of patients according to ASIA injury scale score; ASIA A was 86 (40.56%), ASIA B 11 (5.18%), ASIA C 24 (11.32%), ASIA D 49 (23.11%), and ASIA E 42 (19.81%). 86 (34.9%) patients were in the 18-44 age group, 91 (43.2%) were in the 45-64 age group and 35 (15.4%) were in the 65 years and over.

Etiology were 101 (47,64%) falls, 88 (41,5%) motor vehicle accident, 16 (7,54%) other causes, 7 (3.3%) sport injuries. The number of patients requiring mechanical ventilation (MV) was 56 (26.41%). When the patients in our study group were examined in terms of developing complications; 47 (22.16%) of the patients had pneumonia and 34 (16.03%) had urinary tract infection (UTI). In our study, mortality rate was found 20.75% (44 exitus). There was an increased risk of mortality associated with older age, complete injury and pneumonia complications (45-64 age group OR=3.7, ≥65 age group OR=7.0).

DISCUSSION:

The mortality rate in our study group was 20.75%, which was consistent with the literature. It has been reported that there is a relationship between advancing age and mortality in patients with spinal cord injury or spinal trauma (6). The mortality rate in our study was higher in the older age group, in line with the literature. It is thought that the increase in comorbid diseases that occur with advancing age and the decrease in cardiac reserve cause an increase in mortality in the elderly (5,6). There was a relationship between the presence of comorbid disease and mortality in patients with spinal cord injury. Comorbidity contributes to mortality by attenuating natural defense systems and decreasing the physiological endurance threshold to stress (6,7). Varma et al. (7) found that increased risk of mortality in patients with cervical and thoracic injuries compared to patients with lumbosacral injury. It ıs reported that patients with ASIA A grade (complete injury) increased the risk of mortality compared to patients with ASIA B, C, D grades (7). Our data were compatible with this study. Ulger et al. (2) reported in their study on patients with CSCI that UTI development as a complication did not increase the risk of mortality. Also, we found similar results. It has been reported that sepsis, pneumonia, wound infection and delayed healing, pulmonary embolism, deep vein thrombosis, gastrointestinal bleeding and mortality rates were high in patients receiving high-dose methylprednisolone and especially long-term protocols (8,9). In a study about early mortality in patients with cervical spinal cord injury, it has been reported that the risk of mortality decreased in patients undergoing spinal surgery (9).

CONCLUSION

This study shows the demographic characteristics of CSCI patients, mortality rates in CSCI patients in our center, and factors that may affect mortality. The mortality rate obtained in our study group was 20.75%, which was found to be compatible with the literature. Considering the developments in current medical practices, it can be thought that the mortality rates in our study group and in the literature are high. However, considering the limited neuronal plasticity and regeneration capacity of the spinal cord, especially in the cervical region, it can be thought that it is not very high with our current technology and treatment capacity.

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RETROSPECTIVE EVALUATION OF GROWING SKULL FRACTURES

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SUMMARY

OBJECTIVE

In this study, patients with head trauma who applied to the emergency department of Inönü University Turgut Özal Medical Center (IUTOTM) with GSF detected in the follow-up are presented in the light of the literature.

METHODS

The data of 18 pediatric head trauma patients diagnosed with GSF, who were evaluated in the IUTOTM emergency department between October 2016 and July 2022, were evaluated retrospectively. Direct radiography, cranial computed tomography (CT) and magnetic resonance imaging (MRI) examinations were performed in the patients as examination methods.

RESULTS

11 of the patients were male and 7 were female. The mean age was 21.4 months. BCC was detected in the right parieto-occipital region in 6 patients, in the left temporoparietal region in 5 patients, in the left frontoparietal region in 2 patients, in the left parieto-occipital region in 3 patients, and in the right frontoparietal region in 2 patients. None of the patients had neurological deficits. All patients had complaints of headache and skull deformity. While 14 had no history of epileptic seizures, 4 patients had a history of seizures. In 4 patients with a history of seizures, encephalomalastic area and cyst secondary to the old contusion were detected in the brain parenchyma. All patients were hospitalized with neurosurgery consultation and discharged after surgical treatment. No neurologic deficit was detected after surgery in any of the patients.

CONCLUSION

Although GSF is rare, it is a condition that can manifest itself with a wide variety of clinical signs and symptoms, causing serious neurological disorders and cosmetic problems. For this reason, children under 3 years of age with head trauma and especially those with linear fractures should be followed closely for at least three months until the fracture heals. Regular (monthly) head X-rays should be performed in patients with linear fractures greater than 4 mm, and CT scans should be performed in cases of increased fracture enlargement. In addition, MRI is extremely important for early diagnosis and treatment in these patients.

INTRODUCTION

Growing skull fracture (GSF) is a rare complication of pediatric head trauma and causes delayed-onset neurological deficits and cranial defect. GSF usually develops following linear fracture with underlying dural tear resulting in herniation of the brain (1). Early diagnosis and treatment are important to prevent complications. However, there are no clear guidelines for the early diagnosis of GSF (2). Growing skull fractures are also described as leptomeningeal cysts (3). It is a rare complication of childhood head trauma. They are more common in the parietal and parieto-occipital regions and occur in linear fractures of 4 mm or larger (1,3,4). Its pathophysiology is not fully understood, but dural rupture was found in all patients. Patients may apply to the physician with headache, vomiting, convulsions, and swelling in the fractured area (2). In patients diagnosed with GSF, the treatment is surgery. It is obligatory to close the dura defect detected in the surgery(2,3). For early detection and treatment of this disease, patients with linear fractures are recommended to be followed closely until the fracture heals, in order to prevent possible brain damage in the early period(3,4). In this study, patients with head trauma who applied to the emergency department of IUTOTM with GSF detected in the follow-up are presented in the light of the literature.

METHODS

The data of 18 pediatric head trauma patients diagnosed with GSF, who were evaluated in the IUTOTM emergency department between October 2016 and July 2022, were evaluated retrospectively. Direct radiography, CT and MRI examinations were performed in the patients as examination methods (Figure1).

RESULTS

11 of the patients were male and 7 were female. The mean age was 21.4 months. GSF was detected in the right parieto-occipital region in 6 patients, in the left temporoparietal region in 5 patients, in the left frontoparietal region in 2 patients, in the left parieto-occipital region in 3 patients, and in the right frontoparietal region in 2 patients. None of the patients had neurological deficits. All patients had complaints of headache and skull deformity. While 14 had no history of epileptic seizures, 4 patients had a history of seizures. In 4 patients with a history of seizures, encephalomalastic area and cyst secondary to the old contusion were detected in the brain parenchyma. All patients were hospitalized with neurosurgery consultation and discharged after surgical treatment. No neurologic deficit was detected after surgery in any of the patients.

DISCUSSION

GSFs are particularly seen in the parietal and parietooccipital regions, occurring in linear fractures of 4 mm or larger. However, the development of GSF in the post-traumatic suture areas is not uncommon. It can also be seen rarely in the frontal, orbital and skull base. It occurs as a complication after childhood head trauma. Its incidence has been reported to be 0.05- 1.6% in large series (1). In this study, the data of 18 patients diagnosed with GSF, who were evaluated in the IUTOTM emergency service between October 2016 and July 2022, were evaluated retrospectively. In GSFs, 50% of patients are under the age of 1 and 90% are under the age of 3, and the fracture should coincide with the time when skull growth is most active. Its incidence is extremely low after 8 years of age. The mean age of the patients in our study was 21.4 months. In the 22 disease series of Erşahin et al., the mean age was found to be 12.9 months (2). Dosoglu et al. 2 of the 7 cases in the series were reported to be adults, 4 of the other 5 patients were reported to be under 3 years old and one was 8 years old (3). Vezina et al. reported that the mean age of onset was 21.9 months and there was a male predominance (4). Clinical findings in GSFs are varied. Swelling often develops under the scalp after head trauma, and cerebrospinal fluid (CSF) accumulates under the swelling. The formation of the collection may occur in the early post-traumatic period as well as in the late period (5). In the series of Erşahin et al., a mass and bone defect in the scalp were detected in 17 of 22 patients. Other findings include; convulsions, hemiparesis, recurrent meningitis and exophthalmos were counted. The patients in our study had complaints of headache, deformity and swelling in the head. Sometimes it may occur with the findings of a mass occupying space in the brain. Patients may apply to the physician with headache, vomiting, and convulsions. All of the patients in our study had complaints of headache and skull deformity. While 14 had no history of epileptic seizures, 4 patients had a history of seizures. In 4 patients with a history of seizures, encephalomalastic area and cyst secondary to the old contusion were detected in the brain parenchyma. Occasionally, GSF can be detected in the skull base in patients. Clinical signs of a growing fracture in the skull base; ocular proptosis is rhinorrhea or otorrhea. Since most of the growing fractures of the orbital roof are in the vicinity of the globe, these patients show more downward shift than proptosis. Other rare findings of enlarged skull fractures include; pulsatile orbital mass and eye swelling have been reported (6). In our study, no patient with baseline GSF was found. In the diagnosis of GSF, head radiographs of the examination methods have a specific diagnostic value. Among the examination methods, MRI should be performed in addition to those with GSF detected on direct X-rays or CT (4). Linear fractures are found in all patients, and discrete linear fractures are found in most of them. In craniographs, the edges of the defect are irregular and wavy (2,5). The pathophysiology of growing skull fractures is still not fully understood; however, dural rupture was found in all patients (7). It is thought that the arachnoid membrane and brain tissue herniation towards the fracture line occurs as a result of subarachnoid hemorrhage under the fracture and obstruction of local cerebrospinal fluid circulation. Another thought is that the most important factor causing the formation of growing skull fractures; argues that it is the pulsatile force of the brain in the maximum growth period (2,3,7). The pulsatile force of the brain causes herniation of the brain due to dural tear at the fracture line. As a result, the fracture in the skull expands. The presence of a linear fracture line and adjacent contusion brain tissue means a trauma sufficient to cause a dural tear (2,4,7). The reason why it is more common in children is because the dura is firmly attached to the bone. Over time (within an average of 2 months), the fracture enlarges and a defect occurs. If the dura under the fracture is intact, the size of the defect does not enlarge. For this reason, there is also a dura tear in GSFs. The resulting defect borders are irregular and have a wavy appearance. The most common type of defect is irregular, oval or lens-shaped defects with a long axis along the fracture line (5). Cerebromeningeal scar tissue often develops in the brain tissue at the site of the growing fracture. Again, cystic changes in this region result from cystic encephalomalacia. Areas of decreased density and increased density are found together, suggesting absorption and deposition at the bony margins. Bone margins may be thinned or thickened. In cranial CT, the size, location, and relation of the leptomeningeal cyst with the cranial defect can be detected (5). Brain contusion is detected in almost all patients in CT. All 18 patients in our study underwent direct radiography, CT and cranial MRI. In addition to MRI and CT findings, it is possible to clearly detect the brain tissue overflowing from the bone defect, the CSF collection and the size of the cyst. In CT and MRI, accompanying GSFs; It is also possible to see ventricular enlargement on the same side as hydrocephalus, encephalomalacia, and leptomeningeal cyst. The treatment of true leptomeningeal cysts detected in GSFs is surgery (7,8). It is mandatory to close the dura defect in surgery. The dural defect is usually larger than the bone defect. Therefore, it is necessary to enlarge the bone defect until the dural edges are visible. Cranioplasty is performed after the dura defect is closed. In some patients, it may be necessary to remove gliotic brain tissue (8). Dural defect repair with surgical treatment and effect closure with cranioplasty were applied to all patients in our study by the neurosurgery department. No neurologic deficit was detected in any of the patients after surgery, and the patients were discharged with full recovery.

CONCLUSION

Although GSF is rare, it is a condition that can manifest itself with a wide variety of clinical signs and symptoms, causing serious neurological disorders and cosmetic problems. For this reason, children under 3 years of age with head trauma and especially those with linear fractures should be followed closely for at least three months until the fracture heals. Regular (monthly) head X-rays should be performed in patients with linear fractures greater than 4 mm, and CT scans should be performed in cases of increased fracture enlargement. In addition, MRI is extremely important for early diagnosis and treatment in these patients.

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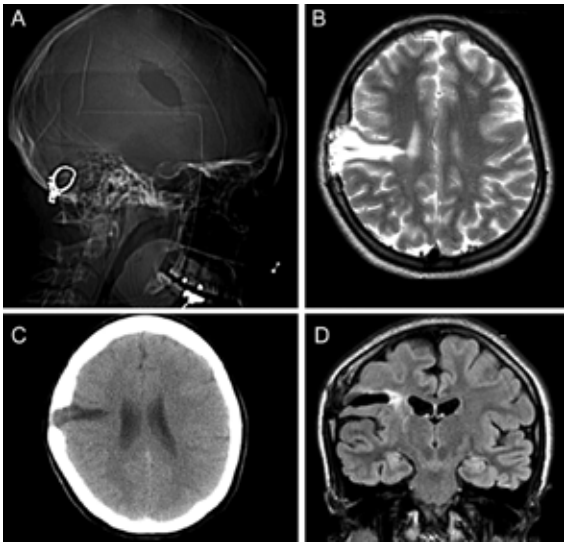
Figure:1

A: Right parietal fracture direct skull grafi

B: Right parietal leptomeningeal cist T2 weighted axial cranial MRI

C: Right parietal fracture and right parietal encephalomalacia cranial CT

D: Right parietal leptomeningeal cist T1 weighted coronal cranial MRI



EVALUATION OF ISOLATED LUMBAR TRANSVERSE PROCESS FRACTURES IN EMERGENCY DEPARTMENT

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SUMMARY

OBJECTIVE:

Isolated transverse process fractures of the lumbar spine (ITPF) are common fractures in the emergency department and are thought to be a milder injury than fractures of the corpus, pedicle, and lamina. These fractures, which can be seen unilaterally or bilaterally, at one or more levels, usually develop as a result of direct trauma. In this study, the data of patients with isolated ITPF in our emergency department were evaluated retrospectively in the light of the literature.

METHODS

In this study, the data of 78 patients with acute isolated ITPF who presented to the emergency department between October 2018 and April 2022 and were consulted by neurosurgeons were evaluated retrospectively.

RESULTS

44 of the patients were male and 34 were female. The mean age was 39.1 years. Fractures were found on the right in 29 patients, on the left in 38 patients, and on both sides in 11 patients. ITPF was detected as single level in 13 patients, two levels in 29 patients, three levels in 31 patients, and four levels in 5 patients. None of the patients had neurological deficits. Although 12 of the patients had intra-abdominal injuries, none of them were secondary to the fracture. Except for 3 patients who were hospitalized for follow-up due to intra-abdominal injury, the patients were discharged without hospitalization with the recommendation of 4-6 weeks of heavy exercise and not doing heavy work after analgesic and muscle relaxant treatment. In addition, lumbosacral corset was recommended for 16 of the patients.

CONCLUSION

In conclusion, isolated lumbar ITPF does not require surgical treatment. If there is no accompanying intra-abdominal pathology and neurological deficit, conservative and symptomatic treatment is sufficient. However, we think that caution should be exercised in patients with ITPF in terms of accompanying abdominal trauma and other spinal cord injuries.

INTRODUCTION

As a result of extensive screening of trauma patients with computed tomography, radiological diagnosis of ITPF has increased. Spine service (neurosurgery or orthopedics) consultation is frequently requested for patients with ITPF and it is known that this practice has time and extra limitations. ITPFs of the lumbar spine are fractures that are commonly seen in the emergency department and are thought to be a milder injury than corpus, pedicle, and lamina fractures. These fractures, which can be seen unilaterally or bilaterally, at one or more levels, usually develop as a result of direct trauma (1,2). In some studies in the literature, it has been reported that there is a significant relationship between the radiological diagnosis of ITPF and severe abdominal or spinal cord injury or both (2). It is likely that ITPF occurs exceptionally during traumatic events involving a large amount of force (3). Although ITPF is thought to represent a great strength, it is a minor injury compared to other vertebral fractures, and these injuries do not require neurosurgical intervention (4). Spine service (neurosurgery or orthopedics) consultation is requested from all patients with these fractures in our institution. However, time and money can be saved by delaying these referrals if spine service consultation is not needed.

In this study, the data of patients with isolated ITPF in our emergency department were evaluated retrospectively in the light of the literature.

METHODS

Data of 78 patients diagnosed with acute isolated ITPF in the emergency department between October 2018 and April 2022 were evaluated retrospectively. Spinal computed tomography examination was performed as the examination method in the patients. Tomographic examination results were evaluated with the consultation of the emergency physician and radiologist (Figure:1).

FINDINGS AND RESULTS

44 of the patients were male and 34 were female. The mean age was 39.1 years. Fractures were found on the right in 29 patients, on the left in 38 patients, and on both sides in 11 patients. ITPF was detected as single level in 13 patients, two levels in 29 patients, three levels in 31 patients, and four levels in 5 patients. None of the patients had neurological deficits. Although 12 of the patients had intra-abdominal injuries, none of them were secondary to the fracture. Except for 3 patients who were hospitalized for follow-up due to intra-abdominal injury, the patients were discharged without hospitalization with the recommendation of 4-6 weeks of heavy exercise and not doing heavy work after analgesic and muscle relaxant treatment. In addition, lumbosacral corset was recommended for 16 of the patients.

DISCUSSION

The emergence of newer, more detailed radiological examination methods has increased clinicians' access to high-quality scans. The inclusion of these examination methods in routine trauma management has led to increased detection of traumatic spine diseases, including ITPFs (5,6). ITPFs of the lumbar spine can be detected directly due to blunt trauma (as in motor vehicle accidents), severe lateral flexion-extension forces (as in sports, especially football), avulsion of the psoas muscle due to severe trauma, or pelvis fractures(7,8). ITPF is not associated with neurological deficit or structural instability. In this study, no signs of neurological damage were detected in any patient with ITPF. The transverse processes of the vertebrae act as additional retainers for the paraspinal muscles and ligaments. However, these attachments contribute to axial stability by sharing the load carried by the front, middle or rear columns. Fractures associated with the anterior and especially the middle columns are generally considered to be unstable due to the close neighborhood relationship with the spinal cord. Therefore, fractures in these areas are more likely to be treated with braces or surgery. Although posterior column fractures are not as urgent as those in the middle or anterior column, additional treatment is applied to symptomatic treatment when instability is a concern or when the patient shows significant pain with movement (8,9).

TP, which is the anatomical component of the posterior column, has no close anatomical relationship with the nerve roots and the spinal cord itself. Because of this anatomical structure, after fracture development, the TP bone fragment does not assume a position that could endanger the upper or lower spinal root. ITPF alone is not associated with any ligament injury that may endanger the spinal cord. That is, these fractures do not impair the mechanical load support functions of the spine or its relationship with the spinal cord and nerve roots. Therefore, iTPF does not require any interventional surgical treatment. Therefore, neurosurgery or orthopedic consultation is not required in these patients (10). In some studies in the literature, it has been reported that there is a significant relationship between the radiological diagnosis of ITPF and severe abdominal or spinal cord injury or both (2-11). It is likely that ITPF occurs exceptionally during traumatic events involving a large amount of force. Although they are benign in themselves, detection of these lesions may require additional radiological and general diagnostic investigation. Some studies have suggested that the presence of ITPF may serve as an indicator for the presence of other co-existing traumatic injuries or the severity of the injury in general (11,12). Specific patterns of ITPF at specific spinal levels can be associated with specific patterns of injury. For example, fractures at the L5 level were positively correlated with pelvic fractures and solid organ injury. Similarly, T1-T4 level ITPF has been associated with an increased prevalence of rib fractures (12).

CONCLUSION

In the light of this information, we think that care should be taken in terms of accompanying abdominal trauma and other spinal cord injuries in patients with ITPF.

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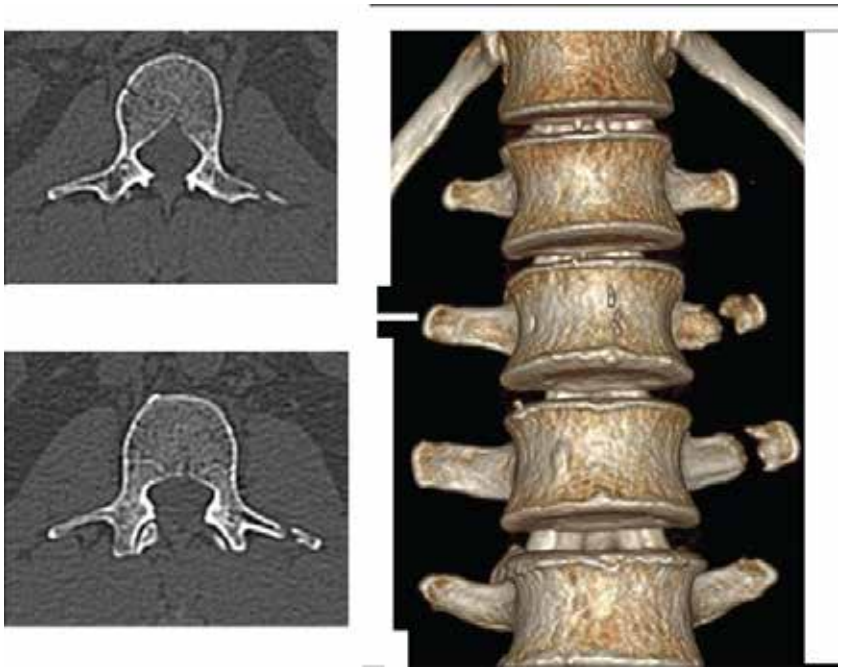
[DISCUSSION: 234-235]

Figure 1: Lomber CT (Isolated L2 and L3 left transverse fractures)



TRAUMATIC POSTERIOR CRANIAL FOSSA EPIDURAL HEMATOMA

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ABSTRACT

Objective: Posterior cranial fossa epidural hematoma (PCFEH) is observed less in comparison with supratentorial hematoma and symptoms and signs are generally not specific. So, early diagnosis and treatment of PCFEH is prognostically significant. In this study we aimed to our 12 PCFEH cases were examined with regard to descriptive treatment criteria and were discussed in the accompaniment of relevant literature.

METHODS: A total of 204 traumatic epidural hematoma patients who were under follow-up and treatment were enrolled. All cases were diagnosed via CT and the BT scans were taken during the first 6 hours after application and 24 hours later for all patients. The patients were classified according to Hooper's classification system as acute, sub-acute, chronic epidural hematoma taking into consideration the duration of time.

RESULTS: There were determined that a total of 11 patients acute PCFEH and only one (subacute PCFEH and that there was no chronic period patient application. Surgical treatment was applied on a total of 8 patients headache and accompanying nausea was the most frequent symptom for all patients who applied.

CONCLUSION: Even though they are non-specific, headache and nausea-vomiting are the most frequently symptoms observed in PCFEH and cases who apply with such symptoms should be taken under close monitoring especially if they are in the pediatric age group.

KEYWORDS: Epidural hematoma, posterior cranial fossa, Hooper's classification

INTRODUCTION

Epidural hematoma incidence is observed at a frequency of 1 – 3 % in craniocerebral injuries. Whereas posterior cranial fossa epidural hematoma (PCFEH) is observed less in comparison with supratentorial hematoma and makes up about 0.1 - 0.3 % of all craniocerebral injuries or 10 % of all cases with epidural hematoma (1). Symptoms and signs are generally not specific for PCFEH and it has been indicated that soft tissue swelling in the occipital region and occipital fracture observed during imaging are warning signs. These cases are generally related with linear fracture of occipital bone, displaced fracture of lambdoid suture or both (2, 3). PCFEH may grow rapidly and cause clinical pictures as a result of brain stem compression. Hence, early diagnosis and treatment of PCFEH is prognostically significant. Even though magnetic resonance provides more detailed information, computerized tomography (CT) is the more frequently used method for diagnosis (Figure 1). A significant improvement has taken place in the diagnosis and treatment of PCFEH as a result of the routine use of BT and mortality rates have decreased.

There are studies in literature which examine the level of consciousness of the patient, existence or absence of neurological findings, hematoma thickness, hematoma volume and CT results regarding the decision on which PCFEH cases should be subject to surgery (4). In this study which we present based on our opinion that our clinical follow-up results shall contribute to the literature, 12 PCFEH cases were examined with regard to descriptive treatment criteria and were discussed in the accompaniment of relevant literature.

MATERIALS AND METHOD

A total of 204 traumatic epidural hematoma patients who were under follow-up and treatment at the Malatya Turgut Özal Medical Center (TOMC) Neurosurgery department during the dates of March 2010 – January 2018 were examined in this study. PCFEH rate was analyzed in relation with trauma type, epidural hematoma period, gender, age Glasgow Coma Scale (GCS) and therapeutic results. All cases were diagnosed via CT and the BT scans were taken during the first 6 hours after application and 24 hours later for all patients. The patients were classified according to Hooper's classification system as acute (those who applied during the first 24 hours), sub-acute (between 24 hours – 7 days), chronic (after the 7th day) epidural hematoma taking into consideration the duration of time that passed from the time of the event until they became symptomatic (5).

RESULTS

It was determined that the 204 patients under treatment at the Neurosurgery Department had epidural hematoma and that 12 of these patients with hematoma (5.88%) were PCFEH. It was determined that a total of 11 patients (91, 66%) (6 aged above 18 and 5 aged below 18) were acute PCFEH and only one (8, 33%) (below the age of 18) subacute PCFEH and that there was no chronic period patient application. It was determined that 10 (83, 3%) of the PCFEH cases included in the study were male and that 2 (16, 6%) were female. PCFEH was due to falling in 7 cases (58, 33%), traffic accident in 3 cases (%25) and pounding in 2 (16, 6%) cases. Application GCS of 7 cases (58, 33%) was 13 and above, GCS for 4 cases (33, 3%) was between 9- 12 and the GCS score of 1 case (8,33%) was 7. While linear fracture was detected in 10 (83,3%) of the cases, suture displacement type diastase fracture was determined in 2 cases (16,6%) under the age of 18. Surgical treatment was applied on a total of 8 patients (66,66%) (3 were below the age of 18, 5 were above the age of 18). Of the patients subject to surgical treatment, 2 (16,6%) were taken into surgery following control BT due to lucid interval. Head ache and accompanying nausea was the most frequent symptom for all patients who applied. Symptomatic treatment was applied on all patients regardless of whether they were subject to surgical treatment or not. Of our cases, 11 (91,66%) recovered without any sequel, however the adult patient with GCS value of 7 was exitus despite all surgical interventions and our rate of mortality was determined as 8,33 % (Table 1).

	0-18 age	Above 18	Total %
Acute PCFEH	6	5	11 % 91,66
Subacute PCFEH	1	0	1 % 8,33
Chronic PCFEH	0	0	0 %0
Male	5	5	10 % 83,3
Female	2	0	2 %16,6
Falling	4	3	7 % 58,33
Traffic accident	2	1	3 % 25
Pounding	1	1	2 %16,6
Linear fracture	5	5	10 %83,3
Diastase	2	0	2 % 16,6
Lucid interval	1	1	2 % 16,6
GCS 13-15	5	2	7 % 58,33
GCS 9-12	2	2	4 % 33,3

	0-18 age	Above 18	Total %
Acute PCFEH	6	5	11 % 91,66
Subacute PCFEH	1	0	1 % 8,33
Chronic PCFEH	0	0	0 %0
Male	5	5	10 % 83,3
GCS 8 and below	0	1	1 % 8,33
Recovery	7	4	11 % 91,66
Surgical treatment	3	5	8 %66,66
Death	0	1	1 % 8,33

Table 1: Distribution of posterior fossa epidural hematoma according to age and other characteristics

DISCUSSION

The follow-up and treatment characteristics of 12 (5.88%) patients out of with PCFEH out of a total of 204 patients followed up and treated at our clinic with epidural hematoma diagnosis over a course of about 8 years have been evaluated retrospectively and presented in our study. About 85 % of all PCFEH cases which are known to make up 0.1-0.3% of head trauma cases in literature are venous based and develop as a result of transverse or sigmoid sinus damage due to occipital fracture (6). Contrary to supratentorial epidural hematoma, the fact that hemorrhage is venous based in PCFEH and that it develops slowly make it longer for the clinical table to develop thus making the use of imaging methods vital for early diagnosis. Patients with such hemorrhages may be conscious at the time of the application; however, their states may deteriorate rapidly due to the limited volume of posterior fossa and its significant neighbors resulting in herniation. Loss of consciousness may occur rapidly after lucid interval. Accordingly, it is of vital importance to spot the lesion early on. The findings and symptoms for acute PCFEH are non-specific in many cases. Diagnosis can be made according to clinical findings in only a small fraction of the cases. Occipital trauma and occipital fracture is present in majority of the PCFEH cases (7,8). Hence, BT examination is suggested for patients with symptomatic head trauma (9).

Dural venous sinus thrombosis may sometimes be accompanied by PCFEH and magnetic resonance imaging or magnetic resonance venography may be used for a better evaluation of the clinically stable patients (10). There was no case with accompanying dural venous sinus thrombosis in our series. Hence, our patients were not subject to magnetic resonance imaging. In the light of this information, BT examination was carried out at first for detecting the effects of head trauma and fracture on patients who applied with a trauma story and linear fractures were observed in 10 of our patients while diastatic fracture in the form of suture displacement was observed in 2 patients.

While post-trauma PCFEH is generally acute, it may sometimes be sub-acute or rarely chronic (11,12). In our study, 91,66% of the cases were acute, 8,33% were subacute and there were no chronic cases. One of our sub-acute cases was in the pediatric age group. This case was treated conservatively and even though there are some studies in literature indicating that sub-acute cases are observed more frequently, majority of our cases were acute period patients in accordance with the literature. The reason for this is thought to be the fact that our patients applied a short while after trauma and that they were taken into BT follow-up early on.

PCFEH is observed more frequently in the pediatric age group (13).

Erşahin et.al. carried out a study in which it was reported that prognosis was quite well especially for the pediatric patient group with PCFEH who were taken in to BT follow-up after an early diagnosis. In accordance with the literature findings, the pediatric age group ratio in our series was determined as 58.33 % and no mortality was detected in this age group.

The most frequent clinical findings and symptoms are loss of consciousness, vomiting and head ache as put forth before by Gupta et.al. (14). In accordance with the literature, the most frequent symptom observed during application for all patients included in our study was head ache with accompanying nausea. It was determined that the application GCS for 7 cases (58,33%) was 13 and above, for 4 cases (33,3%) between 9- 12 and for 1 case (8,33%) the GCS score was determined as 7 point. While lucid interval is reported as high as up to 40 % in many series in literature, it was observed in 16,6 % of our patients. The reason for this is thought to be the fact that majority of our patients applied during the acute period and were subject to early BT follow-up (15,16).

Even though it is frequently treated by way of surgical discharge, PCFEH's may be treated successfully in a conservative manner when there is no significant mass effect and especially in children. Thus, all patients were subject to symptomatic treatment for eliminating headaches and nausea regardless of whether they were subject to surgery or not. Surgical treatment is suggested for cases with mass effect due to hematoma in BT scans, partial or complete perimesencephalic system obliteration, displacement and/or compression of the fourth ventricle as well as for cases with hematoma volume and thickness exceeding 10ml and 15mm respectively. Surgical treatment was applied on 8 patients (66,66%) in our study due to PCFEH according to these criteria, 4 patients were followed up without surgery and 11 (91,66%) of our patients recovered without any sequel. Varying rates of mortality have been reported for PCFEH series in literature. Bozbuğa et.al. reported a mortality rate of 5,4% for their 73 patient series, while the mortality rate put forth by Pozzati et.al. was 11 %. One of our patients with post-traumatic GCS of 7/15 despite surgical and conservative supportive treatment was exitus and thus our mortality rate was determined as 8,33 %.

CONCLUSION

Even though they are non-specific, headache and nausea-vomiting are the most frequently symptoms observed in PCFEH and cases who apply with such symptoms should be taken under close monitoring especially if they are in the pediatric age group. Early stage cranial BT scan and control should be carried out for patients who apply with occipital head trauma story even if there are no neurological findings since small occipital fractures may be overlooked during physical examination and standard film studies since it may be a life saver.

Figure 1: Preop and Postop BT for epidural hematoma with left occipital suture displacement and cephal hematoma .

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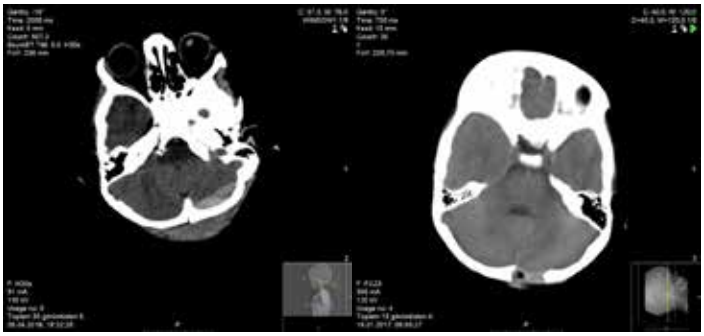
Figure1:Cranial CT showing left occipital



epidural hematoma and postoperative image

RISK FACTORS AFFECTING MORTALITY IN PATIENTS WITH SUBARACHNOID HEMORRAGE

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SUMMARY

Objective: Subarachnoid hemorrhage (SAH); It is a clinical picture that can be of spontaneous or traumatic origin, has high morbidity and mortality, has serious complications, and requires early diagnosis and treatment. The aim of our study is to evaluate the values obtained in the emergency department management of the cases hospitalized with the diagnosis of SAH in our emergency department; This is a retrospective review of its relationship with mortality.

MATERIALS AND METHODS: Our study included 300 patients over the age of 18, who were diagnosed with SAH or referred to İnönü University Turgut Özal Medical Center Emergency Medicine Clinic between 1 July 2018 and 1 July 2022, and whose data could be accessed. The records of the patients diagnosed with SAH in our emergency department were accessed in the automation system. Systemic and neurological examination results, 12-lead ECG results, complete blood count and biochemistry results of the patients were obtained. In addition, the patient's age, gender, complaints of emergency admission, medications used by the patient, whether the patient had a chronic disease (DM, HT, cardiovascular disease, anemia, hyperlipidemia, malignancy, carotid artery stenosis, other diseases, etc.) were evaluated as present or absent. Fisher SAH scores of the patients were recorded. Patients; Hemoglobin (Hg), hematocrit (Hct), platelet (Plt), mean platelet volume (MPV), erythrocyte distribution volume (RDW), glucose, urea, creatinine levels were recorded. All data were statistically evaluated and presented in terms of significance.

RESULTS: A total of 300 patients with SAH were analyzed retrospectively. Of the 300 cases, 60% (n=180) were male and 40% (n=120) were female. 70% of the patients (n=210) were spontaneous, 30% (n=90) were traumatic SAH. were patients. The mean age of all patients was 63.5±15.8 years. In the dead group; The patients' advanced age, drug use, presence of additional disease in the medical history, sudden unconsciousness, presence of neurological deficit at the time of admission, abnormal ECG, Fisher scores were found to be significantly higher ($p<0.05$).

CONCLUSION: The patients' advanced age, drug use, presence of additional disease in the history, sudden loss of consciousness, presence of neurological deficit at the time of admission, abnormal ECG, and high Fisher score were found to be significantly higher in terms of mortality ($p<0.05$).

Key words: Subarachnoid hemorrhage, mortality, risk factors

INTRODUCTION

SAH occurs as a result of spontaneous bleeding of pathological processes such as vessels navigating in the subarachnoid space and their originating aneurysms and arteriovenous malformations, or as a result of an intraparenchymal hemorrhage opening into the subarachnoid space or due to trauma (1). Among spontaneous SAH cerebrovascular disease (CVD); It ranks fourth after atherothrombosis, embolism, and primary intracerebral hemorrhage (ICH). Spontaneous SAHs are among the hemorrhagic stroke types, and they constitute 6-8% of all stroke cases (2). Patients typically present complaining of a severe headache; however, only 10% of patients presenting to the emergency department complaining of a thunderclap headache end up having a SAH (2).Associated symptoms may include neck pain, nausea/vomiting, and photophobia (3). Other similarly presenting diseases include meningitis, migraines, acute narrow-angle closure glaucoma, cerebral venous sinus thrombosis, and non-SAH intracerebral hemorrhage (3). Patients presenting with a SAH classically present with a "thunderclap" headache (characterized as a severe rapidly progressing headache that develops within seconds to minutes and has a maximal intensity at its onset), neck stiffness, vomiting, decreased level of consciousness, hemiparesis, and occasionally, seizures (2).The typical headache pattern is described as a pulsatile pain that propagates towards the occiput (2). There are publications reporting that many factors such as concomitant hypertension, coronary artery disease, diabetes, smoking and alcohol use, and advanced age may be effective in studies conducted to examine the causes of mortality in SAH, a disease with high mortality despite appropriate treatment (2,3,4).

The aim of this study; To investigate the hematological examinations, epidemiological features and Ficher SAH grading results of patients diagnosed with SAH in our emergency department and the relationship between mortality.

MATERIAL AND METHODS

The records of the patients diagnosed with SAH in our emergency department were accessed in the automation system. Systemic and neurological examination results, 12-lead ECG results, complete blood count and biochemistry results of the patients were obtained. In addition, the patient's age, gender, complaints of emergency admission, medications used by the patient, whether the patient had a chronic disease (DM, HT, cardiovascular disease, anemia, hyperlipidemia, malignancy, carotid artery stenosis, other diseases, etc.) were evaluated as present or absent. Fisher SAH scores of the patients were recorded.(Table1). Patients; Hemoglobin (Hg), hematocrit (Hct), platelet (Plt), mean platelet volume (MPV), erythrocyte distribution volume (RDW), glucose, urea and creatinine levels were recorded. In the descriptive statistical analysis of all the data obtained, mean, standard deviation, median, lowest, highest values, frequency and percentage values were used. The conformity of the variables to the normal distribution was measured with the Kolmogorov Smirnov test. Mann-Whitney U test and independent sample t test were used in the analysis of quantitative data. Chi-square test was used in the analysis of qualitative data. The effect level and cut-off value were investigated with the ROC curve. The effect level was examined with univariate and multivariate logistic regression. Data analyzes were performed using the SPSS 22.0 program.

RESULTS

A total of 300 patients with SAH were analyzed retrospectively. Of the 300 cases, 60% (n=180) were male and 40% (n=120) were female. 70% of the patients (n=210) were spontaneous, 30% (n=90) were traumatic SAH. The mean age of all patients was 63.5±15.8 years. In the dead group; The patients' advanced age, drug use, presence of additional disease in the medical history, sudden unconsciousness, presence of neurological deficit at the time of admission, abnormal ECG, Fisher scores were found to be significantly higher ($p<0.05$). There was no drug use in 41% (n=123) of the patients. Antihypertensive drugs were used in 48% (n=144) of the patients, antidiabetic drugs were used in 8% (n=24), and antihyperlipidemiclipidemic drugs were used in 3% (n=9). There was no feature in the previous medical history of the patients in 33% (n= 99), HT in 48% (n=144), DM in 8% (n=15), and heart disease in 11% (n=33). , 3% (n=9) had a history of hyperlipidemia.70% of the patients (n=210) were spontaneous, 30% (n=90) were traumatic SAH. were patients. Of the hospitalized patients, 58% (n=174) were discharged and 42% died. Looking at the laboratory results of our patients, Hg=12.5±2.0 g/dl, Hct=39.5±5.8%, Plt=23,0±6

3x104u/L, MPV=8.4±1.9 fL, RDW= 14.5±2.0%, Glucose=142±72 mg/dl, Blood urea nitrogen=36.1±22.3 mg/dl, creatinine=0.9±0.76 mg/dl (Table2). The age of the patients in the deceased group was significantly ($p<0.05$) higher than the living group. It was determined that there was no significant difference ($p>0.05$) between the gender distribution and length of stay in the dead and alive groups. Sudden deterioration of consciousness in the dead group was significantly higher ($p<0.05$) than the presence of loss at the time of admission group. It was determined that headache did not differ significantly ($p>0.05$) in the dead and alive groups. Fisher scores were found to be significantly ($p<0.05$) higher in the deceased patient group than in the living group. It was determined that MPV and RDW values in the deceased and surviving patient group did not differ significantly in both spontaneous and traumatic SAH groups ($p>0.05$).

DISCUSSION

SAH occurs as a result of spontaneous bleeding of pathological processes such as vessels navigating in the subarachnoid space and the resulting aneurysms and arteriovenous malformations, or as a result of an intraparenchymal hemorrhage opening into the subarachnoid space or due to trauma (1). Among spontaneous SAH cerebrovascular disease (CVD); It ranks fourth after atherothrombosis, embolism, and primary intracerebral hemorrhage (ICH). Spontaneous SAHs are among the hemorrhagic stroke types, and they constitute 6-8% of all stroke cases (2). Although the most common causes of SAH in the literature are head trauma, the most common cause of spontaneous SAH is aneurysms with a rate of 85% (4). Patients typically present complaining of a severe headache; however, only 10% of patients presenting to the emergency department complaining of a thunderclap headache end up having a SAH (2). Associated symptoms may include neck pain, nausea/vomiting, and photophobia (3). Other similarly presenting diseases include meningitis, migraines, acute narrow-angle closure glaucoma, cerebral venous sinus thrombosis, and non-SAH intracerebral hemorrhage (3) Patients presenting with a SAH classically present with a "thunderclap" headache (characterized as a severe rapidly progressing headache that develops within seconds to minutes and has a maximal intensity at its onset), neck stiffness, vomiting, decreased level of consciousness, hemiparesis, and occasionally, seizures (2). The basic imaging method in the diagnosis of SAH is CT without contrast (5). There are many scoring systems to evaluate the clinical and neurological status of patients with SAH. The amount of SAH on CT and the neurological damage status of the patient in the first bleeding are the most important determinants of the neurological complications and damage that will develop later. The most frequently used scorings in the evaluation of patients with SAH are the "World Federation of Neurological Surgeons Scale" (WFNSS), the Hunt and Hess scale, and the Fisher scale, which are the most reliable and simplest (6). In our study, we used the Fisher scale, which is graded on the basis of CT images. Apart from symptomatic and supportive treatments, the aneurysm should be eliminated from the intracranial circulation as soon as possible in cases where aneurysm is detected in diagnostic angiographic examinations. Surgical clipping or endovascular coil embolization are primary methods (7). In studies conducted to examine the causes of mortality in SAH, a disease with high mortality despite appropriate treatment, there are publications reporting that chronic diseases such as hypertension, coronary artery disease, diabetes, smoking and alcohol use increase mortality (8,9,10). In this study, a higher mortality rate was found (42%) than reported in other studies in the literature (11). We think that the reason for this is the high mean age and Fisher score of our patients. In some of the studies in the literature related to blood hematological and biochemical parameters in SAH patients, it was determined that blood values in SAH patients were different from

the normal population. For example, there are publications in the literature showing that the RDW value is significantly higher in patients with SAH when compared to healthy individuals (12). In addition, another study found that inflammatory cytokines suppress the maturation of erythrocytes and the increase in immature erythrocytes reflects high RDW values (13). Despite this literature information, these data need to be confirmed by controlled and large studies. In our study, RDW and MPV values did not differ significantly in both spontaneous and traumatic SAH patient groups. An increase in MPV is an indicator of platelet reactivity. In some studies, the underlying platelet dysfunction was thought to be the culprit in intracerebral hemorrhages, including SAH (14). In addition, since conditions such as hyperglycemia, hyponatremia, hypoxia, hyperthermia as a secondary effect of bleeding in SAH patients cause edema and ischemia in the brain, patients should be protected from such conditions (8,15). Similar to the literature, in our study, blood glucose levels were found to be significantly higher in the deceased patient group. Additionally, there are publications reporting that there is a significant correlation between advanced age, which is an unchangeable risk factor for SAH, and mortality. In fact, although aneurysmal SAH has been reported even in a 39-day-old baby, it has been reported that SAH is the most common for both sexes in the 5th and 6th decades (16). In our study, a significant correlation was found between advanced age and mortality.

CONCLUSION

The patients' advanced age, drug use, presence of additional disease in the history, sudden loss of consciousness, presence of neurological deficit at the time of admission, abnormal ECG, and high Fisher score were found to be significantly higher in terms of mortality ($p<0.05$).

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Table 1:Fisher grading

Grade	CT Findings
1	No blood detected
2	Diffuse deposition or thin on layer with all vertical layers of blood (inter hemispheric fissure, insular cistern, ambient cistern) < 1 mm thick
3	Localized clots and/or vertical layers of blood >,=1mm in thick
4	Diffuse or no subarachnoid blood, but with intracerebral or intraventricular clots

Table2:Laboratory Results of Patients

	Min	Max	Mean±s.d./n-%
Glucose	53	486	142±72 mg/dl
Urea	1	289,3	36.1±22.3 mg/dl
Creatinine	0,2	8,8	0.9±0.76 mg/dl.
Hgb	5,6	17,9	12.5±2.0
Hct	17	54,2	39.5±5.8%
Plt (x104)	8,2	51,2	23±6,3x104u/L
MPV	5,3	14	8.4±1.9 fL
RDW	12,1	24,7	14.5±2.0%

A WARNING SYMPTOM FOR SUBARACHNOID BLEEDING: SENTINEL HEADACHE

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ABSTRACT

OBJECTIVE: In this study, we wanted to discuss our case who applied to our clinic with SAH and had a history of sentinel headache.

METHODS: We retrospectively evaluated the hospital records and data of the patient. A 44-year-old male patient was brought to our hospital with a sudden onset of severe headache and loss of consciousness following vomiting. Temperature: 36.7 C, Pulse: 97 rhythm/min, BP: 150/100 mmHg. In his neurological examination; The patient had GCS:6, isochoric pupils, light reflex +/+, nuchal rigidity, positive Kerning sign, and left extensor plantar reflex, other system findings were normal.

RESULTS: In the cranial tomography examination of the patient with normal hemogram, biochemistry, and PT-PTT-INR values, hyperdense bleeding areas due to SAH in the basal cisterns (Figure 1a), and a bleeding saccular aneurysm at the distal end of the left ICA in the cerebral DSA (Figure 1b). He was taken to the intensive care unit after he underwent an emergency surgery for clipping the left ICA aneurysm (Figure 2). The patient, whose neurological picture did not improve significantly in the follow-up, died on the thirteenth day after admission.

CONCLUSION: This study shows the demographics of CSCI patients, the mortality rate in CSCI patients in our center, and the factors that may affect mortality.

KEYWORDS: Emergency, mortality, cervical, spinal cord, injury

INTRODUCTION

Headache is a frequently observed complaint in admissions to the emergency department and constitutes approximately 2% of patients (1). Secondary headaches constitute approximately 5% of these patients. A group of patients were admitted to the hospital with a sudden onset of severe headache that reached its maximum intensity within one minute. This type of headache is called a thunderclap headache. Subarachnoid hemorrhage constitutes 4-12% of patients presenting with thunderclap (2).

Subarachnoid hemorrhage (SAH) is defined as blood leakage into the subarachnoid space, which is located between the arachnoid and the pia mater and is normally filled with cerebrospinal fluid, and the most common cause is trauma. Nontraumatic, spontaneous SAH can be aneurysmal, nonaneurysmal or perimesencephalic.

Subarachnoid hemorrhage accounts for 5-10% of all strokes. Compared to other types of stroke, although less common, affected patients are younger and have higher morbidity and mortality. 80% of cases are due to saccular aneurysm rupture, therefore, the urgent step after the diagnosis of SAH is the identification of the bleeding aneurysm. Accurate and early diagnosis is very important because complications can be reduced and a better clinical outcome can be achieved with early aneurysm surgery (3).In this study, we wanted to discuss our case who applied to our clinic with SAH and had a history of severe headache.

CASE

A 44-year-old male patient was brought to our hospital with a sudden onset of severe headache and loss of consciousness following vomiting. Temperature: 36.7 C, Pulse: 97 rhythm/min, BP: 150/100 mmHg. In his neurological examination; The patient had GCS:6, isochoric pupils, light reflex +/+, nuchal rigidity, positive Kerning sign, and left extensor plantar reflex, other system findings were normal. In the cranial tomography examination of the patient with normal hemogram, biochemistry, and PT-PTT-INR values, hyperdense bleeding areas due to SAH in the basal cisternas (Figure 1a), and a bleeding saccular aneurysm at the distal end of the left ICA in the cerebral DSA (Figure 1b). The patient was taken to the intensive care unit after an emergency surgery for left ICA aneurysm clipping (Picture 2). He had sudden onset and severe headaches several times in the last 2 months in his history. Computed tomography was performed and no pathology was detected in the follow-up, so it was evaluated as tension headache and analgesic treatment was given. It was learned that the patient had a sudden onset and severe headache 2 weeks before the last bleeding, and he ignored it because there was some relief with analgesics. The patient, whose neurological picture did not improve significantly in the follow-up, died on the thirteenth day after admission.

DISCUSSION

SAH is the most common cause of persistent, intense, sudden onset headache and is a serious condition, with 10-20% of patients dying before reaching the hospital. Severe headache is often the first and only symptom of SAH and is defined as the 'most severe headache in life'. Headache begins suddenly and is very severe. It reaches its most severe state within a few seconds (thunderstorm headache) or within a few minutes (2) There is also a history of severe headache associated with a cerebral aneurysm, known as sentinel headache, occurring approximately 2-8 weeks before SAH. (4). The incidence of sentinel headaches varies widely between studies. This may be due to the fact that it is mostly based on the history given by the patients, that the patients do not apply to the emergency department, or that they are misdiagnosed in the emergency departments. Sentinel headache was first described by Gillinham in 1958 (5). Usually, sentinel headache begins 2 weeks before bleeding, increases within 7-14 days, and peaks within 24 hours. Not all sentinel headaches are due to leaky bleeding, but 74% of patients experience a large aneurysm rupture within 24 hours-4 weeks, half of which is fatal, after sentinel headache caused by leaky bleeding (6). Sentinel headache is thought to be associated with bleeding in the form of leakage from the aneurysm, bleeding confined to the aneurysm wall by dissection of the aneurysm, enlargement of the aneurysm due to thrombus within the aneurysm, dural compression and localized vasospasm. It is very important to examine these patients for aneurysm before SAH. Sentinel headache should be kept in mind in patients with sudden onset, extraordinary and severe headache. Not missing sentinel headache is of great importance in terms of reducing mortality and morbidity. Cranial computed tomography (CT) should be performed in cases of sudden, severe headaches described for the first time, but CT can be normal in 55% of patients. If SAH is considered in patients with normal CT, magnetic resonance imaging (MRI), LP and angiography should be considered in the differential diagnosis.

CONCLUSION

It is very important to reduce the frequency of misdiagnosis in patients who present with a sudden and severe headache. Especially in patients presenting with this type of headache, SAH should be kept in mind in the differential diagnosis and comprehensive investigations should be performed.

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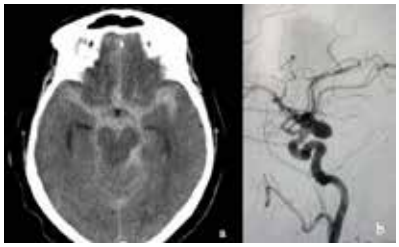

Figure-1: Subarachnoid hemorrhage in non-contrast brain CT and saccular aneurysm at the left ICA distal end in DSA.

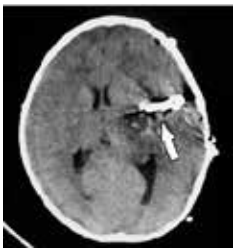

Figure2: Postop left ICA aneurysm clip.

PNEUMOCEPHALUS SECONDARY TO A SPINAL SURGERY: A LITERATURE REVIEW AND A CASE REPORT

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ABSTRACT

OBJECTIVE:

In this study, we wanted to discuss our case who developed pneumocephalus after spinal surgery in the light of the literature.

METHODS: We retrospectively evaluated the hospital records and data of the patient. A 57-year-old male patient presented with complaints of pain in the lower back and both legs for about 4 years. Neurological examination revealed a positive straight leg raising sign in both legs, hypoesthesia in the right L4 and left L5–S1 dermatomes, decreased motor strength in ankle dorsiflexion (2/5), and decreased reflexes in both ankles. He also described neurological claudication after walking 50 m.

RESULTS: Magnetic resonance imaging (MRI) of the lumbar spine showed a giant, inferiorly migrated, sequestered disc fragment at the right L4–L5 level and a disc herniation at the left L3–4 and left L5–S1 levels.The patient underwent surgery for bilateral L4 hemilaminectomy and discectomy. The patient was on prone position and the head was flat. A giant, sequestered disc fragment was removed from the right L4 level. The fragment was so huge and big that medial facetectomy was done. Pedicle screws were placed bilaterally in the L4 and L5 pedicles. On postoperative day 1, his motor strength during ankle dorsiflexion had recovered (4/5), but the patient began to complain of a severe headache, nausea, and dizziness. Extensive extra-axial pneumocephaly was detected in both hemispheres on cranial computed tomography (CT).The patient was successfully managed conservatively with 100% oxygen, bed rest, hydration, analgesics, and close monitoring. On the tenth postoperative day, the patient was discharged with no neurological deficits or pain.

CONCLUSION:

Since pneumocephalus may develop without a CSF fistula, it should be kept in mind in the differential diagnosis of patients with headache complaints after a recent spinal surgery.

KEYWORDS: Pneumocephalus ,spinal surgery, headache.

CASE

A 57-year-old male patient presented with complaints of pain in the lower back and both legs for about 4 years. The patient's right foot started to have weakness in the last two days. The patient had no significant medical history. Neurological examination revealed a positive straight leg raising sign in both legs, hypoesthesia in the right L4 and left L5–S1 dermatomes, decreased motor strength in ankle dorsiflexion (2/5), and decreased reflexes in both ankles. He also described neurological claudication after walking 50 m. MRI of the lumbar spine showed a giant, inferiorly migrated, sequestered disc fragment at the right L4–L5 level and a disc herniation at the left L3–4 and left L5–S1 levels (Figure1). The patient underwent surgery for bilateral L4 hemilaminectomy and discectomy. The patient was on prone position and the head was flat. A giant, sequestered disc fragment was removed from the right L4 level. The fragment was so huge and big that medial facetectomy was done. Pedicle screws were placed bilaterally in the L4 and L5 pedicles (Figure 2). A suction drain was placed into the surgical area. There was no leakage of cerebrospinal fluid (CSF) during surgery. On postoperative day 1, his motor strength during ankle dorsiflexion had recovered (4/5), but the patient began to complain of a severe headache, nausea, and dizziness. Extensive extra-axial pneumocephaly was detected in both hemispheres on CT. (Figure 3). There was no leakage of CSF from the suction drain. The patient was successfully managed conservatively with 100% oxygen, bed rest, hydration, analgesics, and close monitoring. On the tenth postoperative day, the patient was discharged with no neurological deficits or pain.

DISCUSSION

Pneumocephalus can be localized in the subdural, subarachnoid, epidural, intraventricular, and intraparenchymal spaces (1). The most common causes of pneumocephalus are trauma, neoplasms, infections, diagnostic and therapeutic procedures such as lumbar puncture and surgical intervention (2). Pneumocephalus usually occurs after fracture of the skull base, temporal bone, or paranasal sinus. Spontaneous pneumocephalus has also been observed after anesthetic intervention (3). Spinal causes of pneumocephalus during spinal surgeries are very rare. Spinal surgeons are faced with an increasing number of CSF leakages due to recent advances in spinal instrumentation (4). However, the incidence of dural tears during spinal surgeries ranges from 0.3% to 5.9%, and dural tears that occur during spinal surgeries do not usually cause pneumocephalus, pneumorrhachis, or both (5). A CSF leakage can cause meningitis, arachnoiditis, epidural abscess, pneumocephalus, or dural fistula. Two theories have been used to describe the pathophysiology of pneumocephalus: the inverted bottle mechanism and the ball-valve mechanism (4,5). İn the inverted bottle mechanism, it is postulated that as CSF flows out of the subarachnoid space through a dural-arachnoid tear, negative pressure is created within the subarachnoid space. The negative pressure prevents the leakage of more CSF, until air enters to take its place and equilibrates the pressure differential. İn the second theory, the ball-valve mechanism hypothesizes that air enters through a fracture next to an air-containing space (4,5). A vacuum drainage system predisposes a patient to a pneumocephalus in the presence of a CSF leakage (4,6). In our case, we hypothesize that the tip of the giant, inferiorly migrated, sequestered and calcified disc fragment may have been located intradurally and may have damaged the arachnoid in the axilla of the root sleeve. When we removed the disc fragment, although there was no active CSF leakage, a dural and arachnoid tear occurred in the anterior part of the spinal cord and it was removed from this space. We think that the air has passed into the subarachnoid space. In addition, we speculate that axillary perineurium laceration in the root sheath allows air to enter the spinal cord, but not to exit, in the form of a control valve. Furthermore, the suction drain may have predisposed the patient to develop pneumocephalus by the inverted bottle mechanism. Symptoms of pneumocephalus are mostly nonspecific. The most clinically apparent sign of a pneumocephalus is headache. The other clinical signs are nausea, vomiting, dizziness, lethargy, and consciousness. The nonspecific complaints of these clinical symptoms by patients who have just undergone general anesthesia are mostly considered to be insignificant (5,6). Spinal surgeons should be more aware of the potential for patients to develop pneumocephalus after spinal surgeries. CT can be used to detect as little as 0.55 ml of air in the brain and is very useful in the detection of a pneumocephalus. MRI can also be used to detect a pneumocephalus, but CT is more effective (6). Spontaneous absorption of the air can be seen in 85% of patients with pneumocephalus (6). The general approach is conservative, with hydration, bed rest, inhalation of 100% oxygen to increase the speed of diffusion of nitrogen, and analgesics. İn the majority of patients with pneumocephalus, a conservative treatment consisting of bedrest and hyperhydration is adequate and symptoms resolve in 2–3 weeks (4) Prophylactic treatment for meningitis must also be considered for patients with CsF leakage. Our patient was successfully managed conservatively with 100% oxygen, bed rest, hydration, analgesics, and close monitoring. On the tenth postoperative day, the patient was discharged with no neurological deficits or pain.

CONCLUSION:

Since pneumocephalus may develop without a CSF fistula, it should be kept in mind in the differential diagnosis of patients with headache complaints after a recent spinal surgery.

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Figure: 1. T2W MRI showing a huge L4–L5 herniated disc

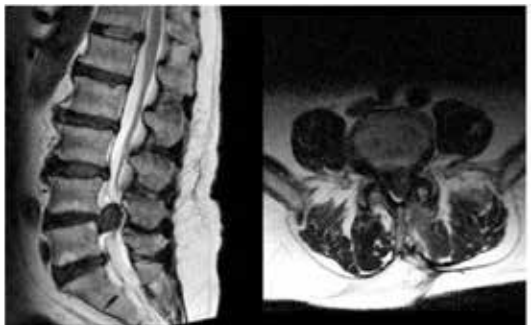


Figure:2 Post operative L4-5 transpedicular screw fixation lateral and AP direct graphs.

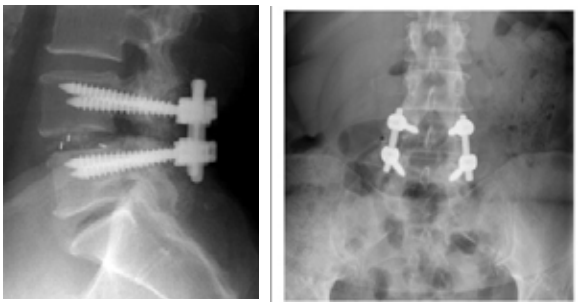
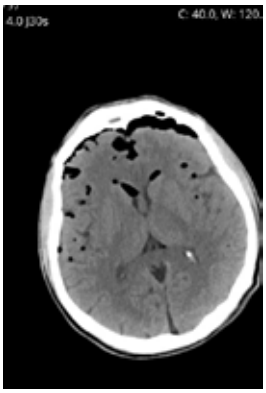


Figure3Axial brain CT showing multiple air bubbles seen diffusely throughout the brain subarachnoid spaces indicating pneumocephalus.



A PROPOSED EXTREME GRADIENT BOOSTING MODEL FOR STROKE DISEASE PREDICTION

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ABSTRACT

Aim: The goal of this study is to predict the diagnosis of stroke disease and to determine the factors associated with stroke by applying the Extreme Gradient Boosting method (XGBoost), which is one of the machine learning methods, on the open access dataset.

Materials and Method: In this study, a dataset containing information on patients with and without stroke disease obtained from an open-access "https://www.kaggle.com/datasets/fedesoriano/stroke-prediction-dataset" was used to predict stroke disease. In order to compensate for the imbalance in the dataset used in the study, SMOTE-NC was applied as the data balancing method and XGBoost method was used in the modeling phase. A 10-fold cross-validation approach was used for the analysis. Accuracy, balanced accuracy, sensitivity, specificity, positive predictive value, negative predictive value, and F1 score were used as performance evaluation criteria. In addition, variable importances reveal the extent to which input variables affect the output variable. Modeling was done using R studio 4.2.1.

RESULTS: As a consequence of the modeling, accuracy, balanced accuracy, sensitivity, specificity, positive predictive value, negative predictive value and F1 score were 97.6%, 97.6%, 98.4%, 96.9%, 96.9%, 98.4%, and 97.7%, respectively. The five most important variables that can be associated with stroke were obtained as age, average glucose level, BMI, not ever married, suffering from heart disease, respectively.

CONCLUSION: The results of this research revealed that the XGBoost method utilized produced good predictions in the classification of having a stroke. It will be beneficial in the field of health related to this disease with its success in classification performance and determination of risk factors associated with the disease.

Keywords— Extreme Gradient Boosting method, Machine Learning, Classification, Stroke, Risk factors.

INTRODUCTION

A stroke is an acute neurological condition of the brain's blood vessels that happens when the blood flow to a portion of the brain ceases and the brain cells are deprived of oxygen (1). According to the World Stroke Organization, nearly 5.5 million individuals die as a consequence of suffering a stroke each year (2). It is the biggest cause of mortality and disability in the world, thus its impact on all parts of life is significant. Stroke impacts not just the patient but also his or her social surroundings, family, and career. In addition, contrary to popular belief, anyone of any age, regardless of gender or physical condition, can be affected (3).

Stroke, which plays a significant role in hospital admission, also causes a variety of physiological dysfunctions that need rehabilitation and care more often, as well as individual, societal, and economic issues (4). It is critical to establish the prevalence and risk factors of a disease with a high mortality and disability rate, such as stroke, and to take appropriate actions to lower the death rate, avoid workforce loss, and lessen the cost on the country's economy. If the modifiable risk factors can be managed with the interventions that will be implemented, the incidence of stroke and accompanying mortality will be reduced (5).

Early stroke detection is crucial and Machine learning (ML) may help in this process. ML is the most sophisticated technology for supporting doctors in generating clinical decisions and projections (6). Machine learning is a rapidly evolving subject of computer algorithms that attempt to replicate human intelligence by learning from their environment. It is the study of algorithms that can be taught and improved without the need of past data.

Extreme Gradient Boosting (XGBoost) is one of the most successful supervised learning algorithms, with a fundamental structure based on gradient boosting and decision tree techniques. XGBoost is an ensemble approach that uses boosting to combine a number of weak classifiers to build a strong classifier (7). Starting with a basic learner, the strong learner is educated iteratively. XGBoost has the capacity to process about 10 times quicker than other machine learning algorithms, placing it in a highly favorable position in terms of speed and performance. In addition, it has a number of regularizations that boost overall performance and decrease overfitting or overlearning (8).

The aim of this study is to classify stroke disease and determine the factors associated with this disease by applying XGBoost machine learning technique to a dataset consisting of open access patients with and without stroke disease.

MATERIAL AND METHOD

DATASET

In this study, a data set containing information on patients with and without stroke disease obtained from the address an open-access "https://www.kaggle.com/datasets/fedesoriano/stroke-prediction-dataset" was used to predict stroke disease and to identify related factors. The data set used in this study included 4861 (95.1%) patients without a stroke diagnosis and 249 (4.9%) patients with stroke. The data set used in this study; it consists of gender, age, hypertension, heart disease, ever married, work type, residence type, average glucose level in blood, body mass index (BMI), smoking status and stroke.

XGBOOST METHOD

XGBoost is a widely used algorithm in the disciplines of health, energy, finance, and so on. Gradient Boost is a powerful machine learning approach that is often used for regression and classification problems where weak prediction models usually create ensemble versions of decision trees. Starting with a primary learner, the strong learner is taught iteratively. Several regularizations are included in XGBoost to increase overall performance and prevent overfitting or over-learning(9). Gradient boosting and XGBoost both work on the same premise. The key distinctions between them are found in the implementation details. XGBoost improves performance by regulating the complexity of the trees via the use of various regularization approaches. XGBoost is an ensemble approach for creating a robust classifier by combining a series of weak classifiers with reinforcement. XGBoost may achieve greater performance than other approaches by employing various regularization strategies to manage the complexity of the trees (10).

MODELLING

In the study, SMOTE-NC was used as the data balancing method to compensate for the imbalance in the used data set, XGBoost was used in the modeling phase for the aforementioned data set. For the analysis, a 10-fold cross-validation technique was applied. In the n-fold cross- validation method, the data is first divided into n parts, and the model used is applied to n parts. One of the n parts is used for testing, while the other n-1 parts are utilized for training the model. The mean of the obtained values is evaluated for the cross-validation method. As performance assessment criteria, we employed accuracy, balanced accuracy, sensitivity, specificity, positive predictive value, negative predictive value, and F1 score. In addition, variable importances indicate how much the input variables contribute to the output variable. Modeling was done using R studio 4.2.1.

RESULTS

Table 1 shows the results of performance metrics from modeling using XGBoost.

Performance Metrics	Testing Stage
	Value (%)
Accuracy	97.6
Balanced Accuracy	97.6
Sensitivity	98.4
Specificity	96.9
Positive predictive value	96.9
Negative predictive value	98.4
F1-score	97.7

The graph of the importance values of the variables determined by the XGBoost model is shown in Figure 1.

Figure 1. The importance values of the variables (BMI: Body Mass Index)

DISCUSSION

Stroke is a localized neurological ailment that occurs suddenly as a result of cerebrovascular illness. Furthermore, stroke is a serious medical and economic concern that causes severe impairment and is the third leading cause of mortality after heart disease and cancer. Although the incidence of stroke varies across locations, it also varies by race and settlement within a single country. In investigations done over the last two decades, the incidence of stroke was found to be between 1/1000 and 1/1000, while its frequency was determined to be 6/1000 (11).

Stroke ranks among the primary causes of death and disability. As the population ages, the number of persons living with the consequences of a stroke has grown despite the decline in stroke mortality. The expanding and aging population has led to a rise in the prevalence of persons living with the consequences of stroke, notwithstanding the decline in stroke mortality (4). In recent decades, the incidence of modifiable stroke risk factors has increased, especially in low- and middle-income countries, which has contributed to a large increase in the worldwide burden of stroke (12). In order to reduce the economic burden of the illness, it is crucial to identify the risk factors connected with it and to guarantee that it is preventable. So, the aim of this study is to predict the state of having a stroke and to determine the risk factors associated with stroke by applying the XGBoost method to the open-access data set consisting of input variables such as socio-demographic and various diseases.

As a result of modeling, accuracy, balanced accuracy, sensitivity, specificity, positive predictive value, negative predictive value and F1 score of the performance metrics were obtained as 97.6%, 97.6%, 98.4%, 96.9%, 96.9%, 98.4% and 97.7%, respectively.

In accordance with the variable importance values derived from the model, the five most important variables that can be associated with stroke were obtained as age, average glucose level, BMI, not ever married, suffering from heart disease, respectively.

In a study using the same data set, SMOTE was used as the data balancing method, and the gradient boosting tree method was used in the modeling. Specificity, sensitivity, accuracy, positive predictive value and negative predictive values were obtained as 0.0887, 0.9772, 0.9339, 0.9544 and 0.1679, respectively, according to the modeling result using the XGBoost method using the original version of the dataset. After applying SMOTE to the data set, the same performance criteria were obtained as 0.0887, 0.9772, 0.9339, 0.9544 and 0.1679, respectively, as a result of modeling using the XGBoost (13).

CONCLUSION

In conclusion, considering the findings in this study, it was seen that successful predictions were obtained in the classification of stroke. In addition, risk factors that may affect stroke were estimated in this study and their significance values were indicated. Thus, it will be beneficial in the field of health related to this disease with its success in classification performance.

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DETECTION OF RISK FACTORS WITH ASSOCIATIVE CLASSIFICATION FOR THE DIAGNOSIS OF CHRONIC KIDNEY FAILURE

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INTRODUCTION

Chronic kidney failure (CKF), which has become a major public health issue in the world and in our country today, is a disease that can occur for a variety of reasons, results in irreversible loss of kidney functions, negatively affects individuals' quality of life, and necessitates lifelong treatment and surveillance (1). It is now claimed that the prevalence of CKF is quickly growing. According to the findings of the studies, the global prevalence of chronic renal failure ranges between 10 and 16%. It is estimated that around 500 million people globally suffer from CKF (2). Chronic kidney failure (CKF) is a growing public health concern around the world. When seen from a prognosis standpoint, this disease, which is exceedingly expensive to cure, can have unfavorable repercussions. As a result, CKF, which can arise for a variety of reasons and culminates in irreversible loss of kidney functions, is a condition that has a detrimental impact on people's quality of life and necessitates lifetime therapy and surveillance (3).

Associative classification is an area of science known as data mining in artificial intelligence. Associative classification uses association rules and classification, two well-known data mining methods, to produce a model for prediction purposes. Associative classification, in particular, is a classification strategy that is developed utilizing a set of rules generated by association rule mining to form classification models. In recent years, association rules methods have been successfully used to construct proper classifiers in associative classification (4).

The purpose of this study is to classify the CKF by applying the associative classification method, which is an important sub-field of machine learning, to the open-access CKF data set. In addition, it is to present the risk factors related to the disease to the user by revealing the relations.

MATERIAL AND METHODS

DATASET

In the study, the ensemble learning method, which is an important sub-field of machine learning, was applied to an open-access data set called "Chronic Kidney Disease". Open access data set named "Chronic Kidney Disease" was obtained from https://www.kaggle.com/abhia1999/chronic-kidney-disease. There are 400 patients in the data set used. 250 (62.5%) of these patients have chronic kidney failure.

ASSOCIATIVE CLASSIFICATION

Associative classification is a data mining method that makes predictions by combining classification and association rules methodologies. Associative classification is a special association rule mining with the target/response/dependent/class variable to the right of the rule obtained. In a rule such as X →Y, Y must be the target / response / dependent / class variable. One of the key benefits of using a classification based on association rules according to traditional classification approaches is that the output of an associative classification algorithm is represented by simple if-then rules. This rule makes the result easier for the user to grasp and interpret. The purpose of the association rules is to find the relationship between the items in the transaction database, whereas, in the associative classification, the aim is to create a classifier that can predict the classes of test data objects. While association rules might have more than one attribute as a result of a rule, associative classification only has one class attribute as a result of a rule (4).

MODELLING

In the current study, the associative classification method was used in the modeling stage for the dataset in question. support and confidence values were taken as 0.2 and 0.5, respectively. Ameva was used as the discretization method. Accuracy, balanced accuracy, sensitivity, specificity, positive predictive value, negative predictive value, and F1-score were used as performance evaluation criteria. In addition rules for risk factors causing kidney failure have been obtained.

RESULTS

The results of the performance metrics obtained as a result of modeling with associative classification method are given in Table 1.

Table 1. The performance metrics obtained with associative classification

Performance Metrics	Testing Stage
	Value (%)
Accuracy	99.5
Balanced Accuracy	99.6
Sensitivity	99.2
Specificity	1
Positive predictive value	1
Negative predictive value	98.7
F1-score	99.6

The rules obtained with the risk factors for the disease as a result of the model are given in Table 2.

Table 2. The rules obtained with the risk factors for the disease

Left-hand side rules	Right-hand side rules	Support	Confidence	Frequency
{sc=[1.25,76),hemo=[3.1,13.1)}	{class=1}	0.482	1	192
{al=[0.5,5),hemo=[3.1,13.1)}	{class=1}	0.46	1	183
{al=[0.5,5),rbcc=[2.1,4.75)}	{class=1}	0.46	1	183
{al=[0.5,5),sc=[1.25,76)}	{class=1}	0.427	1	170
{sg=[1.005,1.018)}	{class=1}	0.417	1	166
{al=[0.5,5),sod=[4.5,138)}	{class=1}	0.41	1	163
{htn=1}	{class=1}	0.369	1	147

According to obtained rules when sc=[1.25,76), hemo=[3.1,13.1) are considered, the probability of to be chronic kidney failure is 100%. when al=[0.5,5), hemo=[3.1,13.1) are considered, the probability of to be chronic kidney failure is 100%. Smilarly when al=[0.5,5), rbcc=[3.1,13.1) are considered, the probability of to be chronic kidney failure is 100%. Other rules are interpreted similarly.

DISCUSSION

Chronic kidney failure (CKF) is a major public health issue that is becoming more common around the world and in our country. Similar findings have been reported in population-based research studying the prevalence of CKF around the world and in our nation. According to the findings of a meta-analysis study completed in 2016, the global prevalence of CKF was determined to be 11.7-15.1% (average 13.4%). Because of its high morbidity rate and increasing health expenditures, CKF is regarded as a severe public health problem around the world. As a result, it is an open area for research and new discoveries (5-7).

Classification analysis is a fundamental method of machine learning that is widely used in the scientific community. Classification is an estimating procedure that allocates each observation in a dataset to one of several predefined classes based on a set of rules. Associative classification combines two common data mining approaches, association rules and classification methods, to create categorization. Association rules methods have been successfully applied in recent years to build correct classifiers in associative classification. The main advantage of utilizing this method is that simple if-then rules describe its output by employing a classification based on association rules according to traditional classification approaches, which makes the rules easier to comprehend and interpret (4).

In the current study, different factors (independent variables) that may be associated with kidney failure diagnosis (the dependent variable) are estimated with the associative classification model and association rules have been found. According to the results of the associative classification analysis, the performance metrics obtained from the model were obtained accuracy, balanced accuracy, sensitivity, specificity, positive predictive value, negative predictive value, and F1 score were 99.5%, 99.6%, 99.2%, 100%, 100%, 98.7%, and 99.6%, respectively.

As a result, the associative classification model proposed as a result of the analysis of the open access data set produces distinctively successful predictions in classifying kidney failure according to performance metrics. With the results obtained as a result of the associative classification, medical professionals can evaluate their patients by considering the rules related to risk factors, and this may help in the diagnosis.

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ESTIMATING RISK FACTORS ASSOCIATED WITH TYPE 2 DIABETES MELLITUS WITH THE RANDOM FOREST MODEL

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INTRODUCTION

Diabetes mellitus (DM) is a chronic condition that has a significant impact on daily life as well as quality of life. This disease cannot be totally cured, but its harmful effects in the short and long term can be avoided if it is adequately controlled and measures are taken (1, 2).

Diabetes mellitus (DM) is a chronic and metabolic disease marked by problems in protein, carbohydrate, and lipid metabolism caused by absolute or relative insulin insufficiency, as well as clinical and biochemical findings (3). Type 1 diabetes is an autoimmune illness that results from the loss of pancreatic beta cells. Type 2 diabetes is defined as a combination of insulin resistance and pancreatic beta cell dysfunction in insulin secretion (4).

Type 2 diabetes accounts for 80-90% of diabetes cases. The disease's prevalence is rapidly increasing over the world. The prevalence of type 2 diabetes rises with age. Factors such as the move from traditional to western lifestyles, an increase in the number of overweight and obese people, a decline in activities such as exercise and sports, and an unhealthy diet all contributed to the disease's prevalence (5).

Machine learning is a branch of artificial intelligence that employs data-driven learning to predict new data when it is presented with new data. Machine learning methods are one of the technologies that have seen widespread use in illness detection and clinical decision support systems in recent years (6).

Random Forest (RF) approach is a machine learning method that is used to construct a prediction set in decision trees growing in subspaces of randomly picked data (7). RF, which is known for producing very good and quick results, is frequently used in classification and regression processes (8). This algorithm has been shown in numerous studies to be a good classification approach and an effective predictor in determining the cause and effect relationship (8-10) .

This study, it was aimed to classify Type 2 DM and determine the risk factors that can be associated with Type 2 DM by applying the Random forest method to the open access Type 2 DM dataset.

MATERIAL AND METHODS

DATASET

In this study, the data set named "Pima Indians Diabetes Database" was used from https://www.kaggle.com/uciml/pima-indians-diabetes-database to examine the working principle of Random Forest and to determine risk factors. In the data set used, there were 768 patients with 500 (65.1%) type 2 diabetes patients and 268 (34.9%) patients without diabetes (11).

RANDOM FOREST

The Random Forest (RF) approach is a classification and regression method that incorporates voting. It is made up of multiple decision trees that are joined together, and the individual trees are voted on to decide the winning class. The decision trees in the forest are independent of one another and are generated using the bootstrap process from samples selected from the data set (12). The RF approach employs a large number of classification trees. Each piece of incoming data is processed by all of these categorization trees. After each input data is entered into all classification trees and voted, assignments are made to the class with the highest number of votes from the tree structures (13).

MODELLING

In the current study, Random Forest was used in the modeling stage for the dataset in question. The data set was divided as 80:20 as a training and test dataset. The 5-fold cross-validation approach was used for the analyses. Accuracy, balanced accuracy, sensitivity, specificity, positive predictive value, negative predictive value, and F1-score were used as performance evaluation criteria. In addition, variable importances were calculated, which gives information about how much the input variables contribute to the output variable. Modeling was done using R studio 4.2.1.

RESULTS

The results of the performance metrics obtained as a result of modeling with Random Forest are given in Table 1.

Table 1: The performance metrics obtained with random forest

Performance Metrics	Testing Stage
	Value (%)
Accuracy	83
Balanced Accuracy	79.9
Sensitivity	69.8
Specificity	90
Positive predictive value	78.7
Negative predictive value	84.9
F1-score	74

The graph of the variable importance values calculated as a result of the Random Forest model is given in figure 1.

DISCUSSION

In this study, it was aimed to apply Random Forest method that machine learning models on an open-source type 2 DM dataset and to give classification estimate. Also, the importance levels of factors that may be associated with type 2 DM for use in preventive medicine applications were obtained from the model.

From the performance metrics obtained as a result of the modeling; accuracy, balanced accuracy, sensitivity, specificity, positive predictive value, negative predictive value, and F1-score were obtained as 83%, 79.9%, 69.8%, 90%, 78.7%, 84.9%, and 74%, respectively.

According to the variable significance values obtained as a result of the model, the most important variables that can be associated with Type 2 DM were obtained as glucose, BMI, diabetes pedigree function, age, blood pressure, pregnancies, and insulin, respectively.

In a study using the same data set, the accuracy, sensitivity, and specificity performance criteria used in the classification made with support vector machines were obtained as 78%, 80%, and 76.5, respectively (14). In one study, MLP and RBF methods were used and the accuracy values were 78.1, 76.8, respectively (15). When the current study results are examined, Random Forest method showed better classification performance.

As a result, the findings obtained from this study showed that the classification of Type 2 DM performed successful predictions. In addition, the importance values of the factors associated with type 2 DM were estimated with the present study, and the factors associated with the disease were revealed.

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PREDICTION OF CORONARY HEART DISEASE IN 10-YEAR PROCESS WITH MACHINE LEARNING METHOD

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INTRODUCTION

The World Health Organization (WHO) reports that 12 million people die from heart disease each year. Cardiovascular diseases are stated as the highest cause of mortality worldwide (1). About 40% of deaths in the US are due to CHD (2). Smoking, high cholesterol and blood pressure are seen in 80% of heart patients and cause early coronary heart disease (3). CHH risk factors are divided into two subgroups as both modifiable and non-modifiable. Modifiable risk factors are diabetes, smoking, obesity, low physical activity, psychosocial reasons, hypertension, dietary habits, alcohol use, and cholesterol. Non-modifiable risk factors are gender, age, and family history (4).

Artificial intelligence (AI), a sub-branch of computer science, has been used more frequently in the fields of industry and academia in recent years (5). While AI defines that programs can learn by behaving like humans, machine learning refers to algorithms written for this purpose (6). ML; It is defined as a field of study in which various algorithms and technical methods are used together with the aim of enabling people to learn on their computers like humans. It is one of the fastest growing fields with the developments it has shown in recent years (7). ML algorithms provide the opportunity to make classification by minimizing the losses in the observed data (8, 9).

The aim of this study is to classify the probability of individuals to have CHD in a 10-year period with Xgboost, which is one of the ML methods, and to predict the disease.

MATERIAL AND METHOD

The data set for the study was taken from https://www.kaggle.com/datasets/dileep070/heart-disease-prediction-using-logistic-regression/code?select=framingham.csv. The data set includes information on patients with and without CHD within 10 years. Data consist of sex, age, whether or not the patient is a current smoker, the number of cigarettes that the person smoked on average in one day, whether or not the patient was on blood pressure medication, whether or not the patient had previously had a stroke, whether or not the patient was hypertensive, whether or not the patient had diabetes, total cholesterol level, systolic blood pressure, diastolic blood pressure, Body Mass Index, heart rate and glucose levels. In this study, three stages of ML were carried out, namely data preprocessing, training of the classification model, and prediction. Data classification was made using Xgboost classification method, one of the ML classification methods. In the data preprocessing stage, the data was brought into an appropriate order for analysis (outlier deletion, debugging, completion of missing observations, standardization). K-fold and cross-validation methods were used in the estimation process of training and test data. The SMOTE method was first applied to the dataset. The dataset is then split into 75% for training and 25% for testing. The XGboost algorithm was used for the classification task. The XGboost model was evaluated with Accuracy, Specificity, Sensitivity, and F1 score. All the modeling and calculations were performed in Pyhton. The accuracy of the data was checked with Accuracy, Specificity, Sensitivity, and F1-score values.

RESULTS

There are 4238 participants in the data set. While 3594 (84.8%) of the participants did not have a diagnosis of CHD, 644 (15.2%) of them had a diagnosis of CHD. While the mean age of the participants was 49.58 ± 8.57 standard deviations, the age range was calculated as 32-70. While 2419 (57.1%) of the participants were male, 3819 (42.9%) were male.

The performance measures of the XGboost model in the test set are given in Table 1. The values of Accuracy, Specificity, and F1-score criteria obtained from the XGboost model were calculated as 0.81, 0.92 and 0.89 respectively.

Table 1. Performance Metrics for XGboost Model

Metrics	Value
Accuracy	0.81
Specificity	0.92
F1-score	0.89

The importance values of the variables used in the data set are given in Table 2.

Table 2. Significance of Variables in the Model (%)

Variable	Importance
Sex	6.917
Age	9.632
Education	4.954
Current smoker	4.119
The number of cigarettes that the person smoked on average in one day	6.849
Whether or not the patient was on blood pressure medication	6.971
Whether or not the patient had previously had a stroke	4.573
Whether or not the patient was hypertensive	8.712
Whether or not the patient had diabetes	3.091
Total cholesterol level	6.321
Systolic blood pressure	8.584
Diastolic blood pressure	7.449
Body Mass Index	7.299
Heart rate	6.633
Glucose levels	7.891

The order of importance values of the variables used in the data set is given in figure 1.

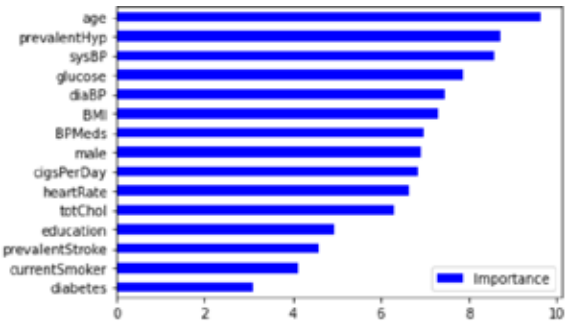

Figure 1. Distribution Graph of the Significance of the Variables in the Model (%)

DISCUSSION

CHH is treated with interventional, medical and surgical methods after diagnosis. However, high cost is required for treatment. Giving importance to the diagnosis and treatment of these high-cost diseases plays an important role in the development of the country (10). WHO, on the other hand, stated that if blood pressure, cholesterol, obesity, and smoking are regulated, there will be decreases in the incidence of CHD (11).

In this study, a classification model for KHH was prepared with the XGboos estimator method, one of the ML methods. The model with high predictive value was obtained with the algorithm established for HR estimation. The values of Accuracy, Specificity, and F1-score criteria obtained from the model were calculated as 0.81, 0.92, and 0.89, respectively. The three most important variables determined for CHH are age, hypertension, and systolic blood pressure. The least effective three factors for KHH were found to be whether or not the patient had previously had a stroke, smoking, diabetes.

CONCLUSION

As a result of the findings obtained in our study, it was found that the XGboost classification method, one of the ML methods, is an adequate and distinctive method for KHH classification. Since the results obtained with ML estimators, which will be used in different disease prediction methods, are generalizable, analyzes that can help Clinical Decision Support Systems can be made in advanced studies.

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INTRAOSSEOUS VS. INTRAVENOUS ACCESS AMONG PEDIATRIC PATIENTS IN CRITICAL CONDITION

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KEYWORDS: intraosseous access. Cardiac arrest, resuscitation, shock, pediatric.

OBJECTIVE:

For the supply of fluids and drugs during a critical condition, access to the vascular system is crucial. Intravenous (IV) access in pediatric patients can be difficult, perhaps needing four or more tries. A quick and secure procedure is intraosseous (IO) needle insertion. In addition to being quicker than IV, IO also seems to have a higher success rate for vascular access. IO was suggested as a standard therapy in the American Heart Association (AHA) Pediatric Advanced Life Support (PALS) curriculum in 1988, and it was approved as a first vascular access option in pediatric cardiac arrest in 2005. The impact of IO or IV access in pediatric critical condition remains unclear. This meta-analysis investigated the impact of intraosseous access on survival to hospital discharge among pediatric patients with cardiac arrest or shock condition.

METHODS: Study was designed as a systematic review and meta-analysis. We based study selection and extraction of a predefined list of variables on the Preferred Reporting Items for Systematic Review and Meta-Analyses (PRISMA) statement. PubMed, Cochrane, Scopus and Web databases were searched up until September 1st, 2022. The keywords were: "intraosseous" OR "IO" OR "B.I.G." OR "bone injection gun" OR "Jamshidi" OR "NIO" OR "EZ-IO" AND "pediatric" OR "child*" AND "cardiopulmonary resuscitation" OR "resuscitation" OR "cardiac arrest" OR "shock". Trials comparing intravenous vs. intraosseous access in pediatric cardiopulmonary resuscitation or in pediatric patients with shock were included. Primary endpoint was survival to hospital discharge (SHD). Standard meta-analysis and meta-analysis were performed using Stata 14.0.

RESULTS:

Two studies compared IO and IV under pediatric cardiac arrest arrest. Pooled analysis of return spontaneous circulation between IO vs. IV group was 20.2% vs. 34.5%, respectively (OR = 0.41; 95%CI: 0.21 to 0.78; p=0.006) [1,2]. Survival to hospital discharge was 3.9% vs. 12.8% respectively (OR = 0.19; 95%CI: 0.12 to 0.31; p<0.001) and SHD with good neurological outcome was 0.6% for IO group, compared to 1.26% for IV group (OR = 0.72; 95%CI: 0.10 to 5.12; p=0.74).

Survival to hospital discharge among patients with shock was 72.5% vs. 89.6% (OR = 1.35; 95%CI: 0.03 to 58.69; p=0.88) [3,4].

Conclusions:

The conducted analysis showed that the use of intraosseous lines during resuscitation of a pediatric patient, as well as when securing a patient with shock, does not improve survival to hospital discharge. However, it is important to keep in mind that these results should be interpreted with caution because it is probable that intraosseous puncture patients had considerably worse conditions than intravenous access patients. It is necessary to conduct a large multicenter, randomized trial in order to confirm the obtained results.

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PREDICTION OF DISTANT METASTASIS OF BREAST CANCER WITH ARTIFICIAL INTELLIGENCE METHODS BASED ON GENOMIC PREDICTORS

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INTRODUCTION

Breast cancer (BC) is among the leading causes of mortality and morbidity among women. BC is a huge public health problem for either developed or developing countries involving economical and mental issues. BC incidence is relatively higher in countries with higher income compared with BC incidence in middle and lower-income countries. The vast majority of studies for the molecular structure of BC are focused on primary cancers (1).

Different subgroups of BC are defined by gene expression profiles, and clinical trials have identified these transcriptional signatures to influence therapy choices. Recent large-scaled genomic analyses ease revealing complicated mutational configurations. The same success is actually absent for genetic configurations of locoregional or distant-metastasis BC, despite the well-defined genomic configuration of BC. Studies for metastatic disease up to date clonally determined relationship between metastases and primary tumor, presence of various common mutations, and presence of typically additional mutations, which are not present in primary tumors (2). Examination of expression levels of thousands of genes with genomic technology and early and rapid detection of BC and metastases with artificial intelligence (AI) methods are important research topics. However, the performance of AI models can be adversely affected by the presence of thousands of disease-unrelated genes, which directly affects the classification performance of the AI model. Before creating the AI models, it is crucial to apply variable selection methods to the data in order to address this drawback. Based on this, the goal of this study is to successfully create an AI model that can forecast distant BC metastasis.

MATERIAL AND METHOD

Genomic data were obtained from the National Center for Biotechnology Information Gene Expression Omnibus (NCBI GEO) database. The dataset included 97 patients with BC, of whom 46 (47%) developed distant metastases and 51 (53%) did not develop distant metastases within 5 years. The data set contained 24,481 gene expression levels from 97 patients (3). The Random Forest (RF) variable selection method was used to identify BC metastasis-associated biomarker candidate genes from the dataset. The dataset is then split into 70% for training and 30% for testing. The LightGBM algorithm was used for the classification task. The LightGBM is a decision tree-based gradient boost ensemble approach. This approach, as decision tree-based approaches, can be used for both classification and regression. The LightGBM is designed to operate well in distributed systems. The LightGBM generates decision trees that grow leaf-by-leaf, which implies that given a condition, only one leaf is split, depending on the gain. Leaf-wise trees are prone to overfitting, especially with small datasets. Limiting the depth of the tree can help to minimize overfitting (4). The LightGBM model was evaluated with Accuracy, F1-score, Precision, Recall, and Area under the ROC Curve (AUC). All the modeling was performed via R programming language (5).

RESULTS

The performance measures of the LightGBM model in the test set are given in Table 1. The values of Accuracy, F1-score, Precision, Recall, and AUC criteria obtained from the LightGBM algorithm were calculated as 0.95, 0.96, 0.93, 1.00, and 0.95 respectively.

Table 1. Performance Metrics for LightGBM Model

Metrics	Value
Accuracy	0.95
F1-score	0.96
Precision	0.93
Recall	1.00
AUC	0.95

DISCUSSION

The prognosis for the majority of patients with distant metastases remains poor despite recent considerable advancements in BC treatment. BC patients with the same illness stage may experience significantly variable therapy outcomes. The clinical behavior of BCs cannot be reliably classified using the strongest predictors of distant metastasis (6). For the early and effective detection of BC distant metastasis, AI-generated clinical decision support systems can be used. Hence, this study analyzed genomic information from 97 patients with and without distant BC distant metastasis, including 24,481 gene expression levels.

The performance of AI models for prediction is decreased by the fact that these data contain thousands of different gene expression levels and few samples. Therefore, RF variable selection method was first used in the study to successfully predict BC distant metastasis. Then, the prediction model was created with the LightGBM algorithm and the model was evaluated with comprehensive performance criteria.

The values of Accuracy, F1-score, Precision, Recall, and AUC criteria obtained from the LightGBM algorithm were calculated as 0.95, 0.96, 0.93, 1.00, and 0.95 respectively. The results of the study showed that the model successfully differentiated BC distant metastasis. The developed model can help clinicians by shortening the clinical decision-making process and initiation of treatment in patients with BC distant metastasis.

CONCLUSION

In conclusion, the proposed AI-based approach can be used for rapid preliminary diagnosis for patients with BC distant metastasis. Therefore, the suggested LightGBM algorithm may be utilized for forecasting other diseases.

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STOCHASTIC GRADIENT BOOSTING CAN PREDICT THE CONDITION OF ANGINA PECTORIS

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INTRODUCTION

Cardiovascular disorders are thought to be the most frequent noncommunicable disease worldwide. Aside from being the most prevalent illnesses, cardiovascular diseases are among the leading causes of mortality worldwide, with the number of fatalities attributable to such diseases increasing year after year. While the number of fatalities from cardiovascular disease was 17.5 million in 2012, it increased to 17.9 million in 2016 and is anticipated to reach 22.2 million by 2030. In 2016, cardiovascular disease-related fatalities accounted for 31% of all deaths (1).

Ischemic heart disease (IHD) is the leading cause of mortality among cardiovascular illnesses. IHD is a term that expresses the condition of not reaching enough blood and oxygen in the myocardium and the resulting clinical pictures. Angina pectoris (AP) is the most prominent sign of ischemic heart disease (2). Angina pectoris is a clinical symptom that is distinguished by discomfort or pain in the chest, jaw, shoulder, back, and arm(3). Angina is caused by an increase in the heart's oxygen demand at the cellular level or a reduction in the oxygen level present in the myocardial, according to AP physiopathology. Although narrowing of the coronary arteries is generally blamed for reduced oxygen supply, aberrant increases in oxygen demand such as increased heart rate, uncontrolled hypertension, and increased myocardial contractility may also cause angina. Angina pectoris affects 0.1-20% of the general population aged 45-74, albeit increasing with age. Angina pectoris is estimated to affect 20,000-40,000 persons per million in most European nations.

Angina is related with worse morbidity, mortality, and quality-of-life outcomes in women than in males, despite the fact that women have less obstructive coronary artery disease and higher left ventricular function. In the absence of substantial coronary artery obstructive disease, the morbidity and death rates for women with chest discomfort and myocardial ischemia are high (4).

In recent years, information technologies have been widely known in every sector. Especially in the health sector, the use of machine learning techniques in the determination of diseases is increasing day by day. Machine learning is a system that investigates the development and operation of data-learning and prediction-capable algorithms. These algorithms develop a model to make and predict choices based on input samples (5).

Stochastic Gradient Boosting (SGB) are one of the most extensively used machine learning techniques nowadays. In 2002, Friedman presented SGB as a relatively novel tree-based regression and classification technique for maximizing predictive performance. SGB is a hybrid that combines the advantages of both boosting and bagging approaches (6). SGB has a several benefits, such as a limited number of user-defined parameters and the ability to model nonlinear relationships, handle qualitative and quantitative variables, and stay strong even when there are missing values or outliers in the data. In addition, the stochastic component of SGB is effective not only at delivering superior predictive performance for parametric approaches, but also at reducing the occurrence of overfitting by excluding a portion of input data using a random approach, which is one of the defining characteristics of a bagging algorithm (7).

In this study, it was aimed to predict angina pectoris in women and to determine the risk factors associated with angina pectoris for women by applying the Stochastic Gradient Boosting method to the open access angina pectoris dataset consisting of only female patients.

MATERIAL AND METHOD

DATASET

In the study, the open-access "Project Angina Data Set" from https://www.kaggle.com/snehal1409/predict-angina was used to examine the prediction of angina pectoris in women and to determine the risk factors associated with angina pectoris. In the data set used, there are 100 (50.0%) no, 100 (50.0%) yes, a total of 200 patients. The data set used in the study consists of status (whether the woman has angina (no/yes)), age, smoke (smoking status (current, ex-, non-smoker)), cig (average number of cigarettes smoked per day), hyper (hypertensive condition (absent, mild, moderate)), angfam (family history of angina (no/yes)), myofam (family history of myocardial infarction (no/yes)), strokefam (a family history of stroke (no/yes)), diabetes (whether the woman has diabetes (no/yes)) variables.

STOCHASTIC GRADIENT BOOSTING

SGB is a combination of bagging and boosting strategies. First, at each stage of the boosting process, a random sample of the data is chosen rather than utilizing the complete data set to execute the boosting. Second, boosting uses deviance (twice the binomial negative log-likelihood) as a proxy for misclassification rates, with the gradient specified by this proxy being the steepest gradient method. Finally, relatively tiny trees are generated, with 6 terminal nodes being a typical size, as opposed to fully formed classification trees being developed at each step of the boosting technique. As with the previous ensemble techniques, no bigger trees are created; instead, each tree that is created throughout the process—often between 100 and 200 trees—is added up, and each observation is categorized in accordance with the classification that appears most often in the trees (8). Using only a fraction of the training data increases both the computation speed and the prediction accuracy, while also helping to avoid over-fitting the data. An advantage of stochastic gradient boosting is that it is not necessary to pre-select or transform predictor variables. It is also resistant to outliers, as the steepest gradient algorithm emphasizes points that are close to their correct classification (9).

MODELLING

In the study, Stochastic Gradient Boosting was used in the modeling phase for the aforementioned data set. For the analysis, a 5-fold cross-validation technique was applied. As performance assessment criteria, we employed accuracy, balanced accuracy, sensitivity, specificity, positive predictive value, negative predictive value, and F1 score. Additionally, it is shown how much the input variables contribute to the output variable by giving the variable importances. Modeling was done using R studio 4.2.1.

RESULTS

Table 1 shows the outcomes of the performance metrics derived from modeling using Stochastic Gradient Boosting.

Table 1. Performance metrics for Stochastic Gradient Boosting model in the testing stage

Performance Metrics	Testing Stage
	Value (%)
Accuracy	94.9
Balanced Accuracy	94.9
Sensitivity	92.9
Specificity	96.9
Positive predictive value	96.8
Negative predictive value	93.1
F1-score	94.8

In Figure 1, the graph of the importance values of the variables obtained as a result of the Stochastic Gradient Boosting model is given.

Figure 1. Predictor importance of the studied variables (Hyper: Hypertensive condition, Myofam: Family history of myocardial infarction, Strokefam: A family history of stroke, Cig: Average number of cigarettes smoked per day)

DISCUSSION

Angina pectoris refers to chest pain induced by ischemic atherosclerotic coronary artery disease with decreased coronary blood flow. It mostly affects the neck, left shoulder, and medial side of the left arm and lasts just 10-15 minutes. IHD in women is underdiagnosed and undertreated. There is an elevated risk of cardiovascular events among women experiencing chest

discomfort. The microvascular etiology of angina is more prevalent in women than in males; hence, traditional diagnostic methods may be inappropriate for women (10). Therefore, the purpose of this work was to forecast angina pectoris in women and to identify the risk variables that may be related with angina pectoris in women by using the Stochastic Gradient Boosting approach to an open-access dataset of exclusively female patients with angina pectoris.

As a result of modeling, accuracy, balanced accuracy, sensitivity, specificity, positive predictive value, negative predictive value and F1 score of the performance metrics were obtained as 94.6%, 94.6%, 92.9%, 96.9%, 96.8%, 93.1% and 94.8%, respectively.

Considering the variable importance values as a result of the model, the most important variables that can be associated with angina pectoris in women were obtained as age, cig, strokefam, myofam, hyper, smoke, respectively.

In a study using the same data set, the performance metrics of the J48 method and Random Forest methods were compared. The performance metrics obtained from the J48 method, accuracy, balanced accuracy, sensitivity, specificity, positive predictive value, negative predictive value, and F1 score 0.868, 0.868, 0.895, 0.842, 0.85, 0.889, 0.872, respectively. Random Forest method showed better classification performance with the accuracy was 0.921, balanced accuracy of 0.921, sensitivity of 0.895, specificity of 0.947, positive predictive value of 0.944, negative predictive value of 0.9 and F1-score of 0.919 (11).

CONCLUSION

As a result, according to the findings obtained from this study, Stochastic Gradient Boosting has been shown to be successful in predicting angina pectoris in women. In addition, with this study, the risk factors affecting angina pectoris in women were estimated and their importance values were stated. With this effective classification performance, it will be useful for illness and preventative medicine applications for medical professionals.

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THE DIAGNOSTIC VALUE OF THE T/R RATIO IN ECG IN THE DIAGNOSIS OF HYPERKALEMIA

INTRODUCTION

Hyperkalemia is a common electrolyte disorder that can be life-threatening if not recognized early and treated promptly (1-3). Although clinically asymptomatic in many hyperkalemic patients, especially in chronic kidney patients, cardiotoxic effects may occur and serious arrhythmias and even death may occur (4). Therefore, early detection of cardiotoxic effects caused by hyperkalemia is very important. ECG is the most widely used diagnostic method to evaluate cardiac involvement in hyperkalemic patients and various ECG findings associated with hyperkalemia in large series are; peaked T waves, prolonged QRS complexes, diminished P waves, and prolongation of the PR interval (5-7). However, in clinical practice, it has been shown that the success of physicians in predicting the presence of hyperkalemia by only evaluating these hyperkalemia findings in the ECG is quite low and variable (8, 9).

In recent years, several studies have been published reporting that the T/R ratio is more specific than the classical hyperkalemia findings on the ECG, especially when the plasma potassium level is above 6mEq/L (10-12). However, the results of the existing studies are not consistent with each other, so the diagnostic value of the T/R ratio for hyperkalemia is still unclear.

In this study, it was aimed to determine the diagnostic value of the T/R ratio in the ECG at the time of admission in terms of the diagnosis of hyperkalemia in patients who are at risk for hyperkalemia who apply to the emergency department.

Material and Method

STUDY DESIGN

This prospective and observational study was conducted with patients over 18 years of age who presented to the emergency department (ED) and were considered potentially at risk for hyperkalemia with a GFR below 60ml/min/1.73m^2 between 01.10.2021 and 01.02.2022 for a period of 4 months. Ethical approval was obtained from the local ethics committee before the study started.

STUDY SUBJECTS AND GROUPS

During the study period, patients over the age of 18 who presented to the ED for any reason and had a GFR below 60ml/min/1.73m2, which were considered potentially risky for hyperkalemia, were consecutively included in the study. Patients with hemolysis in the blood sample, pregnant patients, those with paced rhythm, left bundle branch block, left ventricular hypertrophy, sinus wave pattern, patients diagnosed with acute coronary syndrome, and patients who returned from cardiac arrest were excluded from the study. The remaining patients were divided into 2 groups according to the potassium value; those with a potassium level of 5.5 mEq/L and above were included in the hyperkalemia group, and those below 5.5 mEq/L were included in the normokalemia group.

STUDY PROTOCOL AND ECG ANALYSIS

All demographic and clinical characteristics of the patients who were decided to be included in the study were re-examined by the researchers. The laboratory values obtained on admission and the first ECGs of the patients were recorded on digital system for later re-evaluation in the study form of the patient.

All ECGs were evaluated by two independent emergency medicine specialists who were blinded to the purpose of the study and the patients' potassium levels. In this evaluation, heart rate, p wave amplitude and width, pr interval, qt interval, qtc interval, QRS width, T wave amplitude, R wave amplitude and T/R ratio were calculated. While evaluating the ECG, measurements were made in the three precordial lead; where the V_2, V_3, and $V_{T\ highest}$ (is defined as pericordial lead where the T wave is measured the highest. The cases where the T wave amplitude is above 10 mm are considered as T wave peaks. The guideline published by the American Heart Association is based on the evaluation of ECGs (13).

SAMPLE SIZE CALCULATION

The sample size of this study was calculated with the program G-Power for Mac OS X (version 3.1.9.2; Universitat Düsseldorf, Germany). Considering that the prevalence of hyperkalemia in patients with a GFR below 60 ml/min was reported as 40% in a previous study by Moranne et al. and when the type-1 error level was accepted as 5%, according to the 90% sensitivity target value, the total sample size of the study was calculated as at least 335 patients, 225 of whom were in the normokalemia group and 110 were in the hyperkalemia group.

STATISTICALLY ANALYSIS

All data obtained during the study and recorded in the study form were analyzed using the IBM SPSS 20.0 (Chicago, IL, USA) statistical program. Whether the distribution of discrete and continuous numerical variables was suitable for normal distribution was evaluated with histogram, Q-Q plot and Shapiro Wilk test. Descriptive statistics are shown as mean ± standard deviation (SD) or median (25-75% quartiles (IQR)) for discrete and continuous numerical variables, and as number of cases and (%) for categorical variables. Categorical variables were evaluated with Chi-square and continuous variables were evaluated with t test or Mann Whitney U test. To calculate the diagnostic value of the T/R ratio for the diagnosis of hyperkalemia, ROC analysis was performed and the area under the curve (AUC) was calculated. The best of cut-off value was decided for the T/R value using the Youden-J index. The 95% of confidence intervals (95% CIs) were also calculated when appropriate, and a p-value less than 0.05 were considered statistically significant.

RESULTS

During the study period, 465 patients with low GFR were included in the study consecutively. 120 of these patients were excluded for several reasons. A total of 345 patients were included after exclusion for statistical analysis. Of these patients, 200 (58%) were female and 145 (42%) were male. Hyperkalemia was detected in 115 (33.3%) of these patients, while 230 patients (66.6%) were in the normokalemia group. The patients' flow chart was presented in Figure-1. The basic demographic and clinical characteristics of the patients according to the groups are summarized in Table-1.

When the groups were compared in terms of basic ECG characteristics, it was found that the QRS width was statistically significantly wider in the hyperkalemia group, while no difference was found in terms of QT, QTc duration, and PR intervals. In both groups, $V_{T\ highest}$ was most frequently detected in leads V2 and V3 (Table-2).

While the T wave amplitude and T/R ratio were found to be statistically significantly increased in the hyperkalemia group in all leads (V2, V3, and $V_{T\ highest}$), the R wave amplitude was found to be statistically decreased in the hyperkalemic group in leads V2 and $V_{T\ highest}$. There was no difference in R wave amplitude in lead V3 (Table-3).

ROC analysis was performed and the area under the curve (AUC) was calculated to evaluate its diagnostic efficacy in predicting hyperkalemia (>5.5mEq/L) for T/R ratio, T and R waves' amplitudes, and width of the QRS complex all in leads V2, V3, and $V_{T\ highest}$. However, it was not reported because the AUC value of the T/R ratio of leads V2 and V3 was calculated as lower than 0.70.

However, since the AUC value of the T/R ratio, T and R waves' amplitudes, and width of the QRS complex of leads V2 and V3 were calculated as lower than 0.70, the AUC values of these values were not reported. The AUC values for the T/R ratio, T wave amplitude, R wave amplitude and QRS complex width in lead $V_{T\ highest}$ are as follows, respectively; 0.778 (95% CI; 0.727 - 0.829), 0.717 (95% CI;0.659 - 0.775), 0.656 (95% CI; 0.595 - 0.717), and 0.627 (95%CI; 0.562 - 0.692) (Table-4). For the prediction of hyperkalemia, the sensitivity/specificity values for the different cut-off points, along with the best cut-off value for the T/R ratio on $V_{T\ highest}$ lead, which has the best AUC value among all variables, are presented in Table-5.

DISCUSSION

We think that we obtained two important results in our study, in which we evaluated the effectiveness of T/R ratios in predicting hyperkalemia in individuals with decreased GFR values who were admitted to the emergency department and were at risk for hyperkalemia. First, as expected, we found that QRS width and T wave amplitude were higher in the hyperkalemia patient group than in normakalemic patients. In addition, we found that T/R ratios were also higher in hyperkalemia patients, which is a less researched subject. Secondly, we performed ROC analysis to reveal whether this T/R ratio, which was found to be increased in hyperkalemia patients in our study, can be used reliably in the diagnosis of hyperkalemia in the patient group with low GFR. When the AUC curves obtained in the ROC analyzes were compared, we found that the T/R ratio, with an AUC value of 0.778, was a more effective marker than other ECG parameters such as QRS width and T wave amplitude increase, which are associated with hyperkalemia. However, considering that the AUC value of the T/R ratio is lower than the ideal targets such as 0.85, and the best threshold value that can be used for the diagnosis of hyperkalemia, the sensitivity of 0.7143, is only 75%, the T/R ratio alone can be safely used to exclude the diagnosis of hyperkalemia cannot be recommended for use. However, we still think that the presence of increased T/R ratio in the ECG of patients with known low GFR may be more helpful for the diagnosis of hyperkalemia than the classical hyperkalemia ECG findings.

Hyperkalemia presents as a serious electrolyte disorder in emergency departments. Because of its cardiac effects, prompt recognition and treatment of potassium disorders is of great importance. At this point, many studies have been conducted on ECG in terms of its value in the diagnosis of hyperkalemia. The first major study investigating the sensitivity and specificity of using ECG in the prediction of hyperkalemia was done by Wrenn et al (8). ECG findings of hyperkalemia were defined as increase in T wave amplitude, decrease in P wave amplitude, and QRS complex expansion, and physicians were asked to evaluate ECGs of patients at risk for hyperkalemia, blinding them to potassium levels. The sensitivity of ECG findings in predicting

hyperkalemia was found to be 62%, while the specificity was found to be 85% in plasma potassium levels above 6.5 mEq/L. On the other hand, in a retrospective study by Regolisti et al., in which they examined T wave changes in patients with acute kidney injury, it was reported that ECG changes were present in approximately half of 168 patients with plasma potassium levels above 6 mEq/L, and the most common finding in these ECG changes was T wave spikes with 34% (9). However, it has been stated that ECG changes are a poor predictive factor in determining serum potassium levels in individuals with acute kidney injury. In our study, a statistically significant difference was found in T wave amplitudes between normokalaemia and hyperkalemia groups. However, considering that the AUC value for the T wave amplitude was 0.717 (95% CI; 0.659 - 0.775), the sensitivity was 57.39% and the specificity was 77.39%, it does not seem possible to say that it is a strong predictor factor alone in the diagnosis of hyperkalemia.

In addition to T wave spikes, there are various ECG findings associated with hyperkalemia in classical sources. Some of those; Prolongation of the PR interval, shortening of the QT interval, flattening of the P wave, widening of the QRS complex and deterioration of the QRS complex in a sinusoidal pattern. In the study conducted by Regolisti et al., patients were divided into two groups according to their serum potassium level. Of these, those with a plasma potassium level above 5.5 mEq/L were included in the hyperkalemia group, while those below 5.5 mEq/L were included in the control group. No statistically significant difference was found between the ECGs of these two groups in terms of QRS duration, QT interval, and QTc duration (4). In our study, similar to the study of Regolisti et al., we did not find a difference between the groups with plasma potassium levels above and below 5.5 mEq/L, in terms of PR interval, QT interval and QTc duration. However, unlike Regolisti's study, a significant difference was observed in QRS durations between hyperkalemia and normakalemia groups in our study. However, considering the very low AUC value of 0.627 (95%CI; 0.562 - 0.692), it does not seem possible to use it in routine practice in the diagnosis of hyperkalemia.

Another parameter associated with hyperkalemia in recent years is the T/R ratio, which is expressed as the ratio of T wave amplitude to R wave amplitude. Since the expected effect due to hyperkalemia is an increase in T wave amplitude and a decrease in R wave amplitude, the T/R ratio has been the subject of research in order to minimize other confounding factors. Buerschaper et al. performed an ECG scan to predict pre- and post-transplant events in patients with chronic kidney disease (14). 139 patients awaiting transplantation were included in the study and their ECGs were evaluated. The increase in T/R ratio in anterior leads before transplantation was found to be predictive for increased cardiovascular system diseases within 1 year after transplantation. Multivariate cox regression analysis; showed that an increase in the T/R ratio in the anterior and inferior leads is associated with cardiovascular events. On the basis of this, it is thought that there is also hyperkalemia and arrhythmias due to hyperkalemia cause cardiovascular events. In addition, a significant correlation was found between T/R ratios and potassium levels.

In a study by Aslam et al., the reliability of ECG in detecting hyperkalemia in hemodialysis patients was investigated (10). T wave amplitude and T/R ratio were calculated in the precordial leads, and no significant difference was found between the hyperkalemic and normokalemic groups. In another study, Green et al. investigated the relationship of T wave changes and T/R ratio with serum potassium levels in patients with end-stage renal disease (11). During ECG measurements, the longest T wave and the highest R wave in any lead in the same cardiac cycle were proportioned to each other, and an increased T/R ratio above 0.75 was determined. It has been found that the increase in T/R ratio has 85% specificity and 24% sensitivity for cases where the serum potassium level is above 6 mEq/L, and it has been emphasized that it is a more specific finding than the T wave spike. In another study by Montague et al., ECG findings in hyperkalemia were analyzed retrospectively (12). 90 patients with plasma potassium level above 6 mEq/L were included in the study. Measurements were made in lead V4 and in the lead with the maximum amplitude of the R wave. In both measurements, T/R ratios increased significantly depending on potassium values, but its use in diagnostics was limited.

Cardiovascular system diseases are the leading causes of morbidity and mortality in patients with chronic kidney disease, and arrhythmias are the leading causes of these diseases. Especially hyperkalemia is an important risk factor for arrhythmias in these patient groups. For this reason, regular measurements of plasma potassium levels throughout the year are recommended in patients with chronic kidney disease. In current guidelines, routine potassium measurement is recommended at least 1-2 times a year in those with CKD stages 1-3, and at least 2-4 times a year in those with CKD stages 4-5. In addition, it is emphasized that potassium levels should be measured again within 3 days for those with potassium levels of 5.5 – 5.9 mEq/L, and within 1 day for those with 6.0 – 6.4 mEq/L. This situation brings extra costs and labor for the health system, and it can negatively affect individuals with chronic kidney disease psychosocially. Instead, we think that it is an important question whether ECG, which is a non-invasive, inexpensive, easily accessible and rapidly reproducible test, can be used as a more comfortable alternative for both healthcare professionals and patients in the follow-up of hyperkalemia.

As a result, we think that it stands out as a potential candidate for the follow-up of hyperkalemia, especially since the T/R ratio has the largest AUC value among the ECG parameters in our study. However, since the calculated AUC value for the diagnosis of hyperkalemia is 0.778, it is not possible to say that it is an ideal diagnostic test. However, we think that higher sensitivity or specificity values can be obtained with different threshold values for the T/R ratio and can be used in clinical practice to exclude the diagnosis of hyperkalemia with high sensitivity values.

LIMITATIONS

Our study is a prospective observational study and was carried out in a single center. Therefore, it may represent a limited sample. In addition, a serum potassium level above 5.5 mEq/L was considered as hyperkalemia in our study. In our study, no grading was made according to hyperkalemia values. We think that different results can be obtained especially when the higher potassium levels, where cardiac effects occur, are taken as a sample.

CONCLUSION

The presence of increased T/R ratio in the ECG of patients with known low GFR may be more helpful for the diagnosis of hyperkalemia than the classical hyperkalemia ECG findings.

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ÜST SOLUNUM YOLU ENFEKSİYONU SONRASI KORPUS KALLOZUM SPLENİUMUNUN GEÇİCİ LEZYONU: OLGU SUNUMU

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ÖZET

Beynin sağ ve sol hemisferlerini birbirine milyonlarca sinir lifi ile bağlayan, beynin ana komissural alanı korpus kallozumdur. Korpus kallozumun anatomik olarak en arkada kalan splenium bölgesinde, beyin diffüzyon manyetik rezonans görüntülemelerinde geri dönüşümlü lezyonların görüldüğü hafif ensefalit tablosuyla gelen hastalar olduğu fark edilmiştir. Geri dönüşümlü splenial lezyon sendromu (MERS) olarak adlandırılan bu sendrom ilk olarak Tada ve arkadaşları tarafından bildirilen klinik ve radyolojik bir sendromdur. Patofizyoloji mekanizması henüz kesinleşmemiş olan korpus kallozum splenium (SCC) geri dönüşümlü lezyonu için çeşitli hipotezler mevcuttur. Bunlar inflamatuar infiltratlar, hiponatremi, oksidatif stres, intramiyelinizan ve sitotoksik ödem, nöroaksonal hasar, otoimmün süreçlerin rol oynadığı yönünde hipotezlerdir. Nadir görülen bu sendromun etiyolojisinde enfeksiyonlar, antiepileptik ilaç kullanımı, madde yoksunluğu, ilaca bağlı toksisite, metabolik bozukluklar, epilepsi gibi fonksiyonel beyin hastalıkları, maligniteler, travmatik beyin hasarı, serebrovasküler hastalıklar, otoimmün hastalıklar gibi birçok faktör yer almaktadır. Bu olgu sunumunda üst solunum yolu enfeksiyonu sonrası senkop şikayeti ile acil servise başvuran hastada görülen ve nadir bir durum olan MERS sendromu sunulmuştur.

ANAHTAR KELİMELER: Enfeksiyon, Geçici lezyon, Korpus kallozum, Senkop

GİRİŞ

Beynin sağ ve sol hemisferlerini birbirine milyonlarca sinir lifi ile bağlayan, beynin ana komissural alanı korpus kallozumdur. Rostrum, genu, body ve splenium olmak üzere önden arkaya dört bölümden oluşur. Bazı hastalarda farklı klinik şikayetler sonrası beyin manyetik rezonans (MR) görüntülemelerinde korpus kallozumun spleniumunda (SCC) geri dönüşümlü lezyonlar olduğu görülmüştür. Geri dönüşümlü splenial lezyon sendromu (MERS) olarak adlandırılan bu sendrom ilk olarak Tada ve arkadaşları tarafından bildirilen klinik ve radyolojik bir sendromdur[1]. Nadir görülen bu sendromun etiyolojisinde enfeksiyonlar, antiepileptik ilaç kullanımı, madde yoksunluğu, ilaca bağlı toksisite, metabolik bozukluklar, epilepsi gibi fonksiyonel beyin hastalıkları, maligniteler, travmatik beyin hasarı, serebrovasküler hastalıklar, otoimmün hastalıklar gibi birçok faktör yer almaktadır[2]. Bu olgu sunumunda üst solunum yolu enfeksiyonu sonrası senkop şikayeti ile acil servise başvuran hastada görülen ve nadir bir durum olan geçici korpus kallozum splenium lezyonu sunulmuştur.

OLGU SUNUMU

On sekiz yaş erkek hasta dışarıdan eve geldikten sonra başlayan bulantı, kusma ve ardından gelişen kısa süreli bilinç kaybı şikayetiyle 112 ekibi tarafından acil servisimize getirildi. Hasta geldiğinde bilinç konfü, ekstremite kasları belirgin kontrakteydi. Hastanın geliş vitalleri TA:130/70 mmHg, nabız:81 atım/dk, oksijen saturasyonu: %97, ateş:38,5 kan şekeri:121 mg/dl idi. Hastanın herhangi bir kronik hastalığı ve düzenli ilaç kullanımı öyküsünün bulunmadığı öğrenildi. Hastanın anamnezi derinleştirildiğinde eve gelmeden önce piknik yapmak için mangal yaptıkları ve yoğun dumana maruz kaldığı öğrenildi. Ayrıca hastanın üç gündür devam eden ateş, öksürük ve boğaz ağrısı gibi üst solunum yolu enfeksiyonu semptomları olduğu öğrenildi. Elektrokardiyografisi normal sinüs ritmindeydi. Orofarinks muayenesinde tonsiller hiperemikti, diğer sistem muayeneleri olağandı. Hastanın hemogram, biyokimya, troponin I, koagülasyon, etanol düzeyi, madde düzeyi ve kan gazı tetkikleri planlandı. Beyin bilgisayarlı tomografi (BT), toraks BT ve beyin diffüzyon MR görüntülemeleri alındı. Biyokimya tetkiki sonucuna göre glukoz: 116 mg/dl, kreatinin: 0.86 mg/dl, GGT: 18 IU/L, ALT: 13 U/L, AST: 20 U/L, Amilaz: 58 U/L, Lipaz: 105 U/L, CRP: 118 mg/L idi. Hemogramında WBC: 11.460 µL, Neu: 9070 µL, HGB: 14.1 g/dL, HCT: %41.6 ve PLT:159.000 µL idi. Troponin I: 0.003 ng/ml idi. Venöz kan gazı tetkik sonucuna göre pH:7.40, sO_2: %77.8, pCO_2: 39.2 mmHg, pO_2: 45.7 mmHg, COHb: %1.2, sodyum:134 mmol/L, potasyum:3.3 mmol/L, laktat:1.2 mmol/L, HCO3:24 mEq/L idi. Etanol ve madde testleri negatifti. Hastaya acil serviste nazal kanül ile oksijen 4 lt/dk, parasetamol IV ve 500 cc SF infüzyon tedavisi uygulandı. Hastanın birinci saat yapılan nörolojik muayenesinde bilinç açık, oryante, koopereydi ve ense sertliği yoktu. Kas gücü muayenesinde ekstremite kas gücü 5/5 idi. Birinci saat vitalleri TA:120/65 mmHg, nabız:98 atım/dk, oksijen saturasyonu: %98, ateş:36,5 idi. Beyin ve toraks BT görüntülemelerinde akut patoloji izlenmedi. Beyin diffüzyon MR görüntülemesinde SCC'da milimetrik diffüzyon kısıtlanan alan izlendi (Resim 1). Nöroloji uzmanına konsülte edilen hastada nöroloji uzmanı üst solunum yolu enfeksiyonuna bağlı geçici SCC lezyonu ön tanısıyla enfeksiyon hastalıkları uzmanının da görüşünü istedi. Enfeksiyon hastalıkları uzmanıyla görüşüldükten sonra hasta ileri tetkik ve tedavi amacıyla enfeksiyon hastalıkları servisine yatırıldı.

TARTIŞMA

Patofizyoloji mekanizması henüz kesinleşmemiş olan SCC geri dönüşümlü lezyonu için çeşitli hipotezler mevcuttur. Bunlar inflamatuar infiltratlar, hiponatremi, oksidatif stres, intramiyelinizan ve sitotoksik ödem, nöroaksonal hasar, otoimmün süreçlerin rol oynadığı yönünde hipotezlerdir[1,3-6]. Etiyolojisinde çok farklı sebepler rol oynayabilen geri dönüşümlü SCC lezyonunun en yaygın prodromal bulgusu yüksek ateştir. Diğer belirtiler bulantı, kusma, ishal, baş ağrısı, bilişsel bozulma, nöbet, konfüzyon, davranış değişikliği, idrar retansiyonu ve deliryum olabilir[3,7-9]. Diğer nörolojik belirtiler arasında konuşma bozukluğu, ense sertliği, motor fonksiyonlarda bozulma, ataksi, dizartri, görme bozukluğu, koma bulunur[1,7-9]. Bizim vakamızda da acil servise başvurudan üç gün önce başlayan ateş öyküsü mevcuttu bununla birlikte acil servis başvurusu sırasında bulantı, kusma şikayeti vardı ve hastanın bilinci konfüydü. Geri dönüşümlü SCC lezyonu olan hastaların nörolojik semptomları da ortalama bir ay içinde yok olmaktadır. Bizim hastamızın birinci saat nörolojik muayenesi olağandı. SCC'deki bu lezyonların, miyelin içi ödemin hızlı çözülmesi veya sitotoksik ödemle inflamatuar hücrelerin içeri girmesi nedeniyle geçici olduğu yönünde görüşler mevcuttur ancak sadece neden bu bölgenin etkilendiği bilinmiyor bununla ilgili daha fazla araştırma gereklidir[10].

Hafif ensefalit gelişen ve geri dönüşümlü korpus kallozum splenium lezyonu (MERS) olan hastalarda bu durumu tetikleyen başlıca enfektif etkenler arasında influenza virüsü, rotavirüs, varicella zoster virüsü, kabakulak virüsü, Escherchia coli, Salmonella enteritidis, Mycoplasma veya Legionella pneumoniae gibi etkenler vardır[11]. Takatsu ve arkadaşları, Takanashi ve arkadaşları, Wang ve arkadaşları da influenzaya bağlı gelişen MERS olgusu bildirmişlerdir[12-14].

İnfluenza virüsünün intranazal inokülasyonundan sonra olfaktör veya trigeminal sinirler aracılığıyla virüsün beyine girebileceği yönünde görüşler mevcuttur[15]. Hastada influenza virüsü ile nörolojik semptomların görülmesi hekimler açısından tanı ikilemi yaratmaktadır. Bizim vakamızda da hastayı gördüğümüzde ilk aklımıza gelen karbonmonoksit zehirlenmesinden, viral ensefalite, madde veya alkol alımından, iskemik serebrovasküler olaya kadar birçok tanı arasında kaldık. Ancak hastanın klinik takibi esnasında hızla nörolojik fonksiyonlarının düzelmesi, kan tetkikleri sonuçları ve MR görüntülemesinde SCC lezyonunun görülmesiyle hastaya MERS tanısı kondu.

Klinik olarak hafif ensefalit bulguları olan ve nörolojik semptomları hızlı düzelme seyreden hastalarda gereksiz tanısal ve terapötik işlemlerden kaçınmak amacıyla bu tabloya sistemik veya bakteriyel enfeksiyonların neden olduğu geri dönüşümlü SCC lezyonunun yol açabileceği hekimler tarafından akılda tutulmalıdır.

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GİRİŞ: Acil servislere başvuran 24 saat içerisinde başvuran hastalar triaj kategorilerine ayrılarak değerlendirilmektedir.Triaj kategorileri ülkemizde kırmızı , sarı ve yeşil olarak belirlenmiştir. Yeşil alanda genellikle hayatı tehdit etmeyecek semptom ve bulguları olan hastalar değerlendirilmektedir.Hayati tehlike belirlenirken vital bulgular en önemli tanı aracıdır.Vital bulguların normal aralıkta seyretmesi hayati tehlike olmaması lehine hekime yol gösterir .

Bu çalışma yeşil alanda değerlendirilen bazı hasta gruplarının vital bulgularını değerlendirmek amacıyla yapıldı.

MATERYAL METOD: Bu çalışmada 08:00:00 -16:00:00 saatleri arasında 3. düzey eğitim araştırma hastanesi yeşil alana gelen hastaların yaş, cinsiyet, hasta şikayeti ve vital bulguları prospektif olarak incelenmiştir. Veriler hasta muayenesi ile eşzamanlı olarak kaydedilmiştir.

BULGULAR: Toplamda 49 kişi yeşil alana başvurmuş ; 49 kişiden 20 si erkek ; 29 u kadın cinsiyettedir ve bu 49 kişinin şikayetleri ve hasta sayısı tablo 1 de gösterilmiştir; Ayrıca hastaların başvuru esnasındaki vital bulgularının ortalama verileri tablo 2 de gösterilmiştir.

HASTA ŞİKAYETİ	BAŞVURAN HASTA SAYISI (n)
El travması	7
Ayak travması	7
Baş ağrısı	6
Döküntü	1
Kulak ağrısı	2
Boğaz ağrısı	9
Diş ağrısı	1
İshal	6
Bel ağrısı	4
Mide yanması	1
Baş dönmesi	4
Karın ağrısı	1

Tablo 1 : Yeşil alana başvuran hastaların şikayetlerine göre dağılımı

Yaş	31,57±15,7
Sistolik Tansiyon	121,41±12,876
Diyastolik Tansiyon	82,65±7,615
Nabız	90,69±21,632
Solunum	17,24±1,507
Ateş	36,53±4,7945
Spo2	95,57±3,162

Tablo 2 :Hastaların başvuru esnasındaki vital bulgularının ortalama verileri

Yapılan çalışma sonucunda yeşil alana başvuran hastaların vital bulgularının istatiksel ortalama verileri doğal aralıklar içerisindedir ve yeşil alan hastalarının şikayetleri ve vital bulguları hayatı ve ekstremiteleri tehdit etmemektedir .Mortalite ve morbiditeden korunmak için 24 saat içerisinde değerlendirme ve yaklaşım gerektirmemektedir.

TARTIŞMA: Acil servislere başvuran her 4 hastadan 3'ünün durumunun acil olmaması nedeniyle 2012 yılında yeni bir düzenleme yapıldı ve hastaların aciliyetlerine göre sınıflandırma yapıldı. Bu sınıflandırmalardan biri de yeşil alan muayenesi olarak belirlendi.

Acil servise başvuran hastaların Hekim tarafından muayenesi yapıldıktan sonra, mevcut sağlık probleminin acil tanımına girmediği anlaşılabilmektedir.

Bu durumdaki hastalar için "yeşil alan muayenesi" kodlaması yapılmaktadır. Bu hastalar ayaktan tedavi olan ve kısa sürede taburcu edilen hastalardır.

Hafif yaralanmalar, ayaktan tedavi edilen hastalıklar veya Hekim muayenesi gerekli olsa da uzun bir süre bekleyebilecek hastalar yeşil alanda değerlendirilmektedir.Ayaktan tedavi ve taburculuk için vital bulgular ve derin bir tıbbi hikaye ve fizik muayene ile birleştirilerek kullanılabilir .

Yapılan çalışma sonucunda yeşil alana başvuran hastaların vital bulgularının istatiksel verileri doğal aralıklar içerisindedir.Kliğiniğimiz yeşil alanda değerlendirilen hastaların birçoğu için acil müdahale gerekmemiştir.

AMIODARONE OR LIDOCAINE – WHICH SHOULD WE USE UNDER RESUSCITATION?

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KEYWORDS: amiodarone, lidocaine, cardiac arrest, resuscitation, survival rate

OBJECTIVE:

Amiodarone is currently the main antiarrhythmic medication used during cardiac arrest, however according to the ERC 2021 recommendations, lidocaine may be used as an alternative if amiodarone is unavailable or if a local choice has been made to use lidocaine instead. However, amiodarone and lidocaine showed comparable outcomes in a recent randomized controlled trial (RCT), even if the RCT may have been underpowered. Intriguingly, the subgroup of patients with bystander-witnessed CA demonstrated that amiodarone and lidocaine significantly increased the proportion of patients admitted alive to the hospital and the survival rate at hospital release. Our research aimed to find out if lidocaine may be a comparable or even superior resuscitation medication to amiodarone.

METHODS:

Study was designed as a systematic review and meta-analysis. A literature search (PubMed, EMBASE, MEDLINE, Scopus, Web of Science, and CINAHL) was performed to identify randomized controlled trials involving patients undergoing cardiopulmonary resuscitation treated with amiodarone comparing to lidocaine. The primary outcome was the survival to hospital discharge (SHD). Odds ratios (ORs) were calculated with 95% confidence intervals (CIs).

RESULTS:

Two studies were included in this meta-analysis. ROSC was obtained among 45.7% of patients in Amiodarone group, compared to 47.0% for Lidocaine group (OR = 0.95; 95%CI: 0.80 to 1.13; p=0.35). Survival to hospital discharge among Amiodarone and Lidocaine groups varied and amounted to 26.5% vs. 22.0%, respectively (OR = 2.77; 95%CI: 0.39 to 19.75; p=0.37). One study compared IO vs. IV drugs, however, the method of drug administration didn't statistically significantly improve SHD in the case of Amiodarone (19.3% vs. 25.9% for IO vs. IV respectively; OR = 0.69; 95% CI: 0.47 to 1.00; p = 0.05) as well as in the case of Lidocaine (20.6% vs. 24.6%, respectively; OR = 0.80; 95% CI: 0.55 to 1.15; p = 0.23).

CONCLUSIONS:

Comparing amiodarone with lidocaine during resuscitation, lidocaine significantly increases the ROSC which shows the enormous potential of this drug, but in the case of survival to hospital discharge, amiodarone fares much better. Our meta-analysis is limited by the number of available sources, so further large multicenter randomized trials to compare these drugs during resuscitation are needed.

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C1 FRACTURE AFTER EPILEPTIC SEIZURE

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ABSTRACT

INTRODUCTION: Epilepsy; it is a condition characterized by sudden, repetitive seizures resulting from abnormal and excessive electrical discharge in cortical neurons. It occurs in all races and all age groups. It is generally equally common among men and women. Electroencephalography (EEG) is used to diagnose epilepsy.

CASE: A 33-year-old female patient was brought to the emergency room by 112 after falling down the stairs. The patient had tumbled down the stairs after having a seizure. When the patient came to the emergency room, he was conscious, drowsy, and postictal. The patient had tenderness in the cervical region. A linear fracture line extending towards the lamina was seen in the C1 right anterior and lateral part of the patient who had pain in the cervical region after radiological imaging. Since the patient with neck pain had C1 right arch fracture in cervical computerized tomography, the patient was referred to a more comprehensive upper center for further examination and treatment.

DISCUSSION: Epilepsy patients are more vulnerable to trauma than normal healthy people due to their seizures, and serious injuries occur as a result of these traumas. Although long bone fractures are more common after the seizure, vertebral fractures can also be seen at a lower rate.

CONCLUSION: Patients who apply to the emergency department after an epileptic seizure should be evaluated in detail, especially in terms of head and spinal trauma.

KEYWORDS: C1 fracture, epilepsy, seizure, trauma

INTRODUCTION

Epilepsy; It is a condition characterized by sudden, repetitive seizures that occur as a result of abnormal and excessive electrical discharge in cortical neurons (1). Although the incidence of epilepsy varies from society to society, it is generally reported as 20-50/100.000 per year. The prevalence of active epilepsy is 4-10/1000, and the lifetime accumulated incidence is approximately 3% (1). Epilepsy occurs in all races and in all age groups. It is generally equally common among men and women (2). A detailed history taken from the patient and her relatives and a careful neurological examination are the most important criteria for the diagnosis of epilepsy. Electroencephalography (EEG) is an easy and inexpensive method for diagnosing and classifying epilepsy, investigating the place of seizure onset, and monitoring patients (2).

The first cervical vertebra (C1), also known as atlas, assumes the function of a transitional structure between the occiput and cervical spine at the craniocervical junction (3). Its ring-shaped structure provides more movement and flexibility compared to other levels of the spine. Fractures of the C1 vertebrae account for 25% of craniocervical junction injuries, 3% to 13% of cervical spine injuries, and 1.3% to 2% of all spinal injuries. The most common cause of all atlas fractures is motor vehicle accidents and falls, accounting for 80%-85% (3). We wanted to contribute to the literature by presenting a patient with a history of trauma and C1 vertebral fracture after epileptic seizure.

CASE

A 33-year-old female patient was brought to the emergency room by 112 after falling down the stairs. Vital signs of the patient; arterial blood pressure was 100/60 mmHg, heart rate was 108/min, fever was 36.5 °C, and respiratory rate was 12/min. According to the history taken from the patient's family, the patient had a history of epilepsy and was using valproic acid 500 mg 1x1 and the patient had not had seizures for 7 years. The patient had 2 generalized tonic-clonic seizures today. The patient had tumbled down the stairs after having a seizure. When the patient came to the emergency room, her consciousness was confuse, prone to sleep, and postictal. In the physical examination of the patient, although her four extremities were mobile, the patient had sensitivity in the cervical region and the patient was evaluated as high-energy multiple trauma by applying a cervical collar. In the hematological examinations taken from the patient, the patient's hemoglobin value was 5.8 g/dl, pH in arterial blood gas: 7.070, pCO2: 50.2 mmHg, pO2: 72.6 mmHg, HCO3: 12.6 mmol/L and lactate: 13.1 mmol/L. Control hemogram was obtained from the patient with low hemoglobin value and hemoglobin was 5.4 g/dl. The rectal examination of the patient was normal stool contamination. Radiological imaging of the patient was performed. In the meantime, the postictal patient was given intravenous infusion of 10 mg of diazepam in 15 minutes, and then 2000 mg of valproic acid with an IV loading infusion for 45 minutes. After the treatment and follow-up, the patient's consciousness was restored. The patient was questioned in terms of low hemoglobin and he said that he was in the menstrual period and that blood loss was high during these periods. In the patient's control arterial blood gas, pH: 7.384, pCO2: 32.3 mmHg, pO2: 33.9 mmHg, HCO3: 19.7 mmol/L and lactate: 6.1 mmol/L. After the radiological imaging of the patient, a linear fracture line extending towards the lamina was observed in the C1 right anterior and lateral part of the patient who had pain in the cervical region. The patient was consulted to neurosurgery, general surgery, neurology and internal medicine. General surgery did not consider emergency surgical pathology in the patient. Neurology made treatment recommendations for the patient. Internal medicine recommended 3 units of erythrocyte suspension to the patient. Neurosurgeon, on the other hand, referred the patient to a more comprehensive center for further examination and treatment because of a C1 right arch fracture in cervical computerized tomography in the patient with neck pain.

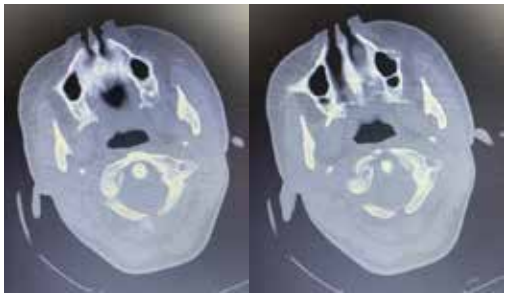

Figure-1: C1 right arch fracture

DISCUSSION

Epilepsy patients are more vulnerable to trauma than normal healthy people in the society due to their seizures, and serious injuries occur as a result of these traumas (4,5). In these traumas, there is always the risk of developing fractures due to long-term use of antiepileptic drugs. The risk of bone fractures is increased by the severity of the seizure and some factors related to the patient (age, other existing diseases, and the effect of some antiepileptic drugs on vitamin D metabolism). Rarely, bone fractures can be seen without a history of trauma or fall after a seizure (6). It has been reported that fractures of other bones (scapula, acetabulum, pelvis, etc.), especially long bone fractures, and, to a lesser extent, vertebral fractures may develop after an epileptic seizure (6). In addition, post-seizure soft tissue injuries, oral and dental injuries, fractures, head trauma, burns, and drowning are injuries reported in epilepsy patients (6).

Vertebral fractures are not a common condition after epileptic seizures, but they usually occur in the middle and upper thoracic region due to contraction or direct trauma in seizures (7,8). In a study examining 340 patients with spinal trauma after epileptic seizures, 40 patients had vertebral fractures. Of these, 8 were cervical, 17 were thoracic and 15 were lumbar vertebral fractures. Of the cervical vertebral fractures, 5 were C6, 2 were C5, and 1 were C7 (9). Vertebral fractures are most common in the community as a result of traffic accidents and most commonly in the cervix region. Vertebral fractures during epileptic seizures generally occur in the mid-thoracic region (9).

In patients presenting to the emergency department with trauma, it is easier to diagnose spinal trauma in case of existing neurological deficits, but the possibility of spinal injury should be considered in the absence of any deficit in the patient (10). Among all cervical vertebral fractures, C1 and C2 combined fractures constitute 3% of vertebral fractures. While 16% of C2 fractures are accompanied by C1 fractures, 43% of C1 fractures are associated with C2 fractures. Atlantoaxial fractures are frequently seen in motor vehicle accidents and falls from height (11). In our case, C1 vertebral fracture occurred after high-energy trauma after epileptic seizure.

Atlas fractures constitute 1-2% of spinal injuries and 2-13% of acute cervical fractures. Jefferson's fractures are the most well-known and burst-like fractures. Fractures in C1 usually occur as a result of axial loading. (12). In atlas fractures, treatment is planned according to the type of fracture and the condition of the transverse ligament. If the transverse ligament is intact, cervical immobilization will be sufficient for treatment in these cases. However, if the transverse ligament is damaged, immobilization can be considered as one of the treatment methods, but surgical fixation and fusion constitute the main treatment (12).

CONCLUSION

After epileptic seizures, patients apply to the emergency department very frequently. It is not possible to take anamnesis from patients, especially since these patients are brought to the emergency room by their families or 112 and can be alone during the seizure. Patients who apply to the emergency department after an epileptic seizure should be evaluated in detail, especially in terms of head and spinal trauma.

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İKİSİ BİR ARADA: HEMORAJİK VE İSKEMİK SEREBROVASKÜLER OLAY AYNI VAKADA

GİRİŞ

Serebrovasküler olay (SVO), dünyada en sık karşılaşılan nörolojik hastalık olup ölüm nedeni olarak kalp hastalıkları ve kanserden sonra üçüncü sırada yer almaktadır. Ancak fiziksel engel yapmada birinci sırada yer almaktadır. Serebrovasküler hastalıkların değiştirilebilen nedenlerinin belirlenmesi SVO'ın engellenmesi ve/veya morbidite ve mortalitenin azaltılmasında önem teşkil etmektedir. SVO'ın kesinleşmiş risk faktörleri arasında hipertansiyon (HT), sigara, diyabetes mellitus, atrial fibrilasyon(AF) , dislipidemi, kardiyovasküler hastalıklar, asemptomatik karotis stenozu, obezite, fiziksel inaktivite, oral kontraseptif kullanımı, orak hücreli anemi, diyet ve beslenme ve postmenapozal hormon tedavisi yer almaktadır(1-3).

Tüm dünya genelinde travmaya bağlı ölümler ve sakatlıklar önemli bir toplum sağlığı sorunudur. Özellikle travmatik beyin hasarına bağlı bu sorunlar daha fazladır. Dünya genelinde yılda yaklaşık 69 milyon insan travmatik beyin hasarına maruz kalmaktadır . Travmatik beyin hasarında morbidite ve mortalite oranını direkt olarak etkileyen parametre ise beyin ödemi ve kafa içi basınç artışıdır. Bu durum beyin perfüzyonunu bozarak travma sonrası sekonder hasarı artırmak ile birlikte serebral herniasyonlara da neden olmaktadır. Bu yüzden travmatik beyin hasarı sonrasında kafa içi basınç artışını kontrol altında tutmak morbidite ve mortaliteyi azaltmak için önemlidir(4).

OLGU

67 yaş erkek 3 metre yükseklikten sırt üstü düşme ile acil servise 112 ekiplerince getirildi. Gelişinde alınan anamnezinde hastanın merdivenlerden çıkarken dinlenme isteği oluşmuş, basamaklara oturup dinlendiği esnada geriye doğru merdiven boşluğuna düştüğü öğrenildi. Olay anını tam olarak açıklamayan, tam senkop olup olmadığını tarifleyemeyen ve görgü tanığı olmayan hastanın gelişinde genel durumu iyi, bilinci açık olan GKS: 14-15 idi. Hastanın kan basıncı 190/100 mm/Hg, nabız 92 atım/dk, spo2 % 96, ateş: 36,2 ^{o}C di. Fizik muayesinde; solunum sesleri bilateral eşit doğal, kalp sesleri ritmik, batın rahat, periferik nabızlar açıktı. Nörolojik muayenesi doğal oryante koopere idi. Bilinen HT, kronik obstürüktif akciğer hastalığı, eski iskemik SVO ve kronik AF'si mevcut. Kullandığı ilaçlar arasında asetilsalisilik asit, ramipril, salbutamol inhaler bulunmaktaydı. Laboratuar değerlerinde WBC:13,800, Hb:10,9 g/dL, PLT:400.000 , Glu:177 mg/dl, BUN:20 mg/dl, Kre: 1,28 mg/dl, Na:136 mmol/l, K:4,9 mmol/l, ALT: 15 U/l, AST:24 U/l, INR:0,93 kU/l, troponin: 2,4 ng/l ydi. Yüksekten düşen hastaya kranial, kontrastlı toraks, kontrastlı batın ve tüm spianal bilgisayarlı tomografi (BT) planlandı ve çekildi. Çekilen BT'lerde sağ frontal bölgede non deplase fraktür ve kontur kup sol frontal bölgede kontüzyon, subaraknoid kanama (SAK) saptandı(Resim 1-2). Toraks BT' sinde de 7,8, ve 9. kotlarda non deplase fraktürler saptandı. Hastanın anamnezinde travma öyküsünün net olmaması ve yüksek enerjili bir travma olması nedeniyle, Kranial BT sinde sağ periventriküler bölgede hipodens alan görülmesi üzerine diffüzyon MR planlandı ve çekildi. Diffüzyon MR ında sağ serebellar bölgede ve sağ bazal ganglion düzeyinde akut enfarkt tespit edildi (Resim 3-4). Nöroşirürji, nöroloji, göğüs cerrahisi ve anestezi konsültasyonları istendi. Nöroşirürji ve göğüs cerrahisi tarafından cerrahi girişim düşünülmedi. Hasta yoğun bakım ünitesine interne edildi.

TARTIŞMA

Travma tüm dünyada ölümlerin önemli nedenlerinden birisidir. Aynı zamanda sebep olduğu sakatlık ve ekonomik kayıplar önemli bir halk sağlığı sorunudur. Travma hastasında zamanlama çok önemlidir ve sistematik bir yaklaşım gerektirir(3). SAK, araknoid ve pia mater arasında yer almakta olan ve normalde beyin omurilik sıvısı ile dolu olan subaraknoid mesafeye kan sızması olarak tanımlanmaktadır ve en sık nedeni travmadır(6).

Travma hastalarında; travmanın oluş mekanizması ve travma gerçekleşmeden önceki durum sonraki tanı ve tedavide değişikliğe yol açmaktadır. Ayrıntılı anamnez ve fizik muayene ile mekanizma ve diğer durumlar ortaya konmalı, eğer bir nedenden dolayı açıklanamıyorsa da primer bakı derinleştirilmelidir. Hastalar nörolojik defisit olmadan acil servise başvurabilirler. Bu nedenle yüksek enerjili travmalarda görüntüleme yapmak mutlaka gereklidir.

Travma olgularında sadece travmanın oluşturduğu sonuçlar yerine multisistemik bakı gereklidir. Senkop tarifleyen ya da olmadığını tam olarak tarifleyemeyen hastalarda altta yatan akut miyokard enfarktüsü, pulmoner emboli, gastrointestinal sistem kanamaları, iskemik SVO, aort diseksiyonu gibi durumlar da göz önünde bulundurumalıdır.

Sonuç olarak, acil servis hekimlerinin multiple travma olgularında travma sonucu oluşan patolojileri ve travmaya neden olmuş durumları erken tanımaları, medikal ve cerrahi tedavileri erken yapılması mortalite ve morbiditeyi önlemede büyük öneme sahiptir.

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THE CLASSIFICATION OF HYPERTENSION WITH THE BAGGED CART MODEL AND DETERMINED OF RISK FACTORS

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INTRODUCTION

Blood pressure, or blood pressure, is the pressure created by the heart against the vessel wall as it pumps blood, and is expressed in mm of mercury (Hg). If this pressure is above the desired values, it is defined as hypertension (1). Hypertension (HT) is the second most frequently diagnosed disease in Turkey and a global health problem that causes 9.4 million deaths worldwide each year (2, 3). The prevalence of HT in Turkey has been found to be between 30-35% in studies and is increasing gradually (4). AHA/ACC 2017 guideline defines the values between 130-139 mmHg systolic and 80-89 mmHg diastolic blood pressures as stage 1 hypertension and recommends starting treatment and lowering blood pressure below 130/80 (5). Considering the increased blood pressure, which is a cardiovascular risk factor, it is observed that the risk begins to increase with exceeding 115/75 mmHg (6). Hypertension is also called silent disease (lanthanic) since it does not show any signs and symptoms except high blood pressure in the early period. In individuals, symptoms such as headache, diplopia, difficulty in speaking, palpitations, dyspnea, weakness, epistaxis, tinnitus, pollakiuria, nocturia, and edema in the lower extremities may occur with increased blood pressure. Although the etiology of hypertension has not been fully determined, it is known that it is associated with various risk factors such as age, gender, race, family and genetic factors, diet, excessive sodium intake (7). Because of the many risk factors associated with disease prediction, assessments made by clinicians are prone to error, especially when data is missing.

Machine learning is a collection of methods that develop various algorithms and techniques to make predictions based on data by teaching certain features and behaviors to the computer (8). It has been developed based on the logic that computers work like the human brain. The human brain directs its behaviors and decisions in the face of the events it will encounter in the future, according to the results it draws from the events experienced. Machine learning algorithms also learn how these events occurred by examining the events shown to them. Later, they gain the ability to generalize over the information they have learned. The main purpose of these algorithms is to obtain new information using past data, to improve themselves and to create models that offer solutions to future problems (9).

The aim of this study is to classify hypertension disease and determine the risk factors associated with this disease by applying Bagged Classification and Regression Trees (Bagged CART) machine learning technique to an open-access dataset consisting of individuals with and without hypertension.

MATERIAL AND METHODS

DATASET

The "Blood Pressure Data for disease Prediction" data set obtained from the address "https://www.kaggle.com/datasets/pavanbodanki/blood-press" was used to classify hypertension disease and determine the associated risk factors. In this dataset, level of hemoglobin, genetic pedigree coefficient, age, BMI, sex, smoking, physical activity, salt content in the diet, alcohol consumption per day, level of Stress for 2000 subjects (Hypertension= 987, Control=1013) , chronic kidney disease and adrenal and thyroid disorders.

BAGGED CLASSIFICATION AND REGRESSION TREES (BAGGED CART)

The bagging strategy can significantly increase the accuracy of the CART, which is regarded as an unstable model (10). The bagged CART significantly enhances classification performance and reduces overfitting while also successfully reducing prediction variance. First, CART divides training sample units recursively using a predetermined number of variables. In order to determine which binary split in a predictive variable is least likely to depart from the projected response variable, it then analyses all of the predictive variables. When homogenous final nodes are formed in a hierarchical tree, the procedure usually continues for each result obtained from the initial split. When cross validation produces the lowest error, CART prunes the trees to prevent overfitting (11, 12).

MODELLING

The 10-fold cross-validation technique was used in the creation of the Bagged CART model from the Decision Tree Ensembles class to classify hypertension (13). Performance evaluation of the established model was evaluated with accuracy, balanced accuracy, sensitivity, specificity, positive predictive value, negative predictive value, F1-Score, G-mean and Matthews Correlation Coefficient (MCC) (14).

RESULTS

The performance metrics for the formed Bagged CART model and the 95% confidence interval for these metrics are given in Table 1.

Table 1. The performance metrics for Bagged CART model

Metrics	Value	95% Confidence Interval
Accuracy	0.997	0.994-1.000
Balanced Accuracy	0.997	0.994-1.00
Sensitivity	0.999	0.993-1.00
Specificity	0.995	0.988-0.999
Positive Predictive Value	0.995	0.988-0.999
Negative Predictive Value	0.999	0.994-1.00
F1-Score	0.997	0.994-1.00
MCC	0.994	0.990-0.998
G-Mean	0.997	0.994-1.000

The importance values of variables related to possible risk factors for hypothyroidism determined by the Bagged CART model are shown in Figure 1.

Figure 1. The importance values for possible risk factors by determined Bagged CART

DISCUSSION

Hypertension is one of the most common chronic diseases in the world and in our country. In the Global Burden of Disease study conducted in 188 countries in 2013, hypertension ranked first in the list of disease risk factors and causes of death (15). In the health burden study conducted by the Ministry of Health of the Republic of Turkey in 2004, hypertension was held responsible for one out of every four deaths (16).

Many machine learning models have been created in the literature to classify hypertension and identify possible risk factors (17, 18). In this study, accuracy, balanced accuracy, sensitivity, specificity, positive predictive value, negative predictive value, F1-Score, G-mean and Matthews Correlation Coefficient (MCC) values of the machine learning method created using data on individuals with and without hypertension were determined as 0.997,0.997, 0.999, 0.995, 0.995, 0.999, 0.997, 0.994 and 0.997, respectively. Considering the results of these metrics, the hypertension classification performance of the model created is quite good. On the other hand, according to the significance of the variables obtained as a result of the model, it can be said that "Levels of Hemoglobin", "Genetic Pedigree Coefficient" and "Adrenal and Thyroid Disorders" variables are the highest risk factors in the diagnosis and follow-up of patients with hypertension.

CONCLUSION

In light of the outcomes of this study's Bagged CART, it can be concluded that hypertension is well-classified by it. On the other hand, potential risk factors for hypertension were identified

using the model's output variables' significance levels. In light of the results, it is therefore anticipated that these risk factors may be advantageous in the clinic.

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AKUT İDRAR RETANSİYONU OLAN GEBE HASTALARDA NADİR KARŞILAŞILAN BİR ETİYOLOJİ

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GİRİŞ: Oligüri, idrar çıkışının günde 400 ml'den veya saatte 20 ml'den az olması olarak tanımlanır ve böbrek fonksiyon bozukluğunun en erken belirtilerindendir.(1-2) Oligüri çeşitli etiyolojik faktörlere bağlı olarak prerenal, renal ve postrenal olarak sınıflandırılabilir. Oligürik hastalarda akut böbrek yetmezliği gelişme riski daha yüksektir. Akut böbrek yetmezliği gelişen hastaların yüzde 30 ila 70'i yüksek morbidite ve mortalite ile ilişkili enfeksiyonlar geçirebilir.(1) Oligürinin süresi ve yoğunluğu prognozu yakından etkiler. İdrar çıkışı <0.5 ml/kg/saat'e kadar geriledikçe mortalite önemli ölçüde artar.(3) Gebelik durumundaki oligüri ve akut böbrek yetmezliği tablosu maternal ve perinatal morbidite ve mortalite açısından oldukça önemlidir. Anne ve bebek sağlığı için tanı bir an önce konulmalı, altta yatan etiyolojiye bağlı tedavi uygulanmalıdır.

OLGU: 26 yaşında, transfer tarihine göre 13 haftalık IVF tekil gebeliği olan kadın hasta, tarafımıza 1 gündür idrar yapamama ve suprapubik ağrı şikayetiyle başvurdu. Kan basıncı, kalp hızı, vücut sıcaklığı ve solunum sayısı normal sınırlar aralığında ölçülen hastanın fizik muayenesinde karın alt kadranda hassasiyet dışında eşlik eden bulgusu yoktu. Hastaya acil serviste foley kateter takılarak mesanesi boşaltıldı ve hasta Kadın Hastalıkları ve Doğum bölümüne danışıldı. Hasta ileri tetkik ve gözlem için Kadın Doğum servisine yatırıldı. Burada trans-abdominal ultrason görüntüleme ile değerlendirilen hastada fetal kalp atımları mevcut ve doğaldı, fetusun ölçümleri haftası ile uyumluydu. Hastada glob vesikale olduğu görüldü. Hastaya Radyoloji bölümü tarafınca yapılan üriner sistem ultrasonunda normal sınırlarda bulgular izlendi. Hastanın mesanesi boşaltıldı ve laboratuvar tetkiklerinde CRP'nin 85 gelmesi üzerine tam idrar tahlili, idrar kültürü alındı ve antibiyoterapi başlandı. Hastanın sondası mesane egzersizi yapıldıktan sonra çıkarıldı, spontan diürez olmaması üzerine foley kateter yeniden mesane içine yerleştirildi. İdrar tahlili normaldi ve kültürde üreme olmadı. Üroloji bölümünün de önerileri alındıktan sonra kontrol ve antibiyoterapi devamı ile sonda takılı halde taburculuğu yapıldı.

TARTIŞMA VE SONUÇ: Akut üriner retansiyonun en sık görülen sebebi çıkış yolunda obstrüksiyondur. Kadınlarda altta yatan neden olarak listenin başında pelvik kitle, prolaps yer almaktadır. Gebe hasta popülasyonunda ise uterusun gebeliğin özellikle 12.-14. haftalarda pelvik bölgede kapladığı yerin anatomik varyasyonlarına bağlı mesane çıkışında obstrüksiyona yol açabileceği de göz önünde bulundurulmalıdır. Bu sebepler doğrultusunda oluşabilecek oligüri tablosu ve idrar yolu enfeksiyonu bizim vakamızda olduğu gibi yakından takip edilmeli, gerekirse hastanın hospitalizasyonu yapılmadır.

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THE PREDICTION OF HYPOTHYROIDISM WITH THE XGBOOST MODEL BASED ON CLINICAL DATA AND DETERMINED OF RISK FACTORS

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INTRODUCTION

Thyroid diseases, one of the most common endocrine problems, are characterized by symptoms that affect the quality of life of patients and are generally related to excessive or low hormone production. Thyroid diseases can also occur with nodule formation or tumor development (1). Hypothyroidism is the under-secretion of thyroid hormones due to underactive thyroid gland. Since these hormones regulate our metabolism, weakness, fatigue, dryness and flaking of the skin, enlargement of the tongue and hoarseness in the voice may occur due to less hormone secretion into the blood (2). Since the hormones secreted by the thyroid gland are effective on metabolic activities, the development and growth of tissues, the rate of use of nutrients for energy and live weight gain (3), accurate diagnosis is of great importance for the appropriate treatment of thyroid diseases. However, there are many types of thyroid disease and some points are overlooked, making it difficult for doctors to accurately diagnose patients.

Analysis of health data has been one of the most promising and important research areas over the years. Machine learning applications in health are tools developed to interpret and analyze complex data and to extract meaningful information. The purpose of these tools is to improve patient diagnosis, treatment and follow-up for both clinicians and patients. Machine learning approaches have been used in many researches, from predicting the diagnosis and treatment processes of diseases in medical applications to drug discovery (4).

In this study, Extreme Gradient Boosting (XGBoost) algorithm, which is one of the machine learning techniques, was used to help clinicians diagnose hypothyroidism. In an open-access hypothyroidism dataset, the classification of hypothyroidism and the risk factors associated with the disease will be determined according to the order of importance and used in diagnosis, with the machine learning method applied to the data obtained from healthy and diseased samples.

MATERIAL AND METHODS

DATASET

An open access data set consisting of demographic and clinical data of 3163 individuals (Hypothyroid=150, Negative=3012) taken from the UCI database used in this study was used (5). In the data set used, 907 (29.4%) men, 2182 (70.6%) women and the mean age of men are 51.4±18.9 years and the mean age of women is 51.1±19.5.

XGBOOST MACHINE LEARNING MODEL

The XGBoost algorithm, which is a high-performance version of the Gradient Boosting algorithm optimized with various regulations, was introduced by Tianqi Chen and Carlos Guestrin in the article "XGBoost: A Scalable Tree Boosting System" published in 2016. The most important features of the algorithm are its high predictive power, preventing over-learning, managing lost data and at the same time performing these operations quickly (6).

MODELLING

Random Forest variable imputation method was applied in the analysis of missing data in the data set, and then SMOTE method was used for class imbalance (7, 8). Afterwards, XGBoost machine learning model was established with 5-fold cross validation on the obtained data set. Performance evaluation of the established model was evaluated with accuracy, balanced accuracy, sensitivity, specificity, positive predictive value, negative predictive value, F1-Score, G-mean and Matthews Correlation Coefficient (MCC) (9).

RESULTS

The performance criteria for the created XGBoost model and the 95% confidence interval for these criteria are given in Table 1.

Table 1. The performance criteria for XGBoost model

Metrics	Value	95% Confidence Interval
Accuracy	0.987	0.984-0.990
Balanced Accuracy	0.987	0.984-0.990
Sensitivity	0.980	0.974-0.985
Specificity	0.994	0.991-0.997
Positive Predictive Value	0.994	0.991-0.997
Negative Predictive Value	0.980	0.975-0.985
F1-Score	0.987	0.984-0.990
MCC	0.975	0.971-0.979
G-Mean	0.987	0.984-0.990

The importance values of variables related to possible risk factors for hypothyroidism determined by the model are shown in Figure 1.

Figure 1. The importance values for possible risk factors

DISCUSSION

Hypothyroidism, which is a common thyroid disease, is a disease that occurs as a result of thyroid hormone deficiency (rarely ineffectiveness) at the tissue level and progresses with metabolic slowdown (10). It is critically important that the patient is not exposed to additional tests in order to tire the patient less and to frazzle them out during the diagnosis and treatment periods of this disease, which significantly affects the quality of life of people. For this reason, in this study, a diagnosis/diagnosis model will be designed to help doctors, both to diagnose hypothyroidism and to reduce the tests and examinations applied to the patient in the follow-up of this disease. Along with the frequent use of machine learning methods in the field of health, studies are carried out to increase the quality of human life. At the last point, we see that computer-aided diagnosis/follow-up systems used in the diagnosis of the disease are gaining more and more importance day by day (11).

In this study, machine learning was applied to an open source hyproid dataset and the accuracy, balanced accuracy, sensitivity, specificity, positive predictive value, negative predictive value, F1-Score, G-mean and Matthews Correlation Coefficient (MCC) values obtained from the model were 0.987, 0.987, 0.980, 0.994, 0.994, 0.980, 0.987, 0.975 and 0.987, respectively. Considering these metrics, the model created is quite successful in classifying hypothyroidism. In addition, the most important 3 factors that may be associated with hypothyroidism were determined as T4U, TBG and TSH.

CONCLUSION

In conclusion, considering the results of the machine learning model created in this study, it has a very good classification performance of hypothyroidism. On the other hand, possible risk factors for hypothyroidism were determined with the significance of the variables obtained as a result of the model. Therefore, in the light of the findings, it is predicted that these risk factors may be beneficial in the clinic.

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BILATERAL PATELLAR TENDON RUPTURE DUE TO KNEE TRAUMA: A CASE REPORT

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INTRODUCTION

In this case report, we aimed to present a patient with bilateral patellar tendon rupture who slipped and fell from a ladder.

CASE

A 38-year-old male patient applied to the emergency department with the complaint of slipping and falling from a three-step ladder. The patient stated that when he fell, both knees were bent and he had no trauma elsewhere. The patient has a history of systemic lupus erythematosus (SLE) ,it was learned that he used methylprednisolone, mycophenalat mofetil and hydroxychloroquine for treatment. In the extremity examination of the patient, bilateral patella tendon could not be palpated. Lower extremity peripheral pulses were palpable. Other system examinations were normal. Bilateral patella dislocation was observed in the direct X-ray of the patient. (Figure 1). Fluid increases were observed in the knee joint space and suprapatellar bursa in the knee computerized tomography (CT) of the patient. (Figure 2). Superficial ultrasonography (USG) was planned for the patient. In the USG, bilateral patellar tendons were not showed to continuity, and dense collection areas were observed. These findings made us think of bilateral patellar tendon rupture. Orthopedics department consultation was requested for the patient. Bilateral patellar tendon repair was performed on the patient who was operated by orthopaedics. Later, the patient was discharged with recovery.

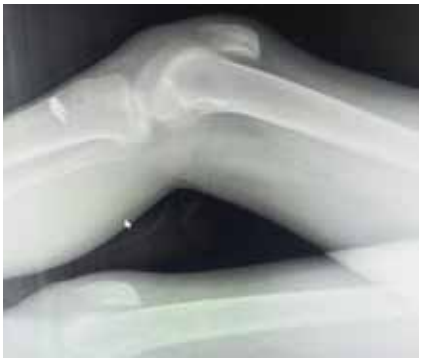

Figure 1. Bilateral patella dislocation image on direct X-ray

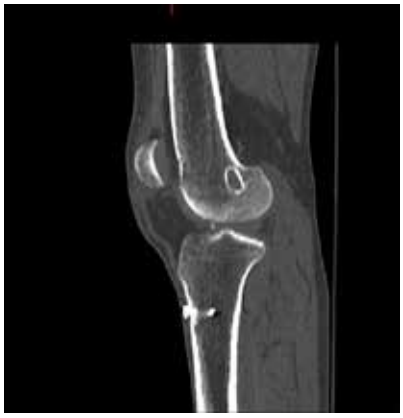

Figure 2. Fluid increases in the knee joint space and suprapatellar bursa on bilateral knee computed tomography, A: left knee, B: right knee.

DISCUSSION

Patella tendon rupture is not common in emergency departments. It occurs in less than one person out of 100,000 people per year. It is generally expected in the 3rd and 4th decades. It is more common in men than women (1).

The pathophysiology underlying bilateral patellar tendon rupture has been reported to be divided into three categories in the literature. The first group consists of patients with underlying systemic or autoimmune disease considered to be at higher risk for bilateral patellar tendon rupture. This includes patients with lupus erythematosus, rheumatoid disease, diabetes mellitus, chronic kidney disease and hyperparathyroidis. These conditions are thought to cause inflammatory changes that alter the structure of the tendon. Chronic inflammation and amyloid deposition were found in the histological examination of the tendons of these patients. The second group includes oral or injectable corticosteroids thought to be associated with bilateral patellar tendon rupture. Steroids are believed to affect collagen synthesis and compromise blood flow, thereby weakening the tendon. Patients in the third group show inflammatory and degenerative changes in histological studies attributed to chronic microtrauma (2).

This type of injury requires prompt diagnosis and surgical repair as it is part of the patellar tendon extensor mechanism (3). In our case, it was learned that our patient was a 38-year-old male patient, his knees were forced to overextension as a result of falling from a ladder, he had a history of SLE and was treated for this disease. In addition, our patient was operated shortly after the diagnosis and the patient was treated.

Patellar tendon ruptures are typically unilateral, and in the presence of a healthy patellar tendon, the tensile load usually leads to transverse fracture of the patella, since the patella is the weakest link in the extensor mechanism (4). In our case, unlike the literature, patellar tendon rupture was bilateral and there was no fracture in either patella.

CONCLUSION

In knee traumas admitted to the emergency department; It should not be forgotten to be careful in terms of patellar tendon rupture, especially in knee traumas of patients with a disease such as SLE, to evaluate the diseases in the history of the patients and the drugs they use together with their trauma history.

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TROPONIN ELEVATION AFTER BLUNT CHEST TRAUMA

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INTRODUCTION: Cardiac trauma has a higher mortality than other system organ injuries. For this reason, myocardial contusion injury is a serious condition that requires rapid diagnosis and diagnosis. While most of the blunt cardiac injuries occur due to traffic accidents, the remaining part is seen as a result of falling from a significant height. Blunt thoracic trauma can cause death with coronary artery damage, myocardial contusion and, accordingly, contractile dysfunction, followed by arrhythmias.

CASE: A 39-year-old male patient was admitted to the emergency department after a tire burst while changing a car tire. Initial assessment of the patient showed a temperature 36.6°C, heart rate 87 bpm, blood pressure 126/85 mm Hg, respiratory rate 21 breaths/min, and an oxygen saturation of 98% on room air. Electrocardiogram (ECG) was taken because the patient had chest pain. ECG showed normal sinus rhythm without any ST-T wave changes. No pathology was detected in bedside echocardiography. Laboratory tests were normal except for an elevated serum troponin level.Troponin I levels was elevated at 891 pg/mL (reference range 0-17,50 pg/mL). The control troponin value was determined as 1761 pg/mL. The patient was admitted to the coronary intensive care unit. The patient whose troponin value decreased in the follow-ups was discharged 2 days later.

CONCLUSION: We advise that all blunt chest trauma patients should be screened for cardiac contusion by continuous ECG monitoring and troponin levels.

KEYWORDS: Troponin, chest trauma, cardiac contusion, emergency department

ACUPUNCTURE-INDUCED PNEUMOTHORAX

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INTRODUCTION

Pneumothorax is defined as accumulation of air in the potential space between the parietal and visceral leaflets of pleura. Pneumothorax may develop spontaneously or it may either result from trauma or procedural interventions [1,2]. Acupuncture is an alternative treatment method originating from traditional Chinese medicine but has also been investigated through evidence-based studies by modern medicine [3]. It is considered a relatively safer form of treatment and used in the treatment of various clinical conditions including chronic pain [4]. However, it may lead to some local complications including local reactions and infection, and it may also cause some more serious complications such as septicemia, spinal cord injury and pneumothorax [5]. A study, based on postmortem investigations, showed that even 10-20 mm insertion of the needle into the chest cavity during acupuncture is sufficient for pneumothorax to develop [6].

CASE

A 26-year-old female presented to the emergency department with sudden-onset right-sided chest pain, back pain and dyspnea. At the time of presentation, her vital signs, including oxygen saturation (98%), were normal. There wasn't anything significant in the patient's history other than smoking. She described having undergone dry needle acupuncture therapy for chronic back pain and neck pain in a physiotherapy unit the day before emergency department application. She stated that a pleuritic chest pain and back pain started nearly one hour after acupuncture application. Pulmonary auscultation showed decreased respiratory sounds on the upper zone of the right hemithorax. Due to the overlapping site of pain and auscultation findings and close temporal proximity of the acupuncture application and the appearance of the sypmtoms iatrogenic pneumothorax was suspected. Posterior-anterior chest X-ray did not clearly show pneumothorax though it raised some suspicion (Figure 1). Then, the patient had computerized tomography (CT) of the chest which clearly showed right-sided pneumothorax (Figure 2), and she was transferred to another hospital because there is no available bed in our hospital for in-patient follow up of the patient after chest tube insertion.

DISCUSSION

Acupuncture and dry needling are evidence-based therapeutic options. They are frequently resorted to patients who refrain from other treatment modalities or patients who cannot find any other effective therapeutic option [7]. Pneumothorax is one of the most serious complications of acupuncture. A prospective study with 229,230 patients showed that 2 patients developed pneumothorax due to acupuncture [8]. Another study of 97,733 patients also showed 2 cases of acupuncture-related pneumothorax [9].

Fortunately pneumothorax is a rarely seen complication of acupuncture. Deep penetrative applications by inexperienced practitioners increase risk of complications. Patients with lower body mass index and those who have thinner connective and adipose tissue surrounding the chest wall are at higher risk.

Patients who present to emergency department with any type of chest or back pain must be examined cautiously. Trauma and interventional procedures should be noted, and it should be kept in mind that recently-developing causes of pain can be missed in patients with chronic pain. If the patient complains of a new type of pain or increased pain intensity after an interventional procedure performed on the chest or back, pneumothorax should be included in the differential diagnosis list.

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DROWNING IN THE RESUSCITATION ROOM

İNTRODUCTION: Drowning; due to diving or immersion in a liquid environment; It is a process that occurs with the formation of a liquid/air interface in the respiratory tract and the prevention of air inhalation, which can result in death with the deterioration of primary respiratory functions.

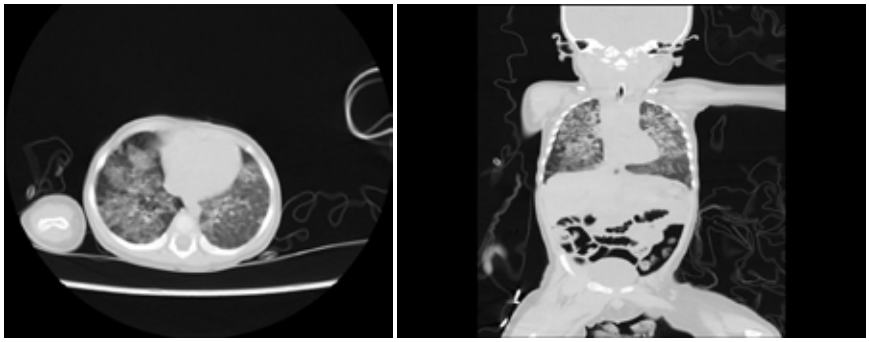
We discussed this type of admission, which can be mortal for the patients and cause permanent neurological damage, in the context of our two pediatric patients, who we treated in our resuscitation room and whose results of hospital processes were completely different from each other.

A 4-year old male patient, stays upside down in a bucket filled with water for 10-15 minutes until the family finds him. The patient, who was brought to the emergency room in a poor general condition, GCS:3, respiratory effort is about to end, was intubated in the resuscitation room and treatment was started for hypothermia(35.6°C) and hypoxia(65%). The patient, who was tachycardic(170/m), tachypneic(44/m), and had deep acidosis in blood gas (Ph:6.66, lactate:17mmol/L, HCO3:6.6mmol/L) upon arrival at the hospital, had appearances consistent with pulmonary edema and brain edema in the tomography of the patient. The patient; who was stabilized and hospitalized in the pediatric intensive care unit(PICU) with the diagnoses of drowning, ARDS, and cerebral edema, who was followed up in the PICU, whose acidosis and hypoxemia did not improve, and whose cerebral edema continued, died at the 34th hour of the follow-up.

A 2-year old female patient, stays upside down in a bucket filled with water for 5-10 minutes until the family finds her. The patient, who was stated to have a bruised face after being removed from the water and started to cry with tactile stimulation, was in a bad general condition, tachypneic(44/m), tachycardic(165/m), when she was brought to the emergency room. The patient, whose clinic and imaging were in favor of pulmonary edema, had acidosis in blood gas (ph:7.18 lactate:5mmol/L HCO3:20.2mmol/L), was intubated due to tachypnea and was admitted to the PICU. The patient, who was extubated on the 5th day of the PICU follow-up, was discharged on the 11th day of hospitalization with neurologically healthy.

RESULTS: Drowning; It causes many organ dysfunctions with lung compliance, hypoxemia resulting from intrapulmonary shunt. Pulmonary (pulmonary edema, ARDS), neurological (brain edema), cardiovascular (dysrhythmias) are some of these. The first interventions and ongoing care of emergency room patients presenting with choking are important, but sometimes, despite everything, the patients cannot be saved.

KEY WORDS: drowning, pulmonary edema, brain edema



DIALYSIS DISEQUILIBRIUM SYNDROME: RARE SERIOUS COMPLICATION OF HEMODIALYSIS

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INTRODUCTION: Dialysis disequilibrium syndrome (DDS) is an extremely rare central nervous system complication that occurs in patients receiving hemodialysis and can be potentially fatal. DDS with milder symptoms including nausea, vomiting, headaches, fatigue, and restlessness can still be evident. Dialysis removes osmotically active molecules like urea from the blood more rapidly than they can diffuse out of the brain causes osmotic gradient leading to the flow of water into the brain, with the end result of cerebral edema.

CASE: A 50-year-old male patient applied to the emergency department with complaints of sudden change in consciousness that started 1 hour ago. She had a background of end-stage renal failure secondary to hypertension and was on haemodialysis three times per week for many years. On examination, she had a Glasgow Coma Scale of 13. Vitals at presentation were temperature 36.6 ^{o}C, heart rate 76 beats per min, respiratory rate 20 per min, blood pressure 110/70 mm of Hg, and pulse oximetry 95%.The patient became confused about 85 minutes into hemodialysis. On neurological examination, the patient was confused, unable to follow commands and pupils were equal reacting to light bilaterally. Her CT-head showed features of cerebral edema. Postdialysis labs revealed BUN 75 mg/dl (urea reduction ratio [URR] 56.8%) and creatinine 4.2 mg/dl. The patient was given mannitol 125 mg and 3% hypertonic saline was started at 30 cc/hr intravenously. He was transferred to the intensive care unit for supportive management.

CONCLUSION: DDS is a rare syndrome characterized by neurological symptoms of varying severity that affect dialysis patients. Although DDS is a rare and self-limiting syndrome, it's important to be aware of this diagnosis, particularly in high-risk groups.

KEYWORDS: Dialysis disequilibrium syndrome, hemodialysis, neurological symptoms

HYPERTENSIVE ENCEPHALOPATHY WITH DYSARTHRIA

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INTRODUCTION: Hypertensive encephalopathy is an emergency hypertensive condition that occurs with a sudden and high increase in blood pressure, headache, restlessness and blurred vision , changes in mental status, and returns with a decrease in blood pressure. Elevated blood pressure is considered as a potential predisposing factor as well as a precipitating factor for acute changes in mental status. It is characterized by rapidly progressive signs and symptoms including headache, seizures, visual disturbances, altered mental status and focal neurologic signs. Although the syndrome is usually reversible if the hypertension is treated early, it may be fatal if it is unrecognized and treatment is delayed.

CASE: A 75-year-old male patient presented to the emergency department with a change in consciousness. The patient's blood pressure on admission was 210/110 mm Hg. There was no significant medical history and the patient did not take any prescription medications. Laboratory studies were unremarkable. A neurological examination was normal except for dysarthria. A head CT on admission was normal. Diffusion-weighted imaging was normal, indicating the absence of infarction. Based on these findings, a diagnosis of acute hypertensive encephalopathy was made. We immediately initiated intravenous antihypertensive therapy.After institution of antihypertensive therapy, the patient had clinical resolution of his symptoms.

CONCLUSION: Hypertensive encephalopathy is a hypertensive emergency that requires rapid intervention. Hypertensive emergency crises can lead to very serious complications if not intervened in a short time.This case demonstrates that hypertensive encephalopathy along with neurologic exam finding like dysarthria. Thorough neurologic examination, in conjunction with CT and DWI, is essential for the correct diagnosis.

KEYWORDS: Hypertensive encephalopathy, dysarthria, neurological symptoms

BİR ÜNİVERSİTE HASTANESİNE BAŞVURAN 200 KAFA TRAVMALI ÇOCUK OLGUNUN RETROSPEKTİF OLARAK DEĞERLENDİRİLMESİ

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ÖZET

GİRİŞ VE AMAÇ

Travmalar dünyadaki çocukların en sık ölüm nedenlerindendir. Özellikle kafa travmaları ciddi mortalite ve morbidite ile beraber seyredebilirler.[1]Bu çalışmada kafa travmalarını hatırlatmak ve dikkat çekmeyi amaçladık.

YÖNTEM

1 Hazian 2021 ve 1 Temmuz 2021 tarihleri arası 3.basamak bir hastane acil servisine getirilen, 18 yaşın altındaki 200 hastanın bilgileri retrospektif olarak değerlendirildi.

BULGULAR

200 hastanın 120 si (%60) erkek, 80'i (%40) kız idi. Yaş dağılımı;50 hasta(%25) 0-1 yaş,34 hasta(%17) 1-2 yaş,38 hasta (%19) 2-5 yaş,36 hasta(%18) 6-10 yaş,42 hasta(%21) 11-18 idi.

En sık travma mekanizması 90 hasta (%45) düşme idi, bunu sırasıyla 52 hasta (%26) ile araç içi trafik kazası,20 hasta (%10) ile bisiklet kazası,10 hasta (%5) ile araç dışı trafik kazası, yine 10 hasta (%5) ile elektrikli scooter kazaları,8 hastada (%4) ile paten kazaları, 6 (%3) hasta ile elektriksiz(klasik tip) scooter,2 (%1) hasta ile darp ve 2 (%1) hastada üzerine ağır cisim düşmesi idi.

TARTIŞMA

Düşmeye bağlı kafa travması diğer travma mekanizmalarına göre yüksek olup bu durum çocukluk çağında kalvaryimun diğer bölgelere göre nispeten yüksek olması ve servikal kas yapısının tam olgunlaşmamasına bağlı denge fonksiyon yetersizliğine bağlı olduğunu düşünmekteyiz.

Travma mekanizması açısından çalışmamız literatür ile uyumludur. Fakat araştırdığımız kadarı ile Türkiye'de elektronik scooter a bağlı kafa travmasının ayrı olarak değerlendirildiği ilk çalışmadır.

Klinik pratikte kafa travması ile gelen her hastaya medikolegal endişelerden dolayı bilgisayarlı tomografi çekilme isteği varken yapılan çalışmalarda gereksiz tomografi çekilmesinin radyasyona bağlı kanser riskini artırdığı söylenmiştir. Bizim çalışmamızda da bu yüzden PECARN skorlama sistemine göre bilgisayarlı tomografi endikasyonu konmuştur. Hastaların çoğunluğunda bir radyolojik patolojiye rastlanmamıştır.

SONUÇ

Kafa travmalarına dikkat çekmeyi ve hatırlatmayı amaçladığımız bu çalışmada gereksiz kranial tomografi çekilmesinin önüne geçilmesi, gerekirse Türkiye için ayrı bir skorlama sistemi geliştirilmesi, son zamanlarda giderek kullanımı sıklaşan elektronik scooter kazalarına dikkat edilmesi, kask vb. koruyucu ekipmanlar giyilmesi, bu konuda daha detaylı ve prospektif çalışmalar yapılması gerektiğini düşünüyoruz.

ANAHTAR KELİMELER: acil servis, kafa travması, pediatrik travma

GİRİŞ VE AMAÇ

Travmalar dünyadaki çocukların en sık ölüm nedenlerindendir. Özellikle kafa travmaları ciddi mortalite ve morbidite ile beraber seyredebilirler. Amerika'da saatte ortalama 1 çocuk travmaya bağlı nedenlerden kaybedilmektedir.[1] Amerika da her yıl yaklaşık 750.000 den fazla çocuk acil servislere başvurmaktadır. Pediatrik travmalarda en yüksek insidanslar yeni yürümeye başlayan çocuklar ve adolesanlardadır. Çocuklarda künt travmalar kesici-delici alet yaralanmalarına göre daha sık görülür. Bir yaşın altındaki bebekler travmaya bağlı ölümler açısından en yüksek riske sahip gruptur.[2]

Beyin sarsıntısı, minör kafa travması ya da travmatik beyin hasarı literatürde farklı tanımlara sahip olsa da 2016 'da Berlin'de yapılan bir konferansta fikir birliğine varılarak biyomekanik güçlerin neden olduğu beyin hasarı olarak tanımlanmıştır.[3] Travmaya bağlı nöropatolojik değişikler olsa bile asıl tanım fonksiyonel bir bozukluğu yansıtır ve nörogörüntüleme de herhangi bir patoloji saptanmayabilir.[4]

Klinik belirti ve bulgular oldukça değişken olduğu gibi ayrıca ortaya çıkmaları saniyeler içinde olabileceği gibi günlerde alabilir. Çocuklar şikâyetlerini tam olarak anlatamayabiliriler bu nedenle tanı koymak daha da zor olabilir. Bulgular gizli ve silik olabileceğinden klinisyenin tanı koyması zor olabilir. Gloskow koma skalası beyin hasarını belirlemek için kullanılabilecek güvenilir bir araçtır. Klinik pratikte çocuklar için modifiye edilmiş hali kullanılabilir.[5] Ciddi yaralanmalar için kırmızı bayraklar baş ve boyun ağrısı, çift görme, kol veya bacaklarda uyuşukluk-güç kaybı, bilinç kaybı, artan huzursuzluk hali, nöbet, zihinsel fonksiyonların kötüleşmesi, koagülopati öyküsü, önceki nöroşirujik cerrahi (örnek: Şant operasyonu) özgeçmişi, tehlikeli yaralanma mekanizması sayılabilir.[6]

Görüntülemede hızlı ve lezyonları tanımadaki hassasiyetinden dolayı sıklıkla bilgisayarlı tomografi kullanılmakla beraber radyasyon bağlı kanser riskini en aza indirebilmek adına hastanın 'Pediatric Emergency Care Applied Research Network' (PECARN) gibi skorlama sistemlerinin kullanılması önerilmektedir.[7]

YÖNTEM VE BULGULAR

1 Haziran 2021 ve 1 Temmuz 2021 tarihleri arası 3.basamak bir hastane olan Erciyes Üniversitesi Tıp Fakültesi Acil Servisine getirilen, 18 yaşın altındaki 200 hastanın bilgileri retrospektif olarak kaydedildikten sonra SPSS 20 programı ile istatiksel olarak değerlendirildi.

Kliniğimize başvuran 200 hastanın 120 si (%60) erkek, 80'i (%40) kız idi. Hastaların yaş dağılımını incelediğimizde;50 hasta(%25) 0-1 yaş,34 hasta(%17) 1-2 yaş,38 hasta (%19) 2-5 yaş,36 hasta(%18) 6-10 yaş,42 hasta(%21) 11-18 yaş aralığında idi.

En sık karşılaşılan travma mekanizması 90 hasta (%45) düşme idi, bunu sırasıyla 52 hasta (%26) ile araç içi trafik kazası,20 hasta (%10) ile bisiklet kazası,10 hasta (%5) ile araç dışı trafik kazası, yine 10 hasta (%5) ile elektrikli scooter kazaları,8 hastada (%4) ile paten kazaları, 6 (%3) hasta ile elektriksiz(ayakla itilen-klasik tip) scooter,2 (%1) hasta ile darp ve 2 (%1) hastada üzerine ağır cisim düşmesi(tüplü televizyon ve dolap) idi.

Hastaların başvuru anında çocuklar için modifiye edilmiş pediatrik Glaskow Koma Skalaları değerlendirildiğinde 182 hastanın(%91) ,13-15 puan,14 hastanın (%7) 10-12 puan, 4(%2) hastanın ki ise 10 un altı olarak hesaplandı.

Acil servise başvuran 200 hastanın PECARN skorlama sistemine göre 120 sine bilgisayarlı tomografi çekildi. 60 hastada(%50) herhangi bir anormalliğe rastlanmazken 36 hastada(%30) izole lineer kafatası kemik kırığı,24(%20) hastada ise subdural hematom, intraserebral hematom, epidural hematom ve subaraknoid kanama gibi farklı patolojiler vardı.

Hastaneye yatış açısından yapılan değerlendirilmede 35hasta (%17.5) hastaneye yatırıldı,1 hasta(%0.5) acil serviste kayıp edildi.

TARTIŞMA

Her ne kadar lösemi gibi hematolojik hastalıklar basın ve halkın daha çok dikkatini çekse de Amerika Birleşik Devletlerinde yapılan bir çalışmaya göre pediatrik yaş grubunda kafa travmalarından ölen çocuk sayısı lösemi den ölen çocukların sayısından yaklaşık olarak 5 kat fazladır.[8]

Olgularımız değerlendirildiğinde erkek/kız oranı 120/80 (1.5) olup erkek hastalarda fazla olup literatür ile uyumludur.[9] Erkek çocuklarda fazla görülmesi erkek çocukların da aktif olmasına bağlanmış olup yine daha önce yapılan çalışmalar ile uyumludur.[10]

Düşmeye bağlı kafa travması diğer travma mekanizmalarına göre yüksek olup bu durum çocukluk çağında kalvaryimun diğer bölgelere göre nispeten yüksek olması ve servikal kas yapısının tam olgunlaşmamasına bağlı denge fonksiyon yetersizliğine bağlı olduğunu düşünmekteyiz.

Çalışmamızda hastaların başvuru anındaki çocuklar için modifiye edilmiş pediatrik Glaskow Koma Skalaları yine literatür ile uyumlu olduğu görülmüştür.[11]

Travma mekanizması açısından çalışmamız literatür ile uyumludur. Fakat araştırdığımız kadarı ile Türkiye'de elektronik scooter a bağlı kafa travmasının ayrı olarak değerlendirildiği ilk çalışmadır.

Klinik pratikte kafa travması ile gelen her hastaya medikolegal endişelerden dolayı bilgisayarlı tomografi çekilme isteği varken yapılan çalışmalarda gereksiz tomografi çekilmesinin radyasyona bağlı kanser riskini artırdığı söylenmiştir.[12] Bizim çalışmamızda da bu yüzden PECARN skorlama sistemine göre bilgisayarlı tomografi endikasyonu konmuştur. Hastaların büyük çoğunluğunda herhangi bir radyolojik patolojiye rastlanmamıştır.

Çalışmamızın prospektif olmaması, az sürede ve az sayıda hasta ile yapılmış olması çalışmamızın başlıca kısıtlılığını oluşturmaktadır.

SONUÇ

Kafa travmalarına dikkat çekmeyi ve hatırlatmayı amaçladığımız bu çalışmada gereksiz kranial tomografi çekilmesinin önüne geçilmesi, gerekirse Türkiye için ayrı bir skorlama sistemi geliştirilmesi, son zamanlarda giderek kullanımı sıklaşan elektronik scooter kazalarına dikkat edilmesi, kask vb. koruyucu ekipmanlar giyilmesi, bu konuda daha detaylı ve prospektif çalışmalar yapılması gerektiğini düşünüyoruz.

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PROLONGED DRUG-INDUCED ANAPHYLAXIS: CASE REPORT

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INTRODUCTION

Anaphylaxis is a severe hypersensitivity reaction that usually starts quickly and can cause death. While the most common reasons for anaphylactic reactions are drugs, foods and insect bites, the most common drugs causing anaphylaxis are antibiotics and non-steroidal anti-inflammatory drugs. Concomitant asthma and high severity of asthma are among the most important risk factors stated for anaphylaxis. Early diagnosis and immediate treatment are very important to reduce mortality and morbidity due to anaphylaxis. History and clinical findings are the most important tools in diagnosing anaphylaxis, and the first and most important step in epinephrine treatment. Clinical findings often regress with treatment and prolonged anaphylaxis is rare despite treatment. We would like to present a case of prolonged anaphylaxis caused by nonsteroidal anti-inflammatory drug in this case.

CASE REPORT

A 53-year-old male patient presented to the emergency department with complaints of skin itching, redness, swelling, shortness of breath, and fainting that started approximately 30 minutes after taking 25 mg of dexketoprofen. In his history, it was learned that he applied to the emergency service with shortness of breath that started 1 hour after taking flurbiprofen pill one month ago, received irregular treatment with the diagnosis of asthma, received medical treatment with the diagnosis of DM, and was allergic to dairy products. On admission to the emergency service, his GCS was 15, his heart rate was 104 beats/minute, and his saturation was 95%. In the oropharynx examination, uvula edema and diffuse rhonchi in both lungs were detected. In laboratory tests, hemogram, liver and kidney tests, arterial blood gas and troponin values were found to be normal. The patient, who was evaluated as anaphylaxis, was administered adrenaline 0.5 mg IM in the emergency room, and simultaneous oxygen support and fluid infusion were started, and methylprednisolone, diphenhydramine and salbutamol were administered. Adrenaline 0.5 mg IM repeat dose was administered to the patient whose hypotension and respiratory distress continued. In the control evaluation, it was observed that the uvula edema regressed, but the complaints of hypotension and dyspnea continued. Adrenaline infusion was started in the case who did not detect acute pathology in the chest X-ray taken for differential diagnosis. The case was consulted with the intensive care unit and transferred to the intensive care unit for the continuation of treatment and follow-up. In the intensive care follow-up, it was observed that urticaria-compatible lesions continued on the skin at the 16th hour, and adrenaline infusion continued with fluid infusion due to resistant hypotension. In the intensive care unit, adrenaline infusion was continued for 36 hours and inotropic support was discontinued when hypotension and respiratory findings improved in the follow-up, and the patient whose vital signs were stable was taken to the service follow-up.

DISCUSSION

While symptoms and signs of anaphylaxis can be variable in Anaphylaxis, it can be triggered by the same or similar allergen and can occur differently in the same person each time. In our case, only respiratory symptoms developed with the use of analgesics belonging to the propionic acid group before, while prolonged anaphylaxis developed with another analgesic belonging to the same group. Prolonged anaphylaxis is defined as the duration of anaphylaxis for hours or days, in which clinical symptoms do not completely disappear despite effective treatments. Cases of anaphylaxis lasting up to 192 hours have been reported in the literature. Prolonged anaphylaxis is an unpredictable, rare clinical condition. Although the recommended follow-up period in anaphylaxis by the guidelines is 6-8 hours in cases presenting with respiratory complaints and 12-24 hours in cases presenting with circulatory disorders, each patient's follow-up period and termination of follow-up may vary according to the patient. Similar cases should be referred to allergy and immunology clinics for reliable drug use and asthma control in order to prevent future risks.

INVESTIGATION OF INCIDENTAL PULMONARY NODULES DETECTED IN THE EMERGENCY SERVICE IN TERMS OF PULMONOLOGIST FOLLOW-UP

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INTRODUCTION

A pulmonary nodule is defined as a rounded opacity, well or poorly defined, measuring up to 3 cm in maximal diameterand is surrounded completely by aerated lung. A lesion larger than 3 cm is termed a pulmonary mass (1). Solitary pulmonary nodules (SPN) are classified as solid or sub-solid; the latter further divided into part-solid or ground glass nodules (GGN). GGN demonstrate opacificationwith a higher density than the surrounding tissues butnot obscuring the underlying bronchovascular structures (1). The differential diagnoses of GGN differ from solid SPN and include benign processes such as focal inflammation, interstitial fibrosis and atypical adenomatous hyperplasia (premalignant) and malignant pathologies, including adenocarcinoma in situ, minimally invasive adenocarcinoma and invasive adenocarcinoma (2). The prevalence of non-calcified SPN is 2–24% in the non-screening population and 17–53% in the screening population (3). Most of these nodules are benign.

SPN are clinically important as they may represent anearly, potentially curable malignancy, in particular, lungcancer, which is the leading cause of cancer death in world. The prevalence of malignancy in patients with a SPN varies across studies ranging from 2 to23%. According to BTS, there is no risk of lung cancer in nodules of 4 mm or less, and larger nodules should be followed routinely (4). It is important clinicians are familiar with the evaluation of SPN especially as the increased utilisation of CT has led to increased identification of incidental pulmonary nodules (5).

MATERIALS AND METHODS

The study is a retrospective study. Patients who applied to the emergency department in July 2022 and had thoracic CT imaging were included in the study. The demographic characteristics of the patients, the characteristics of the nodule, and the chest diseases outpatient clinic admissions of the patients before and after thorax CT imaging were recorded. The patients were divided into two groups according to the nodule size. Group 1 nodule size was considered to be 4 mm or less, while group 2 nodule size was accepted as >4 mm. Statistical analyzes were done with IBM SPSS v23. Normality analyzes of quantitative data were performed with the Kolmogorov-Smirnov test. Comparison of normally distributed data was made with independent sample t-test. The comparison of qualitative data was made with the Pearson chi-square test. Data were presented as mean ± standard deviation and n (%). The significance value was accepted as $p<0.05$.

RESULTS

614 patients who underwent thoracic CT imaging in July 2022 were included in the study. Nodules were detected in 22.1% of these patients. The mean age of the patients with nodules was 64.1 ± 17.8 years and 52.9% were male. Right lung nodules, calcified nodules, pulmonary nodules and multiple nodules were found to be statistically significant in the group with >4 mm nodule size. Only 17.6% of patients with a nodule size >4mm who underwent thoracic CT imaging in the emergency department were examined by a pulmonologist within one month.

DISCUSSION

Lung cancers often present as SPN or a focal nonspecific radiological increase in opacity. Studies have reported that the incidence of SPNs on chest radiographs varies between 0.1-2% (6). It is known that age, increase in nodule size and the presence of concomitant malignancy increase the risk of malignancy of the nodule (7). When a nodule is seen on radiography, the first thing to do is to evaluate the possibility of benign/malignant nodule. Although radiographic features such as the presence of calcification of the pulmonary nodule, its well-circumscribed and stable two-year follow-up suggest that the lesion is benign, it has been shown that this is not always true and the differential diagnosis of benign/malignant nodule cannot be definitively made with radiological criteria (6). Given the high prevalence of small benign nodules in the available information, the requirement to follow up on each case for 2 years results in an increase in the large resource, workload, and radiation-affected population. Therefore, instead of following every small indeterminate nodule, it may be appropriate to screen selected high-risk groups and cases with suspicious morphological features (7).

In our study, we examined the pulmonologist follow-up processes of patients who were found to have SPN in thorax CT imaging performed in the emergency department. It was determined that the majority of our patients were not followed up in terms of nodules, and only 1/4 of them were examined by a pulmonologist in the last two years. The rate of patients who went to pulmonologist control after thorax CT imaging was 15.4%. Thorax CT scans in emergency services are generally not evaluated for nodules. This prevents patients with SPN from being followed up for malignancy.

CONCLUSION

Fleischner Society does not recommend follow-up for low-risk nodules smaller than 4 mm, but recommends a check-up every 12 months in the high-risk group. This may cause some slow-growing cancers to be missed, but it is relatively acceptable considering the harm of unnecessary control shots. Early follow-up of SPNs is important for the early diagnosis and treatment of lung cancer, and it is important to recommend pulmonologist follow-up for SPNs detected in the emergency department.

Keywords: Emergency Medicine, Lung Cancer, Solitary Pulmoner Nodules.

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Tablo 1. Characteristics of Solitary Pulmonary Nodules and Pumonologist Follow-up Data

		4 mm and under (n=51)	> 4 mm (n=85)	Total (n=136)	p
Age		61,2 ± 18	65,9 ± 17,6	64,1 ± 17,8	0,162
Gender					
	Male	26 (51)	38 (44,7)	64 (47,1)	0,478
	Female	25 (49)	47 (55,3)	72 (52,9)	
Lung right side		32 (62,7)	71 (83,5)	103 (75,7)	0,006
Lung left side		28 (54,9)	60 (70,6)	88 (64,7)	0,064
Calcification		10 (19,6)	31 (36,5)	41 (30,1)	0,038

		4 mm and under (n=51)	> 4 mm (n=85)	Total (n=136)	p
Type of nodules					
	Solitary	50 (98)	78 (91,8)	128 (94,1)	0,132
	Ground glass	1 (2)	7 (8,2)	8 (5,9)	
Subpleural location		38 (74,5)	55 (64,7)	93 (68,4)	0,234
Pulmoner location		22 (43,1)	62 (72,9)	84 (61,8)	0,001
Count of nodules					
	Single	34 (66,7)	25 (29,4)	59 (43,4)	<0,001
	More than one	17 (33,3)	60 (70,6)	77 (56,6)	
Pulmonologist visits					
In one mount after CT		6 (11,8)	15 (17,6)	21 (15,4)	0,358
Last one year before CT		8 (15,7)	16 (18,8)	24 (17,6)	0,642
Last two years before CT		12 (23,5)	24 (28,2)	36 (26,5)	0,547
Last five years before CT		16 (31,4)	43 (50,6)	59 (43,4)	0,029

TRAUMA-INDUCED DEEP VEIN THROMBOSIS

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INTRODUCTION: Venous thromboembolic events (VTE) are potentially preventable causes of morbidity and mortality after injury.Deep venous thromobosis (DVT) affects veins of the lower extremities. After a trauma, the incidence of VTE varies from 7% to 58%, depending on patient demographics, mechanism of injury, diagnoses, and type of VTE prophylaxis used. The primary method of radiological diagnosis of lower extremity DVT is a complete bilateral duplex sonography, which can be augmented by other methods such as evidence-based risk factor analysis. Failure of the physician to recognize a vascular injury can have catastrophic limb or life threatening (pulmonary embolism) implications.

CASE: A 17-year-old male patient presented to the emergency department with motorcycle accident. The past medical and family history of the patient was non-contributory for a history of thrombophilia or other thrombotic major risk factors. Vitals at presentation were temperature 36.3°C, heart rate 70 beats per min, respiratory rate 20 per min, blood pressure 115/68 mm of Hg, and pulse oximetry 98%. A multiview plain film x-ray examination of the right lower extremity demonstrated no fracture, dislocation, or bony mass. There was tenderness in his right lower extremity. There was swelling and diameter difference in the right lower extremity compared to the left lower extremity. Right lower extremity pulse was palpable and there was no sign of critical ischemia. A right lower extremity echo-doppler ultrasound, and D-dimer were ordered to rule out a vascular disorder. A lower extremity venous ultrasound examination was performed and revealed a clot in his right peroneal and posterior tibial veins. The D-dimer result was also positive for a suspected thrombosis. The patient was managed anticoagulation initially by low molecular weight heparin.

CONCLUSION: Here, we presented a case of DVT following trauma. It should be kept in mind that post-traumatic DVT can also be seen in young patients without comorbidities. Providing importance to history and imaging findings can provide a clearer picture of the diagnosis.

KEYWORDS: Deep venous thromobosis, trauma, young patients

KIRIM KONGO KANAMALI ATEŞİ HOLİSTİK TANI: VAKA TAKDİMİ

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ANAHTAR KELİMELER: Ateş; kanama; kene; kırım kongo

GİRİŞ:

12. yüzyılda, bugün Tacikistan'a karşılık gelen bir bölgede, günümüzde Kırım-Kongo kanamalı ateşi (KKKA) olarak kabul edilen hemorajik bir hastalık tanımlandı.

İnsan enfeksiyonu, enfekte hayvanlardan veya insanlardan alınan kan veya doku ile temas yoluyla da oluşur. Ayrıca, hastalığın ileri evrelerindeki hastalardan kanlı kusmuk, vücut sıvıları veya aerosoller yoluyla kişiden kişiye bulaşma gerçekleşebilir [2–3].

Genel olarak, KKKA enfeksiyonu, ateş ve diğer spesifik olmayan 'grip benzeri' semptomlarla birlikte ani bir hastalık başlangıcına yol açar [4]. Ortalama ölüm oranı %30'dur ancak %70'e kadar çıkabilir [5-6]. Hastalığın ciddiyetinin kandaki virüs miktarı ile korelasyon gösterdiği gösterilmiştir (10^9 genoma kadar equivalent/ml kanda) [7-8]. İlginç bir şekilde, KKKA 'dan ölen hastalarda antikor gelişimi genellikle görülmemiştir [9].

En yaygın olarak, KKKA, kan örneklerinde ters transkriptaz-PCR ile teşhis edilir. Virüs izolasyonu, biyogüvenlik seviyesi 4 laboratuvarlarıyla sınırlıdır.

Hastalığın ilerlemesi hızlıdır ve dört farklı aşamaya ayrılabilir: inkübasyon, prehemorajik, hemorajik ve nekahat dönemi [1]. Ölümcül vakalarda, trombosit sayıları, hastalığın erken evrelerinden itibaren bile son derece düşük olabilir. Serumda aspartat ve alanin aminotransferaz düzeylerinde artışlar, protrombin ve kısmi tromboplastin sürelerinde uzama da gözlenmiştir [5].

KKKA tedavisi esas olarak destekleyicidir. Antiviral ilaç olarak ribavirin tercih edilmektedir [10-11].

VAKA SUNUMU:

Özgeçmişinde sadece bilinen Tip 2 DM olan 73 yaş erkek hasta 3 gündür halsizlik, iştahsızlık ve baş dönmesi şikayeti ile sağlık kurumuna başvuruyor. İlk başvurduğu hastanede hastadan alınan kan tahlileri sonucunda hsTroponin-I değerinin yüksek olması nedeniyle akut koroner sendrom ön tansısı ile bir üst merkeze sevki uygun görüldü. Sevk edildiği merkezde hastaya yapılan tetkikler sonrasında acil kardiyak patoloji dışlanarak bisitopeni saptanması üzerine hematolojik değerlendirilme amacıyla hastanemize yönlendirildi. Hasta 112 tarafından acil servisimize getirildiğinde hastanın anamnezi derinleştirildi ve köyde çiftçilikle uğraştığı öğrenildi. Ve tüm tahlileri ve sevk kağıtları ile birlikte değerlendirildi. GKS 15 idi. Dış merkezli sonuçları : vücut ısısı 36,7 ^{0}C, brakial arteriyal tansiyon 120/70 mmHg, nabzı 88/dk olup tetkiklerinde hemoglobin 13,2 g/dL beyaz küresi 2090/µL, nötrofil sayısı 1610/µL, trombosit sayısı 26000/µL iken kreatinin 1,7 mg/dL üre:127 mg/dL, CRP 9,7 mg/Lidi. Karaciğer enzimlerinden ALT (127 U/L), AST (270 U/L), GGT (113 U/L) ve LDH (807 U/L) yüksek saptanırken ALP (93 U/L) normal değerlerdeydi. Kardiyak markerlardan hsTroponin-I (0,116ng/mL) yüksek olarak saptandı. Diğer tetkiklerinde anormal bulgular saptanmadı. Bilinen kene teması olmamasına rağmen mesleği çiftçilik olduğu, hastaneye başvuru mevsimi ilkbahar olması, platelet düşüklüğü, kardiyak marker ve karaciğer fonksiyon testi yüksekliği göz önünde bulundurularak hasta gelir gelmez ön tanıda Kırım Kongo Kanamalı Ateşi düşünüldü ve hasta izole odaya alındı. Enfeksiyon kliniğine konsülte edildi, KKKA ön tanısı ile enfeksiyon kliniğine yatışı uygun görüldü. Hastadan alınan PCR testi KKKA açısından pozitif olarak sonuçlandı.

TARTIŞMA:

Kırım-Kongo Kanamalı Ateşi en yaygın görülen viral kanamalı ateşlerden biridir. Özellikle ilkbahar, yaz aylarında ateş ve kanama şikayeti ile hastanaye başvuran hastalarda ön tanıda akla gelmediği takdirde çok kolay atlanabilecek bir hastalıktır. Bu durum hem hastalığın tanısının koyulması ve tedavi alma sürecini geciktirir hem de sağlıklı kişilere bulaş riskini artırır. Her kardiyak marker yüksekliğinde akut koroner sendrom tanısı koymak gibi hastaları tek bir tetkikle değerlendirmek yerine hastaların meslekleri, aile öyküleri, özgeçmişleri gibi ayrıntılı anamnez bulguları, tüm tahlilleri ve tetkikleri hatta hastaneye başvurduğu mevsimi dahi göz önünde bulundurarak bir bütün olarak değerlendirmemiz gerektiğini düşünüyoruz.

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GİRİŞ

Trombositopeni; trombosit sayısının normal değerlerin (150000-450000/microL) altında olduğu durumu ifade eder. İlaçlar, doğrudan kemik iliği veya diğer organ toksisitesi dahil olmak üzere çeşitli mekanizmalarla trombositopeniye neden olabilir. İlaç kullanımı sonrası itp oluşması sekonder itp sebepleri arasındadır. DITP, trombositopeninin diğer nedenleri ekarte edilerek ve trombositopeninin ilaç kesilmesi üzerine gerilemesi ile görülen klinik bir tanıdır. İlaca tekrar maruz kalındıktan sonra tekrarlayan akut trombositopeni atakları DITP'yi kuvvetle düşündürür. (1) İlaca bağlı trombositopeninin laboratuar testlerle doğrulanması çoğu ajan için mümkün değildir.(2)

VAKA SUNUMU

41 yaş erkek hasta vücutta ve yüzde yaygın döküntü şikayetiyle acil servise başvuruyor. Soygeçmişinde özellik olmayan hastanın kronik bir hastalığı ve bu sebeple ilaç kullanımı öyküsü yok. Hasta dış merkezde 5 gün önce idrar yolu enfeksiyonu tanısı almış ve trimetoprim-sülfamethoksozol tedavisi başlanmış olup tedavinin 3.günü vücutta yaygın peteşiyel döküntüler başlamış. Vitalleri stabil olan hastanın kan basıncı:125/70 mmHg ateş:36,6 nabız:90/dk solunum sayısı:13/dk olarak ölçüldü. Fizik muayenede konjuktivalar hiperemik, ağız ve yanak içinde mukozalarda peteşi ve yüzden başlayarak tüm vücutta yaygın peteşi ve purpuralar mevcuttu. Batın rahat hassasiyet yok, kabızlık, ishal ve kanlı gayta yok. Tetkiklerinde WBC:10580 NEU:5162 HG:13.2 PLT:11500 CRP:28 URE:18 KRE:0.75 TIT: ERITROSIT 6 olarak ölçüldü. Periferik Yayma: trombosit sayısı hemogram ile uyumlu,şistosit veblast, atipik hücre yok şeklinde raporlandı. Hasta Stevens Jhonson sendromu? Vaskülit? İlaca bağlı trombositopeni? Ön tanılarıyla dermatoloji ve iç hastalıkları kliniğine konsülte edildi. İç hastalıkları tarafından ilaca sekonder İTP olarak düşünüldü. Tedavi olarak 80 mg prednol ve 1 ünite trombosit süspansiyonu önerildi. Kontrol hemogramda WBC.6940 NEU:4503 HG:11.9 PLT:53900 çıkması üzerine hasta hematoloji polikliniğe yönlendirilerek acil servisten taburcu edildi.

TARTIŞMA

Günlük olarak alınan yeni bir ilacın başlaması ile, ilaç ilişkili trombositopeni kliniği oluşması arası genellikle iki haftadan azdır.(3) Çoğu ilaç, günlük uygulama veya önceden maruz kalma ile duyarlılık oluşturur. Bununla birlikte, bazı ilaçlar, önceden duyarlılaşma olmadan ilk maruziyette trombositopeniye neden olabilir.(4) Klinik olarak önemli kanama veya trombosit sayısı <10,000 /microL olan hastalara trombosit transfüzyonu yapılmalıdır (2). IVIG ayrıca trombosit transfüzyonu kanamayı durdurmada etkisiz ise uygulanabilir. (5) Kanama riski ilaç ilişkili immüntrombositopeni de primer ITP'den daha fazladır(6)

SONUÇ

Acil servise döküntü ile başvuran hastalarda nadir bir klinik sebep de İlaç ilişkili immüntrombositopenidir. Nadir görülen bu klinik tablo da anamnez dikkatlice sorgulanmalı ve ilaç alımı sonrasında döküntülerin başlaması bizi şüphelendirmelidir.

ANAHTAR KELİMELER

Trombositopeni, trimetoprim-sulfametoksazol, immün trombositopenik purpura, acil servis

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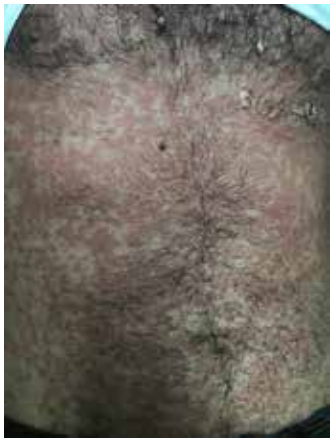

ISOLATED MEDIAL SUBTALAR DISLOCATION

Fatih Mutlu, Çağrı Türkücü, Ekrem Taha Sert, Kamil Kokulu

INTRODUCTION: Subtalar dislocation is defined as a separation of the talocalcaneal and talonavicular articulations, commonly caused by high-energy mechanisms, which include falls from height, motor vehicle crashes, and twisting leg injuries. The dislocations are divided into medial, lateral, anterior, and posterior types on the basis of the direction in which the distal part of the foot has shifted in relation to the talus. However, isolated medial sub-dislocations are very rare considering the fracture- dislocations.

CASE: A 77-year-old male was admitted to the emergency room with the complaints of deformity, limitation of movement and pain in the left foot after a fall from a height. The patient was unable to stand or walk with the injured foot. His past medical history was unremarkable. There was no history of ankle sprains or ligament laxity. Clinical examination detected a deformation of his left foot: the left foot medially displaced, the talar-head was prominent dorsolaterally, and the skin stretched over the protrusion of talus without any wound. Swelling and bruising were present. Peripheral vascular circulation was normal. No motor or sensory deficit was detected. The radiographic examination revealed an isolated medial subtalar dislocation in the left ankle without accompanying fracture. After an emergency surveillance, 3 mg intravenous midazolam was used to induce conscious sedation. The left knee joint was fixed at a flexion of 90° and reduction was performed through calcaneal traction by exerting force in the opposite direction to the medial dislocation. The physical examination undertaken after this procedure showed that the joint was stable and there was no neurovascular pathology

CONCLUSION: Medial subtalar dislocations are injuries that can be easily diagnosed using radiography. In these cases, it is possible to achieve excellent or near-perfect outcomes by performing immediate and careful reduction without causing osteochondral damage followed by an appropriate duration of immobilization.

KEYWORDS: Isolated subtalar dıslocatıon, radiography, deformation

GIANT HEMATOMA AFTER PARACENTESIS

INTRODUCTION

Paracentesis is the process of taking fluid from the peritoneal cavity with a needle under sterile conditions.There is a 1% risk of complications.Complications are local infection,abdominal wall hematomas,intraperitoneal bleeding and intestinal perforation[1].Abdominal wall hematoma is very rare and accounts for less than 1% of complications[2,3].

CASE PRESENTATION

A 65-year-old male using coumadin, with a histories of cirrhosis of the liver,ht,cabg,mvr,dvt,entered the emergency department with complaining of pain and swelling on the right side of his abdomen.It was learned that paracentesis was performed by gastroenterology 3 days before.His general condition was good,and he was conscious.Except for diffuse tenderness and distension in the abdomen,examination findings and vital parameters were normal.Laboratory findings Hb: 8.4 g/dL,PLT:154,000 cells/ml,INR:4.71,and abdominal USG showed diffuse intramuscular hematoma in the right rectus abdominis.In contrast-enhanced abdominal CT,the dimensions of the hematoma measured 33x23x20 cm,no intra-abdominal bleeding was detected.

The patient was admitted to gastroenterology department.1 amp Kvit and 1 unit ERT replacement was given.Upon the opening of the hematoma to the skin during the patient's hospitalization on the 2nd day,1000cc hematoma was drained by general surgery.As the hematoma persisted,the bleeding orifice was sutured to prevent futher blood loss.On day 3, 3000cc hematoma was drained by interventional radiology.Antibiotherapy was started for the patient whose infective markers increased during follow-up.Since the patient's INR was high and thrombocytopenia developed,1amp Kvit,2 units of pooled thrombocyte and 2 units of FFP were applied.While the drainage was continuing,on the 4th day,the skin was again fistulized,and surgical drainage was performed again.Septic shock and MODS developed in the patient who was admitted to the intensive care unit after these procedures and developed sepsis on the 9th day of his hospitalization.Despite supportive treatments,the patient's general condition deteriorated and he died on the 11th day of his hospitalization.

DISCUSION

Abdominal paracentesis is a frequently used diagnosis and treatment method in the emergency department.Both impaired coagulation system and collateral vessels in the abdominal wall are factors that increase the risk of bleeding in cirrhosis patients with massive ascites.As in our patient, the presence of additional anticoagulant drugs increases this risk even more.It has been reported that hemorrhagic complications regressed up to 68% in paracentesis performed with USG [4].In addition,patients at risk should be hospitalized for close observation for at least 24 hours after paracentesis and monitored for life-threatening hemorrhagic complications [5, 6].

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NADİR BİR ANAFİLAKSİ NEDENİ: KOKOREÇ

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GİRİŞ

Anafilaksi ani gelişen, mortalite ve morbiditesi yüksek, IgE'nin aracılık ettiği tip 1 hipersensitivite reaksiyonudur. Anafilaksi en sık immünolojik olarak duyarlı bireylerin alerjenlere maruz kalmasıyla tetiklenir. Genellikle[u1] cilt, solunum sistemi, gastrointestinal sistem, kardiyovasküler ve santral sinir sistemi dahil olmak üzere bir dizi organ ve sistemi etkileyen klinikle gelebilir. En sık etkenler yiyecekler, böcek ısırıkları, ilaçlar, doğal kauçuk lateks ve radyokontrast madde olmakla beraber bazı hastalarda anafilaksiye yol açan etken belirlenemez. Biz de bu olgumuz ile kültürümüze özgü bir gıda maddesi olan kokoreç ile gelişen bir anaflaktik şok vakasını sunmayı amaçlıyoruz.

VAKA

Altmış dört[u2] yaşında erkek hasta 30 dakika önce, kokoreç yedikten sonra başlayan baş dönmesi, bulantı-kusma, vücutta kızarıklık ve kaşıntı şikâyeti ile acil servise başvurdu. Fizik muayenesinde; genel durumu kötü, terli, takipneik görünümde, Glaskow Koma Skoru (GKS) [u3]15 idi, ateş 36.7 C, nabız 98/dk, kan basıncı 74/46mmHg, solunum sayısı 26/dk ve parmak ucu oksijen satürasyonu 90'dı. Solunum muayenesinde; bilateral ronküs duyuldu ve vücutta yaygın, kaşıntılı, kızarık, deriden kabarık, basmakla solan cilt lezyonları görüldü. Özgeçmişinde DM, HT, BPH ve 1 ay önce geçici iskemik atak öyküsü mevcuttu. Mevcut kliniği ve anamnezi ile hasta kokoreç yemeye bağlı anaflaktik şok kabul edildi ve adrenalin 0,5 mg IM uygulandı[u4]. Bu tedavi ile eş zamanlı, damar yolu açıldı, nazal kanül ile oksijen desteği sağlandı ve sıvı resüsitasyonu başlandı. Hastanın hipotansiyonu ve bronkospazmının devam etmesi sebebi ile 2 kez daha IM adrenalin tekrarlandı. Tedavinin takibinde yeterli tansiyon oluşturamayan hastaya IV adrenalin 1 µg/dakika dozunda başlandı. Antihistaminik ve kortikostreroidler tamamlayıcı olarak tedavisine eklendi. Hasta takip ve tedavi amaçlı Acil Kritik Yoğun Bakım ünitesine yatırıldı. 2 gün yatışının ardından steroid ve adrenalin ihtiyacının gerilemesi üzerine alerji poliklinik kontrolü önerisiyle taburcu edildi.

TARTIŞMA

Anafilaksinin yetişkindeki bilinen en sık sebebi besinler olmakla beraber, kokoreç gibi sakatat tüketimi sonrası, anafilaksi geliştiğine dair literatürde bildirilen vaka sayısı oldukça azdır. Bununla beraber gıda kaynaklı anafilaksisi olan bir hastada, baharatlara karşı alerjik reaksiyonlar düşünülmelidir. Gıda kaynaklı anafilaktik reaksiyonun nedenini belirlemek için tüm şüpheli bileşenler dikkate alınmalıdır. Piyasada bulunmayan ekstraktlar için taze gıda ekstraktlarının hazırlanması, anafilaktik reaksiyonun nedenini belirlemede yardımcı olabilir.

SONUÇ

Anafilaktik şok ve anafilaksi acil serviste dikkat edilmesi en mortal durumlardan biridir. Kokoreç ve veya içeriğindeki baharatlar ise bunun nadir bir sebebi olabilir.

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GERİATRİ HASTA VE ACİL SERVİS HEMŞİRELİĞİ

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Dünyamız yaşlanırken beraberinde yaşlanan bir insan topluluğunu da beraberinde getirdi. Günümüz dünyasında teknolojik ve bilimsel ilerlemeler ortalama hayatta kalma süresinin artmasını sağladı. Özellikle gelişmiş ülkelerde ortalama hayat süresinin artması ile Dünya Sağlık Örgütü (WHO) yaşlılık yaş dağılımını 65-75 yaş arası; erken yaşlılık evresi, 75-85 yaş arası; orta yaşlılık evresi, 85 yaş ve ötesi; ileri yaşlılık evresi olarak tekrar sınıflandırdı. WHO'nün 2011 yılı verilerine göre dünyada palyatif bakım ihtiyacı olan insan sayısı 19 milyon ve %60'ını 60 yaş ve üzeri hastalardan oluşmaktadır (1). 2050 yılı itibari ile 2 milyar yaşlı insanın olacağı tahmin edilmektedir ve tıp alanındaki gelişmeler göz önüne alındığında sağlık hizmeti talebi artacağı kesindir. Acil servise başvuran hastaların ülkemizde %9-23'ünü, dünyada ise %12-24'ünü yaşlı nüfus oluşturmaktadır ve kronik hastalıkları ve ileri yaş nedeniyle tetkik ve tedavi sürelerinin fazlalığı, kalabalık acil servisler, yatış taleplerinin fazlalığı ve palyatif tedavi ihtiyaçları ile sağlık hizmetlerinin hızlı ve etkili bir şekilde yönetilmesini gerektirir (2,3). Dolayısıyla gerek acil sağlık hizmetlerinde ve gerekse yataklı sağlık hizmetlerinde kapsamlı planlamalar yapılırken geriatrik hasta hizmetleri için geriatri sorunlarını daha iyi yönetmek, bilgi ve farkındalığı arttırmak için eğitim yoluyla Geriatri Acil Yönetimi Modeli acil hemşiresinin bu konudaki yeterliliğini geliştirilebilir. Yaşlılarla ilgili olarak öne sürülen üç farklı model bulunmaktadır. Bunlar; Tıbbi Model, Bireysel Model, Sosyal Model bakım modelidir. Her ne kadar bu üç farklı modelin kendine göre bir değeri ve geçerliği olsa da, günümüzde daha çok ön plana çıkan bireysel modeldir. Bu modelde bireye veya yaşlıya özel fonksiyonel bir skala geliştirilmiştir (4).

Bu modeller kullanılarak yaşlı insanların ihtiyaçlarını göz önünde tutan bakım hizmetleri eğitimleri vurgulanmalıdır. Yaşlı insanlara bakım sağlama gereksinimlerini ön planda tutan çalışmalar yapılmalıdır.

Yaşlılar sağlık sorunlarının fazla olması nedeni ile sağlık hizmetlerine ve kendilerine özel bakım modellerine diğer yaş gruplarına göre daha fazla gereksinim duymaktadırlar. Acil ünitesinde bakıma muhtaç yaşlının sorunlarını, eksikliklerini ve dolayısı ile gereksinimlerini belirlemek, kişiye uygun temel bakım hizmeti sunmak için yaşlı bakım modelleri gereklidir. Bu nedenle hemşirelerin konu hakkında güncel ve pratik bilgilere sahip olmaları, yaşlı bireyin gereksinimlerini belirleyerek en uygun modeli seçmeleri ve uygulamaları önemlidir. Hemşirelerin yaşlı bireylerin yaşamlarının en iyi kalitede devam ettirilmesini sağlamak amacıyla bakım hizmeti sunma ve uzun süreli bakım için yeni bir vizyon tasarlamaları gerekmektedir.

Sonuç olarak; Yaşlı bakım modellerinin kullanımı ile hemşirelik bakımının standart bir biçimde sunulmasına olanak sağlanarak yaşlılarımızın hakkettikleri hizmet uygun bir şekilde verilebilir. Sistematik ve standart bir yaklaşım kalabalıklaşan acil servislerin iş akışını da kolaylaştıracağı kanaatindeyiz.

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ÜST EKSTREMİTEDE DERİN VEN TROMBOZU

GİRİŞ: Derin ven trombozu (DVT), damar yapısındaki değişiklikler, koagulasyon değişiklikleri, mobilitede azalma gibi nedenlerle en sık uyluk derin venlerinde görülür. Nadiren de olsa üst ekstremite derin venlerinde de görülebilir. Hastada ağrı, ateş, trombozun olduğu bölgede şişlik, ısı artışı gibi semptomlar olabilir. Tedaviyle önlenebilir bir hastalık olmasına rağmen eğer geç kalınırsa çeşitli organlarda enfarktlara sebep olabilir.

VAKA: 55 yaş erkek hasta tarafımıza sol kolda şişlik ve ağrı şikayetleri ile başvurdu. Fizik muayenesinde TA: 136/78 sat:%:96 Nb:82/ dk A:36.8°C açlık kan kan şekeri:146 olarak ölçüldü. Hastanın bilinen diyabetes mellitus, kronik böbrek hastalığı ve buna bağlı diyaliz öyküsü mevcut. Hasta haftada 3 kez hemodiyalize giriyor. Sol kol humerus medial yüz orta hat civarında kapatılan fistül nedeniyle, sol kolda şişlik ve ağrı şikayetleri başlamış. Hasta düşük molekül ağırlıklı heparin kulanmış, 3 gün önce tedavisi bitmiş. Şikayetleri artan hasta tarafımıza başvurdu. Hastanın yapılan muayenesinde sol kolda şişlik, ısı artışı, el ekstansiyondaiken şiddetli ağrısı mevcuttu (Resim1: üst ekstremite derin ven trombozu). Hastanın derin ven trombozu açısından yapılan venöz doppler ultrason raporu ''Sol basilic ven lümeninde antekubital düzeyde ekojen materyal izlenmiş olup kompresyona yanıt alınamadı ve RDG de akım kodlanmadı (Trombüs?). Sağ kolda fistül boyunca RDG de akım kodlandı. Sol kolda lenf ödem izlendi.'' Şeklinde raporlandı. Hastayı gerekli tedavi planı için kalp damar cerrahi kliniğine konsülte edildi. Kalp damar cerrahisi kliniğince değerlendirilen hastanın servise yatışı yapıldı.

SONUÇ: Üst ekstremite DVT, nadiren görülüyor olsa da hastada uygun risk faktörleri ve klinik şüphe olduğunda hasta DVT açısından değerlendirilmelidir. Hastada fistül sebebiyle başlayan kan akımı değişiklikleri, damar yapı bozuklukları, koagülasyon değişiklikleri, basınç değişiklikleri gibi durumlar sebebiyle daha az görülmesine rağmen üst ekstremitede DVT oluşmuştur. Hastanın antikoagülan tedaviye yanıt vermememi ve semptomların artışı sebebiyle kalp damar cerrahi yatış yaparak girişimsel işlemler açısından bir tedavi planı oluşturulmuştur. Şikayetler ve fizik muayene selülit ile uyumlu görünse de acil servisimizde acil patolojiler dışlanmadan hasta değerlendirilmemelidir. Ayırıcı tanılar unutulmamalı ve tromboz için dikkatli olunmalıdır.

ANAHTAR KELİMELER: derin ven trombozu, fistül trombozu, üst ekstremite

(Resim1: üst ekstremite derin ven trombozu)

İNTRAKRANİAL APSE

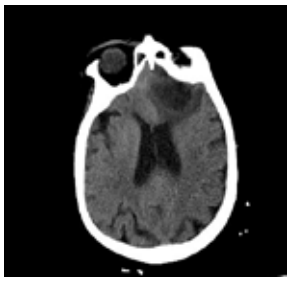
ÖZET: İntrakranial apse , az rastlanan klinik bir durumdur. Bu çalışmanın amacı acil servise başvuran 76 yaşındaki intrakranial apse tanısı konan hastayı irdelemektir.

ANAHTAR KELİMELER: Acil servis, beyin apsesi, baş ağrısı

GİRİŞ: Beyin apsesi, beyin parankiminin fokal piyojenik bir enfeksiyonudur ve en sık fronto- temporal yerleşimli görülmektedir (1). Etiyolojisinde komşuluğunda enfeksiyon odağı bulunması, hematojen yayılım ve travma sonucu direkt inokülasyon yer alır. İntrakranial apse; kafa travması, beyin operasyonları, menenjit ve otojenik, mastoid ve paranazal sinüs enfeksiyonlarının korkulan komplikasyonlarındandır (2). Hastanın kliniği genellikle nonspesifiktir; başağrısı, ateş, ense sertliği, güç kaybı, görme bozukluğu, nöbet, kranial sinir tutulumuna bağlı bulgular, ataksi ve nistagmus izlenebilir. Öncelikli tedavi apse drenajıdır; hedefe yönelik aspirasyon veya kraniyotomi ile yapılabilir. Başlangıç tedavisi olarak geniş spektrumlu intravenöz antibiyotikler kullanılır daha sonra spesifik ajanlarla değiştirilebilir(3). Tanı yöntemleri ve tedavideki ilerlemelere rağmen, beyin apsesi yüksek mortalite nedeniyle ciddi sorun oluşturmaktadır(4).

OLGU: Bilinen diyabet, hipertansiyon ve tıkayıcı beyin damar hastalığı olan, 76 yaşında kadın hasta iki gündür olan halsizlik, baş ağrısı, sağ göz kapağında şişlik, yaklaşık bir aydır sol gözde görme kaybı şikayetiyle başvurdu. Vital bulgularında ateş 36.4 □C, kan basıncı 100/60 mmHg, nabız 95 atım/dk, spo2 %94, kan şekeri 450 mg/dL olarak ölçüldü. Genel durum orta-iyi, şuur açık, Glaskow Koma Skoru(GKS) 15, sol gözde direkt ışık refleksi alınamadı, sağ üst göz kapağı ödemli ve hiperemik, kas gücü tam olarak değerlendirildi. Ense sertliği, fasiyal asimetri, bakış parezisi yoktu. Diğer sistem muayenelerinde patolojik bulgu saptanmadı. Laboratuar değerlerinde lökosit 25500/ml, nötrofil 16680/ml, CRP 100 mg/l, glukoz: 458 mg/dl olarak saptandı. Geçirilmiş cerrahi operasyon ve travma öyküsü bulunmamaktaydı. Semptomatik tedavi ile şikayetleri gerilemeyen hastanın çekilen bilgisayarlı beyin tomografisinde(BBT) sol frontalde orbitanın posteromedialinde kitle saptandı. Beyin cerrahisi konsültasyonu istenen hastaya kontrastlı kranial manyetik rezonans görüntüleme yapılıp intrakranial apse tanısı konularak operasyona alındı, post op 2. günde intrakranial hematom gelişmesi nedeniyle tekrar opere edilen hasta, 10. günde ex oldu.

TARTIŞMA-SONUÇ: Beyin apseleri nadir görülen ancak potansiyel olarak yaşamı tehdit eden, acil teşhis ve tedavi gerektiren bir durumdur. Tanı ve tedavide gecikme olması, prognozu kötüleştirmektedir. Tedavi ile semptomları gerilemeyen hastalarda zaman kaybetmeden ileri tetkik yapılmalı ve tedavi başlanmalıdır. Bu hastalarda altta yatan geçirilmiş travma ve cerrahi öyküsü, immünsupresyon varlığı sorgulanmalıdır. Geçmeyen başağrısı ve nörolojik semptomları olan, risk faktörleri bulunan hastaların ayrırıcı tanısında beyin apsesi de mutlaka akılda tutulmalıdır.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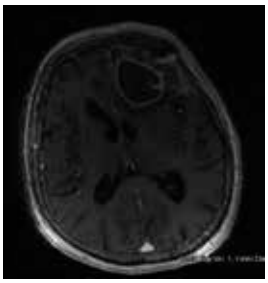
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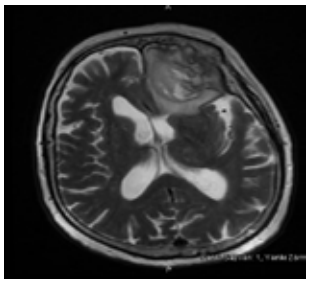

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TRAVMALI HASTAYA HEMŞİRELİK YAKLAŞIMLARI VE AĞRI YÖNETİMİ

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Biyofizyolojik, psikososyal, sosyokültürel değişkenlerin etkilediği ve bireyin günlük yaşam aktivitelerine engel olarak yaşam kalitesini bozan hatta insan hayatını tehdit edebilen bir durumdur (1). Bu nedenle travma hastalarında ağrı kontrolü çok önem kazanmaktadır. Bu bildiride travmalı hastaların ağrı yönetimi ve hemşirelik yaklaşımlarının ele alınması amaçlandı. Travma sonucu organizmada ağrı algısının oluşumu dört aşamada gerçekleşir; ilk aşama transdüksiyondur. Transdüksiyon; duyusal sinir uçlarındaki zararlı uyaranların elektriksel aktiviteye dönüşmesidir (2,3). İkinci aşama olan transmisyon aşama ise ilgili yapılardaki kodlanmış bilginin daha üst merkezlere iletilmesidir. Üçüncü aşama modülasyondur ve spinal kord seviyesindeki ağrılı uyaranların, modifikasyona uğradığı aşamadır. Son aşama olan persepsiyon ise merkezi sinir sistemine iletilen uyaranın ağrı olarak algılanmasıdır (1-2). Travmalı hastada ağrı genellikle iç organların ciltte yansıma bölgelerinin göz ile ve dokunma ile muayene edilerek tanı koyulabilecek ya da bedensel nosiseptif ağrılardır. Travma hastasının ağrı kontrolünde en önemli nokta ağrının doğru değerlendirilmesi, doğru zamanda tespit edip müdahale edilmesidir. Hastanın ağrısını dile getirebilecek durumda olmadığı durumlarda (bilincinin kapalı olması, alkollü olması, uyuşturucu madde almış olması) durumlarda sağlık personeli travmalı hastanın ağrısını değerlendirmekte güçlük çekmektedir (4). Bu tür hastalarda travmanın etkisiyle anksiyete ve ajitasyon gelişebilir ve hastanın ağrıyı algılamada bozulmalar görülebilir. Bu zorluk karşısında hemşirenin iletişim ve mesleki bilgisi önemli rol oynamaktadır. Hemşirenin, ağrının tanımlanması, değerlendirilmesi, izlenmesi, hekim orderinde yer alan analjeziklerin uygulanması, verilen ilaçların hastada göstereceği etkilerin izlenmesi, gelişebilecek komplikasyonların giderilmesi, nonfarmakolojik tedavi yöntemlerinin uygulanması gibi ağrı kontrolüne ilişkin görevleri bulunmaktadır (5). Ağrının giderilmesi Kuzey Amerika Hemşirelik Tanıları Birliği (NANDA; North American Nursing Diagnosis Association) hemşirelik hedefleri arasında da yer almaktadır (6). Sonuç olarak, Hipokrat "ağrıyı dindirmek ilahi bir sanattır" sözüyle ağrı tedavisinin ne kadar önemli olduğunu vurgulamıştır. Bu bağlamda travmalı hastalarda ağrı ile baş etmede hemşirelere büyük görev düşmektedir. Hasta memnuniyetinin yükseltilmesinin tedaviyi olumlu yönde etkileyeceği, hasta-hemşire iletişimini geliştireceğini ve hemşirelerin de verimliliğini artıracağı kanısındayız.

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EVALUATION OF PATIENTS WITH SPONTANEOUS MEDIASTINUM AND RELATIONSHIP WITH METEOROLOGICAL PARAMETERS

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ABSTRACT

PURPOSE:

It was purposed being searched of the of the demographic data of the patients diagnosed with the spontaneous pneumomediastinum (SPM) in the emergency department, and the relationship between the SPM development and meteorological parameters

MATERIAL AND METHODS:

In our study planned as a monocenter retrospective, the data of 31 patients diagnosed with the SPM in the emergency department in totally 2976 days between the dates 2010 and 2017 and the relationship of those patients with the meteorological parameters. Totally 4 groups of data were analysed as a separate group of the days on which the SPM diagnosis was made (D), one day before it (D-1), 2 days before it (D-2) and the days apart from these days.

RESULTS:

The average age of 31 patients diagnosed with the SPM in the emergency department were 48.35±20.80/year. 23 (74%) of the patients were male and 8 (26%) of them were female. It was determined that the SPM development was too much in significant rate in males and the most accompanying disease was chronic obstructive pulmonary disease. It was determined that not any significant differentness in comparison of the meteorological parameters consisting of the data including the daily average pressure (hPa), daily average relative humidity (%), daily maximum wind speed (m/s) and daily average temperature (°C) belonging to day on which the SPM diagnosis was made, one day before it and 2 days before it, and the other days' data.

CONCLUSION:

It was determined that not any relationship between the daily temperature, wind speed, atmospheric pressure and relative humidity rate and SPM diagnosis.

KEY WORDS:

Spontaneous Pneumomediastinum, Temperature, Wind, Atmospheric Pressure, Humidity

INTRODUCTION

The spontaneous pneumomediastinum (SPM) was defined as reaching of the free air as a result of the rupture in the lung's terminal alveoli depending on increased intraalveolar pressure from the peribronchovascular tissue being looser to the mediastinum depending on increased pressure in the parenchyma [1]. Although the free air source is often alveolar rupture; it might be also tracheobronchial system, esophagus and pharynx sourced. Entering of the air into the bronchovascular area as a result of the alveolar rupture firstlycauses to be emphysema in the pulmonary interstisyel area, and it might be also cause to increase of the average mediastinum pressure, reach of the air to the retroperitoneum, anterior mediastinum, subcutaneous tissures and base of the neck having more negative pressure, and rupture in the mediastinal wall and pneumothorax rarely depending on it [1, 2]. The asthma might occur with the predisposing factors such as Chronic Obstructive Pulmonary Disease (COPD), interstitial diseases, tobacco use, and continuous use of the legal or illegal inhaler drugs, and the events and conditions such as vomiting, coughing, upper respiratory tract infection, constipation, physical exercise, respiratory distress syndrome and balloon inflation, use of the wind musical instrument and convulsion rarely in the SPM development [3, 4]. Even though the subcutaneous emphysema, tachycardia and tachypnea were determined in the physical examination; it might be completely normal. The PA-AC X-Ray and Thorax CT are used in the diagnosis. The treatment is symptomatic, and a tube is attached to the thoracostomy treatment when the pneumothorax coexists [3, 5, 6].

The relationship between the meteorological parameters and diseases has been attracted researchers' attention, and there are publications researching the effect of the meteorological parameters in development and exacerbation of many diseases. Although there are publications on the relationship between the diseases such as asthma, COPD and pneumothorax being the risk factors for the SPM and meteorological parameters; not any study on the effect of the meteorological parameters in the SPM development was found in the literature [10, 12].

In our study, it was purposed analysis of the SPM patients applied to the emergency department and research of the effect of the daily temperature, wind speed, atmospheric pressure and relative humidity rate.

MATERIAL AND METHODS

The monocenter study planned as a retrospective case control was started after the local ethics committee approval was received . The patients applied to the emergency department between January 2010 and December 2017 were investigate via the electronic record system and the files of 31 patients diagnosed with the SPM were researched and their data was evaluated. The patients diagnosed with the secondary pneumomediastinum (traumatic, interventional operation or postoperative, infections) were excluded from the study. The patients' demographic data and laboratory results were recorded on the standard data form prepared. The meteorological parameters including the daily average actual pressure (AP) (hPa), daily average relative humidity (RH) (%), daily maximum wind speed (WS) (m/s) and daily average temperature (H) (°C) values for the dates covering the study term were obtained from 13th Regional Directorate of the Ministry of Forestry and Water Affairs. Totally 4 groups of data were analysed as a separate group of the days on which the SPM diagnosis was made (D), one day before it (D-1), 2 days before it (D-2) and the days apart from these days.

STATISTICAL ANALYSIS

The data's statistical analyses were performed by using the SPSS 21.0 (IBM Corporation, Armonk, NY, USA) packaged software. The continuous variables' distribution was determined with Kolmogorov-Smimov normality test in the data analysis. The numeric data was stated as an average ± standard deviation, nonparametric or non-normally distributed numeric data expressed as the Median (minimum-maximum), and the qualitative data was stated as a percentage. Kruskal Wallis Test was used in comparison of the nonparametric or non-normally distributed continuous variables, and Man-Withney-U Test was used in comparison of the dual groups. The Student-T Test was used in comparison of the dual groups of the periodical variables fit for the normal distribution. Fisher's Exact Test was used in comparison of the nominal data. The values, $p<0.05$, were statistically accepted significant.

RESULTS

31 patients diagnosed with the SPM in the emergency department were included in the study. The average age was 48.35±20.80 and 23 of them (74%) was male. The patients' most frequent application complaint to the emergency department was shortness of breath, and 61% of them was smoker. 18% of the patients had additional disease, and the COPD was coexisted at the rate of 22.6% at most. The patients' demographic and laboratory data were demonstrated in Table 1.

It was determined that 35.5% of the patients applied to the emergency department in the season of autumn (n=11), 32.3% of them in spring (n=10), 19.3% of them in summer (n=6) and 12.9% of them in winter. Moreover, it was also determined that 19.3% of the patients applied to the emergency department in October (n=6) and 16.1% of them in April, and there was not any patient application in July (Figure 1).

It was determined that there was not a significant difference in comparison of the day on which the SPM diagnosis was made, 1 day before it and 2 days before it and other days, and the daily average actual pressure (hPa), daily average relative humidity (%), daily maximum wind speed (m/s) and daily average temperature (°C) data (Table 2). It was also determined that there not a significant difference statistically in the groups' dual comparison (Table 3).

It was determined that the SPM diagnosis was made for 26% of the patients (n=8) with the lung X-Ray and 74% of them (n=23) with the computerized thorax tomography, and Hamman's sign accepted as a pathognomonic for the pneumomediastinum was in existence in 8 patients (26%). The duration of the hospitalization was 5.61±5.57/day on the average. It was determined that there was not any complaint of the patients discharged with the complete recovery in their post-discharge controls.

DISCUSSION

The relationship of many medical or surgical diseases with the meteorological parameters had been frequently research object, and the results different from each other were generally obtained for the same disease. But, not any study on the effect of the meteorological parameters in the SPM development had been found in the literature.

It has been known that the mortality increases in the respiratory diseases in the cold weather for many years [12]. The COPD exacerbation had been also determined to increase in the cold weathers [13]. Moreover, it had been shown that the acute asthma exacerbations increased in the low temperature, but the asthma prevalence increased in the high temperatures [11, 14]. The different results related to the effect of the humidity rate in the asthma and COPD exacerbation had been obtained. Tseng et al [13] had determined that the COPD exacerbation increased in the low humidity rates. But, Ferrari et al had determined that the humidity rate in the north and south regions of Germany affected differently, and there was not a significant effectiveness in the south while the humidity rate affected significantly in the north [15]. Mu et al [16] had reached to a different result, and they had stated that the high humidity together with the low

temperature contributed to the COPD disease exacerbation by affecting synergistically. But, Hales et al [11] had determined a relationship between the asthma prevalence and humidity rates in the study performed by them. It had been propounded that the indoor and outdoor humidity rates shall be able to differ as one of the reasons being different of the humidity rate's effect to the COPD exacerbation. It has been thought that the high humidity rate caused the asthma and COPD diseases' exacerbation depending on the allergens found too much in the air [16, 17].

It had been notified that the atmospheric air pressure change was effective in the COPD exacerbation and showed a positive correlation in the study, in which the effects of the air pressure change were researched on the COPD exacerbation [15]. In our study, we determined that there was not a significant difference in the air temperature, humidity rate and atmospheric pressure changes on the day on which the SPM developed, and one and two days before it. We think that the asthma and COPD exacerbations shall be able to be triggered with increasing of the allergen content such as mold and pollutan, decreased oxygen content or respiratory tract infections upon changing of the air temperature and humidity rates, but those factors shall not be able to be sufficient in the SPM development singly.

There are also differences for the meteorological values' effect in occurrence of the Spontaneous Pneumothorax (SP) of which coexistence with the SPM is frequently shown. Bense [10] had stated that the spontaneous pneumothorax was connected with the low atmospheric pressure. Obuchi et al [18] had determined that the SP disease was less on the day on which the sunlight was seen, and according to the other days, the average temperature and maximum temperature were too much two days before on the day on which the disease occurred. They had stated that there was not a change in the atmospheric pressure and humidity rates. Smit et al [19] had stated that there was not a relationship between the atmospheric pressure and SP development. Although the intrathoracic pressure is defined as an important parameter in the SPM development, we determined in our study that the average daily air pressure changes did not have an effect on the SPM development. We think as a reason of this situation that the atmospheric pressure shows different changes during the times of a day because of the circadian rhythm, but the sudden and rapid pressure changes (such as coughing, exercise, vomiting, birth etc.) are especially effective in the SPM.

CONCLUSION

The results related to the effect of the seasonal and meteorological parameters in the progress of diseases differ. It is thought that those differences are generally resulted from the multifactorial reasons such as climate, geographical location, diversity of the factors triggering the diseases and genetic predisposition. We determined that the daily average air temperature, wind speed, humidity and atmospheric pressure were not effective in the SPM development, even though they are differently effective in the asthma, COPD and spontaneous pneumothorax development, which are affined with the spontaneous pneumomediastinum.

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Table 1: The demographic distribution and laboratory results of the patients

	Gender		P value
	Female	Male	
N (%)	8(26)	23(74)	0.011
Age (Mean±SD)	51,625±16,8941	47,217±22,2342	0.740
Chest pain n (%)*	3 (35.7)	14 (60.9)	0.412
Shortness of breath n (%)*	6 (75)	16 (69.6)	0.576
Coughing n (%)*	3 (37.5)	6 (26.1)	0.660
Additional disease ** n(%)*	4 (50)	14(60.9)	0.689
Cigarette n(%)*	4 (50)	15 (65.2)	0.676

ALT Median (min-max)	15 (11-45)	17 (3-47)	0.877
AST Median (min-max)	21 (10-85)	23 (14-64)	0.580
HBG Median (min-max)	13.55 (9.81-14.3)	14.7 (9.6-16.4)	0.048
HCT Median (min-max)	40.4 (27.6-42.6)	44.3 (35.4-52.9)	0.026
WBC Median (min-max)	9.02 (5.77-19.42)	8.97 (4.15-21.15)	0.877
* n(%) : % values of the same-gender patients ** Chronic obstructive pulmonary disease 7 (%22,6), asthma 5 (%16.1), ischemic heart disease 3 (%9.6), Diabetes mellitus 2 (%6.4), Malignancy 1 (%3.2)			

Table 2: The meteorological parameters on the day on which the SPM diagnosis was made, one day before it and 2 days before it and the other days

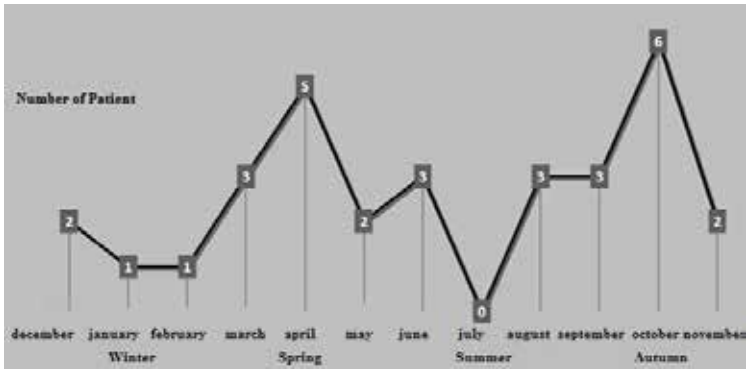
Meteorological parameters Median (Min-Max)	2 days before (D-2)	1 day before (D-1)	SPM day (D)	Other days (OD)	X^2 *	P value *
AP (hpa)	902.9 (898.1- 914.4)	902.8 (896.6-912.6)	902.2 (896.1-906.6)	901.7 (885.5-926.9)	2.036	0.565
RH (%)	45.5 (15.5-93.6)	47.3 (16.8-88.7)	42.8 (16.2-92.9)	51.5 (11.9-100.0)	3.424	0.331
WS (m/sn)	7.9 (3.2-15.0)	7.9 (3.0-16.3)	8.8 (4.3-16.5)	8.2 (1.8-26.3)	1.731	0.630
H (°C)	14.6 (-0.4 -30.4)	15.1 (0.0-31.1)	17.5 (0.5-32.0)	13.9 (-9.7-34.3)	1.929	0.587
*P value: Kruskal Wallis Test AP: Daily average actual pressure (hpa), H: Daily average temperature (°C), RH: Daily average relative humidity (%), WS: Daily maximum wind speed(m/s)						

Table 3: Comparing the meteorological parameters on the day on which the SPM diagnosis was made, one day before it and 2 days before it and the other days

		AP	RH	WS	H
SPM day	Other days	0.889	0.131	0.261	0.327
	1 day before	0.526	0.536	0.602	0.894
	2 days before	0.383	0.504	0.151	0.725
1 day before	Other days	0.550	0.441	0.723	0.441
	2 days before	0.704	0.972	0.508	0.944
2 days before	Other days	0.196	0.437	0.571	0.520
*P value: Mann-Withney U Test AP: Daily average actual pressure (hpa), H: Daily average temperature (°C), RH: Daily average relative humidity (%), WS: Daily maximum wind speed(m/s)					

SUBTITLES

Figure 1: The distribution of the patients according to the season and months



AKCİĞER YERLEŞİMLİ KİSTİK HİDATİK RÜPTÜRÜ VAKASI

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ÖZET

Kist hidatik ülkemizde 1/20.000 ile 1/50.000 sıklığında görüldüğü bildirilmektedir. (1) Echinococcus granulosus ve Echinococcus alveolaris tarafından oluşturulan paraziter bir enfeksiyondur. (2) Çoğunlukla köpek dışkısı yoluyla insana bulaşan tarım ve hayvancılığın yaygın olduğu ülkelerde sık görülür. Klinik olarak genellikle karaciğer ve akciğere yerleşmektedir. Akciğer yerleşiminde göğüs ağrısı, öksürük, nefes darlığı, nonspesifik ateş, hemoptizi veya ağzıdan acı su gelmesi gibi şikâyetlere neden olabilir. (3) Kist rüptürü bazen kendiliğinden bazen de bir travma sonrası olabilir. Görüntüleme yöntemleri ile tanı konulup, tedavisi medikal veya cerrahi olarak değişebilir. Bu olguda acil servise nefes darlığı ve ağızdan su gelmesi şikayeti ile gelen 32 yaşında erkek hasta sunulmaktadır

GİRİŞ

Echinococcus granulosus dünyada oldukça yaygın olup köpek dışkısı yoluyla insana bulaşan tarım ve hayvancılığın yaygın olduğu ülkelerde sık görülen paraziter bir hastalıktır. Çoğunlukla köpek dışkısı yoluyla insana bulaşır. Köpek dışkısı ile dış ortama yayılan yumurtalar insanlar tarafından su ve gıdalarla alındıktan sonra duodenumda yumurtadan ayrılan embriyo vena porta veya lenfatik sisteme geçer ve yayılır.(3) En sık karaciğeri, ikincil olarak akciğerleri tutar. (5,6) Akciğer tutulumunda göğüs ağrısı, dispne, yan ağrı, kaya suyu ekspektasyonu, ateş, hemoptizi gözlenebilir. (3) Akciğer kist hidatiğinin en ciddi komplikasyonlarından biri kistin rüptüre olmasıdır. (4) Kist rüptürü sonucu bazen basit bir ürtikeryal döküntü, anafilaktik şok gözlenirken bazen de ölüm gibi ciddi sonuçlar doğurabilir. (2)

OLGU

Otuz iki yaşında erkek hasta acil servisimize yarım saat önce başlayan nefes darlığı ve ağızdan acı su gelmesi şikayeti ile başvuruyor. Fizik muayenede genel durum orta, ateş 36.5ºC, tansiyon 155/49 mmHg, oda havasında oksijen satürasyonu %80 olarak ölçüldü. 6lt/dk oksijen desteği ile satürasyonu %88-90 arası görüldü. İnspeksiyonda hasta takipneik (24/dk), KTA: 108/dk saptandı. Genel durumu orta, bilinci açık oryante koopere GKS:15 nörolojik mauyenede defisit yoktu. Her iki hemitoraks solunuma eşit katılıyor, dinlemekle sol alt zonda solunum sesleri azalmıştı. Diğer sistem muayeneleri olağandı. Laboratuvar bulgusu olarak Hbg; 14.73/gr, WBC; 11.000/mm3 , PLT; 442.000/mm3 , CRP; 10.33 mg/dL olarak ölçüldü. Akciğer grafiğinde sol alt lobda hava-sıvı seviyesi veren dairesel şekilli lezyon mevcuttu. Akciğer tomografisinde sol alt lob süperior segmentte 150x78x81mm boyutunda içinde çökmüş membranı ve anteriorunda hava sıvı seviyelenmesi içeren kistik lezyon gözlendi. Rüptüre kist hidatiği düşündüren germinatif membran görünümü (nilüfer bulgusu) mevcuttu. Takibimizde hastada yaygın ürtikeryal döküntüler gözlendi. Destek tedavi ve im adrenalin uygulanmasına rağmen unstabil seyreden hasta göğüs cerrahisi ile konsulte edildi ve ivedilikle operasyona alındı.

TARTIŞMA

Kist hidatik tanısı, anamnez, fizik muayene, laboratuar bulguları ve görüntüleme yöntemlerinden yararlanılarak konulmaktadır. Vakaların çoğu asemptomatik seyretmekte ve insidental olarak tanı almaktadır. (3) Genel olarak akciğer tomografisinin tanıda yeterli olduğu bildirilmektedir. Tomografide nilüfer çiçeği, hidroaerofik seviye (hava-sıvı seviyesi), endokist ve perikist aralığına hava girmiş ise menisküs (cresent) bulgusu, kist çevresinde pnemonik infiltrasyon, plevral mayii ve pnömotoraks varlığı, kistin rüptüre olduğunu gösteren önemli bulgulardır. Plevral sıvı ve kronik enfekte kistlerin ise pyojenik apseden ayrımı zor olabilir. (7) Bizim olgumuzda da tomografi görüntülemesinde çoğu bulgu mevcuttu. Akciğer kist hidatiğinin primer tedavisi cerrahidir. Semptomatik hastalar ve kist rüptürü hastalarında destek tedavi sağlanmaktadır. (8) Bizim olgumuzdaki en büyük deneyim anaflaksi tablosundaki unstabil bir hastaya tedavi eşliğinde operasyona hazırlamaktı. Kist hidatik rüptürü sonucu gelişen anafilaksi ciddi bir klinik prezentasyona sahip olabilen aşırı duyarlılık reaksiyonu, vasküler kollaps ve hava yolu obstrüksiyonu nedeniyle ölüme neden olabilir (3). Hastanın acil yönetimi ve operasyonu önem kazanmaktadır.

SONUÇ

Öksürük, yan ağrısı, nonspesifik ateş yüksekliği, ani kaya suyu ekspektorasyonu şikâyetleri olan hastalarda ülkemizde kist hidatik yaygınlığı nedeniyle ayırıcı tanıda ilk akla gelmesi gerekmektedir. Bu olguda hedefimiz kist hidatik vakalarının, acil servise nefes darlığı şikayeti ile gelip ürtikeryal döküntüden, kist rüptürüne ve hatta mortal sonuçlara kadar birçok tablolar ile seyredebileceğini vurgulamaktır.

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IS THORAX COMPUTED TOMOGRAPHY IMAGING A NEW WEAPON IN EMERGENCY SERVICES FOR THE DIAGNOSIS OF COVID-19?

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INTRODUCTION

COVID-19 infection, a highly contagious disease caused by the SARS-CoV virus, was first reported in Wuhan, China, and the World Health Organization declared this increasingly spreading disease as a global public health emergency (pandemic) on January 30, 2020 (1). In the diagnosis of COVID-19, the polymerase chain reaction (PCR) is considered as the reference standard test. Recent studies have shown that; though the diagnostic value of chest radiographs is low in the early stages, thorax computer tomography (TCT) findings could be present even before the onset of symptoms, TCT has quite high sensitivity (98%) in COVID-19 patients with false negative PCR results, and it has a great importance in early diagnosis (2). The PCR test method gives results within 4 hours in the best conditions, and within 48 hours in the density situations. In this study, we aimed to investigate how TCT is used for the diagnosis of COVID-19 in emergency department.

MATERIALS AND METHODS

The study is a retrospective study. Patients who presented to the emergency department with the disease and/or suspicion of COVID-19 in July 2022 and had TCT imaging were included in the study. Demographic characteristics of the patients, TCT-COVID-19 compliance, PCR test results and additional CT needs were recorded. Statistical analyzes were performed with IBM SPSS v23. Normality analyzes of quantitative data were performed with the Kolmogorov-Smirnov test. Comparison of normally distributed data was done with independent sample t-test. The comparison of qualitative data was made with the Pearson chi-square test. Data were presented as mean ± standard deviation and n (%). The significance value was accepted as $p<0.05$.

RESULTS

Our study included 458 patients who underwent TCT for suspected COVID-19. 17.9% of these patients did not want to perform PCR testing. The PCR test was positive in 71% of TCT-COVID-19-compliant patients and 61.8% of COVID-19-incompatible patients. TCT was found to be compatible with COVID-19 in 33% of 82 patients who did not perform PCR testing.

DISCUSSION

It is known that COVID-19 mainly infects the respiratory system, causing inflammation, interstitial damage, changes in the parenchyma and cell death. Thorax CT is widely used in patients with suspected COVID-19 worldwide due to its relatively simple and fast scanning capability and high sensitivity (3). The most common CT finding of COVID-19 pneumonia is ground glass opacities, and its typical pattern has been reported as bilateral, peripheral, multilobar and posterior localization (4). Ground glass opacity can be seen alone or in combination with different findings such as consolidation, interlobular septal thickening, and vascular dilatation. Consolidations are usually multifocal, segmental, patchy, mostly located in the lower lobe and peripheral, and may include air bronchograms (5). In our study, we considered ground glass opacities and consolidations compatible with COVID-19. CT stages of lung involvement in COVID-19 pneumonia have been described. 0-4 after initial symptoms. Day is the early stage and the main imaging finding is subpleural ground-glass opacities in the lower lobes, with unilateral or bilateral distribution (6).

Both the late results of the PCR test and the faster results with TCT have led to an increase in the number of TCT scans in emergency services. Due to the end of the pandemic and quarantine rules, patients do not tend to have PCR tests applied. For these reasons, TCT, which is a win-win for both patient and physician, has overtaken PCR testing in the diagnosis of COVID-19.

CONCLUSION

Although TCT imaging is performed with low-dose radiation, it is obvious that using CT as a diagnostic tool will have long-term side effects. The high density of patients in the emergency department, the lack of observation areas where sufficient patients can be followed in processes such as pandemics, the desire of patients and physicians to get quick results cause an increase in the use of CT.

Keywords: COVID-19 Disease, Emergency Medicine, Thorax CT.

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Table 1.Characteristics of TCT findings

		TCT Findings			
		Negative (n=275)	Pozitive (n=183)	Total (n=458)	p
Age		63.4 ± 17.9	73 ± 15.3		<0.001
Gender	Male	110 (40)	76 (41.5)	186 (40.6)	0.744
	Female	165 (60)	107 (58.5)	272 (59.4)	
COVID status	COVİD PCR -	50 (18.2)	26 (14.2)	76 (20.2)	
	COVİD PCR +	170 (61.8)	130 (71)	300 (79.8)	0.125
	Not tested	55 (20)	27 (14.8)	82 (17.9)	
TCT status	Perform before PCR test	133 (60.5)	89 (57.1)	222 (59.0)	
	Perform after PCR test (<2 days)	35 (15.9)	29 (18.6)	64 (17.0)	0.747
	Perform after PCR test (>2 days)	52 (23.6)	38 (24.4)	90 (24.0)	
Additional CT imaging	No	242 (88)	172 (94)	414 (90.8)	0.033
	Yes	33 (12)	11 (6)	42 (9.2)	

PATIENTS NON-COVID-19 DIAGNOSIS IN PANDEMIC CLINICS: THREE CASE REPORTS

ABSTRACT

With the pandemic process, the frequency of clinicians' referrals for thoracic imaging has increased. In this article, three cases diagnosed other than COVID-19 in pandemic clinics are presented.

A 33-years-old male admitted to pandemic clinic with sore throat and dyspnea for two days. Thoracic imaging showed large pneumothorax. The tube thoracostomy was performed. The patient was discharged after 14 days of follow-up.

A 31-years-old female admitted to pandemic clinic with exertional dyspnea, cough, sore throat and abdominal pain for two weeks. Thoracic imaging showed massive effusion. As a result of further examinations, the patient was diagnosed with metastatic colon carcinoma.

An 18-years-old male admitted to pandemic clinic with sore throat for a day. Thoracic imaging showed mediastinal emphysema.

The increased number of thoracic imaging during the pandemic proses will lead to an increase in the incidence of asymptomatic and subclinical thoracic pathologies. Increase of incidence should be reveled with further epidemiological studies.

Key words: Pandemics, Pneumothorax, Colonic Neoplasms, Mediastinal Emphysema

INTRODUCTION

In December 2019, it is reported a febrile respiratory tract illness of unknown origin from Wuhan. Bronchoalveolar lavage of the patients isolated a novel strain of coronavirus named as SARS-coronavirus-2 (SARS-CoV-2) as the pathogen (1). The World Health Organization (WHO) named pulmonary infection caused by SARS-CoV-2 as coronavirus disease 2019 (COVID-19) (1). First case was reported officially from turkey in 10th March 2020.

Testing currently involves a polymerase chain reaction test from swab samples obtained from the respiratory tract. With the increasing frequency of the disease in our country, the frequency of clinicians applying to radiological methods has also increased. Thorax radiography and computed tomography (CT) are preferred imaging modalities. With increasing thoracic imaging, it was placed in pandemic clinics in non-covid-19 diagnoses. We presented three cases admitted to pandemic clinic and diagnosed pneumothorax, cancer and pneumomediastinum.

CASE 1

On May 17, 2020, a 33-years-old male admitted to our clinic with sore throat and dyspnea for two days. In his medical history, there were no diseases other than bullous lung disease. He had no known contact with COVID-19 patient. He had no dry cough, fatigue or fever and, no overseas travel history. The initial physical examination revealed a body temperature of 36.4 °C, blood pressure of 96/76 mm Hg, pulse of 105 bpm, respiratory rate of 17 breath/min, and oxygen saturation of 95% while the patient was breathing room air. Blood tests revealed normal lymphocyte (3,14 103/uL, normal: 0,8-4 103/uL), and neutrophil count (4,8 103/uL, normal: 2-7 103/uL), and normal C-Reactive Protein level (<0,2 mg/L, normal: <0,5 mg/L). Other biochemical parameters were evaluated within normal limits too. Thorax CT showed that multiple bullae in both lungs, the largest if is approximately 7 cm in size, and pneumothorax in left hemithorax (Figure 1). Patient was hospitalized and tube thoracostomy was performed. The thoracic tube was removed on the tenth day of hospitalization. The patient was discharged asymptomatically after a total of fourteen days of follow-up without any complication.

CASE 2

On April 19, 2020, a 31-years-old female admitted to pandemic clinic with exertional dyspnea, cough, sore throat and abdominal pain for two weeks. In his medical history, there were no diseases other than hyperlipidemia. She had no known contact with COVID-19 patient, fatigue or fever and, no overseas travel history. The initial physical examination revealed a body temperature of 36.4 °C, blood pressure of 121/68 mm Hg, pulse of 95 bpm, respiratory rate of 18 breath/min, and oxygen saturation of 98% while the patient was breathing room air. Blood tests revealed normal lymphocyte (1,13 103/uL), elevated neutrophil count (17,17 103/uL), and elevated C-Reactive Protein level (15,9mg/L). Other biochemical parameters were evaluated within normal limits. Thorax CT showed that massive effusion in right pleural space, reaching thickness of 48 mm and air bronchograms in posterobasal of right lung lower lobe. Patient's oropharyngeal swab and sputum tested negative for COVID-19 by real-time reverse-transcriptase–polymerase-chain-reaction (RT-PCR) assay three times. Patient referred to oncology clinic for suspected malignite. The patient was diagnosed with metastatic colon cancer after advanced imaging and biopsies.

CASE 3

On June 14, 2020, an 18-years-old male admitted to pandemic clinic with sore throat for a day. In his medical history, there were no diseases other than he was smoker. He had known contact with COVID-19 patient, and he had the exertional dyspnea. He had no dry cough, fatigue or fever and, no overseas travel history. The initial physical examination revealed a body temperature of 36.4 °C, blood pressure of 122/92 mm Hg, pulse of 75 bpm, respiratory rate of 16 breath/min, and oxygen saturation of 98% while the patient was breathing room air. Electrocardiography was evaluated as normal sinus rhythm. Blood tests revealed normal lymphocyte (2,06 103/uL), neutrophil count (7,02 103/uL), and normal C-Reactive Protein level (<0,2 mg/L). Troponin I level (0,001ng/mL, normal: <0,0262 mg/L) and other biochemical parameters were evaluated within normal limits. Thorax CT showed that air images in mediastinum. Patient's oropharyngeal swab and sputum tested negative for COVID-19 by RT- PCR assay. The patient was discharged asymptomatically after 24 hours of follow-up.

DISCUSSION

In the COVID-19 pandemic process, emergency services and emergency triage have been restructured worldwide to ensure the isolation and management of SARS-CoV-2 infected patients. While the total number of visits to the emergency departments decreased during this period, the number of patients admitted with COVID-19 infection related symptoms increased (4). In our county patients with suspected SARS-CoV-2 infection defined according to the COVID-19 Outbreak Management and Working Guideline created and published by the Turkish Ministry of Health (5). Patients who meet the criteria in this guideline tested for SARS-CoV-2 infection with RT-PCR in pandemic clinics. Our first case was referred for sore throat and dyspnea; second case was referred for dyspnea, cough, sore throat and third case was referred for sore throat to pandemic clinic according to the COVID-19 Outbreak Management and Working Guideline created and published by the Turkish Ministry of Health.

RT-PCR testing is highly specific, but its sensitivity is 60–70% (6). Therewithal, especially on early periods of pandemic, the RT-PCR result has taken longer than two days in our hospital. CT reports to be available earlier, thus CT has taken an important role in a comprehensive assessment of patients, for demonstrating high sensitivity (although low specificity), to detect the most frequent pulmonary findings of the disease (5,7). Radiological evaluation is important for making decision of hospitalization and early results in determining the severity of the disease in outpatients (5).

Shoji et al. reported an increase in requests of thorax CT since the first records of cases in Brazil (7). However, they expressed their concerns about exceeding install capacity of the system to analyze and produce the CT reports on their report. As opposed to this, in their study from US, Houshyar et al. reported the decrease in daily emergency department radiology volume ranged from 32–40% and, decrease in the non-trauma chest subspecialty volumes by 18% (8). Although, they expressed same concerns about chest radiology demand might increase with an increase in COVID-19 cases.

In our department, 1206 thorax CT performed in March 2019, 1167 thorax CT performed in April 2019 and 1213 thorax CT performed in May 2019. After first case diagnosed in our country, 2599 thorax CT performed in March 2020, 6278 thorax CT performed in April 2020 and 4911 thorax CT performed in May 2020 (Figure 4). An increase in the frequency of further imaging may also lead to an increase in the diagnosis of thoracic pathologies. In patients applying to the pandemic clinic, clinicians try to exclude SARS-CoV-2 infection firstly. If there is no evidence of viral pneumonia in physical examination or thorax CT, patients are referred to other clinics for differential diagnosis.

As a conclusion, we think that the increased number of thoracic imaging during the pandemic proses will lead to an increase in the incidence of asymptomatic and subclinical thoracic pathologies. Increase of incidence should be reveled with further epidemiological studies.

- Informed consent: We asked the patients to help us to publish the case report in an international journal for discussion, including disease symptoms, diagnosis, and image related content. The patients agreed us to use his medical records and signed the consent form.

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Figure 1. Thoracoabdominal computed tomography without intravenous contrast media. The axial reformatted image reveals multiple bullae in both lungs (arrows), and pneumothorax in left hemithorax (asterisk).

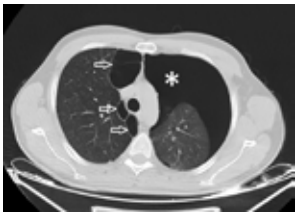

Figure 2. Thoracoabdominal computed tomography without intravenous contrast media. The axial reformatted image reveals massive effusion in right pleural space (asterisk), and air bronchograms in posterobasal of right lung lower lobe (arrow).

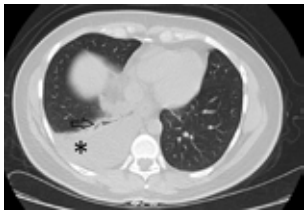

Figure 3. Thoracoabdominal computed tomography without intravenous contrast media. The axial reformatted image reveals gas images in mediastinum at the level of tracheal bifurcation (arrow).

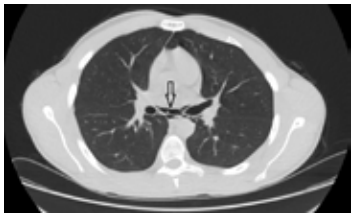

Figure 4. Numbers of thorax CT

POSTPARTUM GELİŞEN SEREBROVASKÜLER HASTALIK; VAKA TAKDİMİ

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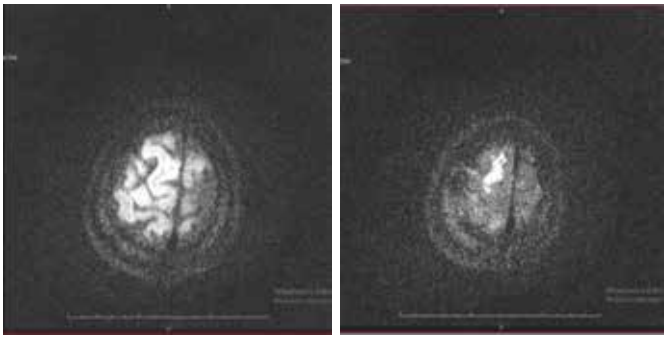
GİRİŞ

Postpartum dönemde, inmeler önemli bir morbidite ve mortalite sebebidir(1). Postpartum dönemde gerçekleşen inmelerin görülme oranları sezaryen operasyonlarda normal doğumlara oranla daha fazla olmakla birlikte 100.000 doğumda ortalama 18 kişide ppsvo görülmektedir(2)(3). Bu vaka takdimini sunuş amacımız postpartum dönemde, özellikle sezaryen ameliyatlarından sonra gelişebilecek serebrovasküler hadiseleri akılda tutmamız gerektiğini vurgulamaktır.

VAKA TAKDİMİ

32 yaşındaki kadın hasta, 5 gün önce spinal anestezi ile sezaryan operasyonu geçiriyor. Baş ağrısı şikayeti ile saat 17:00 gibi acil servise başvuruyor. Geliş vitalleri ateş:36,5 nb:89 ta:110/70 spo2:98. Nörolojik muayenede patolojik bulgu saptanmıyor. Parasetamol flakon iv infüzyon tedavisinden sonra hasta, parasetamol reçetesi ile taburcu ediliyor. Hasta baş ağrısı şikayetinin devam etmesi ve sol kolunda daha fazla olmak üzere sol vücut yarısında karıncalanma şikayetleri ve sol elinde yeni miyoklonik atımlar oluşması sebebiyle gece 01:00'de tekrar acil servise başvuruyor. İkinci başvurusunda vitalleri ateş:36,5 nb: 83 ta:110/80 spo2:96 . nörolojik muayene doğal olarak bulunuyor. Hemogram, biyokimya ve troponin tetkikleri isteniyor. Medikal tedavi uygulanıyor. Hasta tomografi çekimi için sırada beklerken ani bilinç kaybı ve nöbet geçiriyor. Hasta kırmızı alana alınıyor. Hastaya oral airway uygulandı. Hasta monitörize edilerek, ekg çekildi. Vitalleri stabil olan hastanın fizik muayenede sol kolda ve sol bacakta motor kuvvet kaybı bilateral 1/5 idi. Solda patolojik babinski refleksi varlığı mevcut olup, konuşma bozukluğu var idi. Gks göz:4, sözel:4, motor:4 toplam 12 idi. Laboratuvar parametrelerinde biyokimya da glukoz:105 mg/dl Üre:25,6 mg/dl,GFR:109,32 Kreatinin:0,73 mg/dl , AST:21 u/l, ALT:13 u/l, Amilaz:105 u/l, Kalsiyum:8,91 mg/dl, Magnezyum:1,71 mg/dl, Fosfor:3,37 mg/dl, LDH: 218 , Total Bilirubin: 0,25 mg/dl, Direkt Bilirubin: 0,05 mg/dl, İndirekt Bilirubin:0,2 mg/dl, CK:93 u/l, CK-MB: 12,1 u/l , Alkalen Fosfataz: 140 u/l, CRP:24,9 mg/l, GGT: 15,1 u/l , Sodyum: 142 mmol/l, Potasyum: 4,58 mmol/l, Klor: 107,6 mmol/l,WBC:7,16 k/ul idi. Hastaya ANTA takibi yapıldı. 2 mg diazem i.v. puşe uygulandı. Hastanın MR Diffüzyon ve Beyin Bt çekildi. Nörolojiye konsülte edildi. Hastaya ilaçlı MR anjiografi çekildi. MR da parietal bölgede diffüzyon kısıtlaması olması sebebiyle serebrovasküler olay ön tanısıyla takip amaçlı yoğun bakıma yatırıldı. Hastanın nöroloji takibinde düşük molekül ağırlıklı heparin ve levetirasetam yükleme ve idame tedavisi uygulandı. 6 saat içinde hemiplejisi geriledi(Resim 1).



Resim 1. Hastaya ait MR Difüzyon Görüntüsü

TARTIŞMA

İnmeler, 15-49 yaş arası gebe olmayan kadınlarda her 100.000 kişide 21 kişide görülmektedir (4). Gebelerde ise serebrovasküler olay oranı sanders ve arkadaşlarının "pregnancy associated stroke" isimli çalışmasında her 100.000 kişide 34 kişi olarak belirtilmiştir(4,5). Umar farooque ve arkadaşlarının "postpartum ischemic stroke, a rare case " çalışmasında ise bu oran 11-26 kişi olarak belirtilmiştir (1-3). Doğurganlık çağındaki kadınlarda hipertansiyon, diyabetes mellitus ve obezite gibi risk faktörlerinin artması, kadınlarda postpartum svo oranını arttırmaktadır(1). Gebelik sürecinde çok çeşitli fizyolojik değişimler olmaktadır. Kan hacminde ve kalbin pompaladığı kan miktarında artış olması, hastanın damar yapısında da anormallik varsa pıhtı oluşma ve iskemik serebrovasküler olay olma riskinin arttırır(5). Gebelikte ve postpartum dönemde fiziksel aktivitede azalma olması da pıhtı oluşma riskini arttırır. Yine doğum sırasında damar yapılarının zarar görmesi pıhtı riskinin arttırmaktadır. Gebelik süresince koagülasyon faktörleri miktarı artmış iken fibrinoliz olayları azalmıştır(2).

Postpartum serebrovasküler hadise için risk faktörleri arasında sigara, ırk, 20 yaştan genç ve 35 yaşından yaşlı olunması, obezite, hipertansiyon, otoimmün hastalıklar, auralı migren, patent foramen ovale, trombofili olması gösterilebilir. Postpartum serebrovasküler hadise gösteren kadınların 2/3ü sigara kullanıcısıdır(5). Bizim vakamızda postpartum serebrovasküler hadise olmasına rağmen obezite dışında risk faktörü bulunmamaktaydı.

SONUÇ

Sonuç olarak, postpartum serebrovasküler olay, nadir görülmekle beraber erken tanı ve tedavi ile yüz güldürücü sonuçları olan bir hastalık grubudur. Doğum sonrası risk faktörü olan hastalarda özellikle düşünmek gerekirken risk faktörünün olmaması postpartum serebrovasküler olay olmadığını göstermez.

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İNTRAVAJİNAL İŞLEMLER SONRASINDA İNTESTİNAL PERFORASYON

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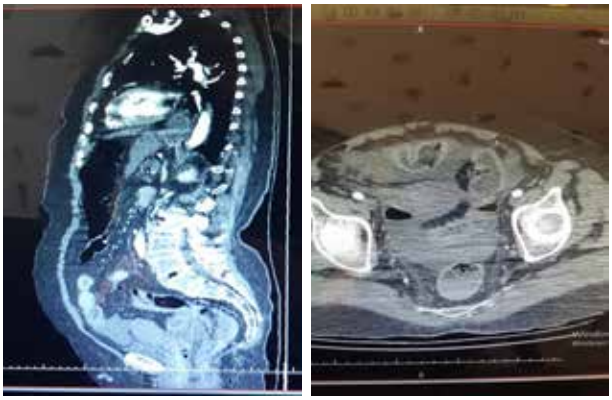
GİRİŞ

Rahim içi araç ucuz , kolay ulaşılabilir, efektif bir yöntem olması sebebiyle en sık kullanılan doğum kontrol yöntemlerinden biridir. Rahim içi aracın uterin perforasyonu yapması ve abdominal organlara göç ederek bu dokulara da zarar vermesi, nadir görülmekle beraber ciddi bir komplikasyondur (1)(2). Bu vakamızda intravajinal uygulanan işlemler sonrasında akut batın tablosuyla başvuran hastalarda ayırıcı tanıda intestinal perforasyonun da yer almasına dikkat çekmek istedik.

VAKA TAKDİMİ

66 yaş kadın hasta rahim içi araç çıkarılması için sabah kadın doğum polikliniğine başvurmuş. Vitalleri Doğal sınırlarda ve stabil olan hastaya yapılan muayene sonucunda uterus içerisinde ria saptanamamış hasta taburcu edilmiş. Aynı gün öğle saatlerinde karın ağrısı şikayetiyle acil servise başvurmuş. Akut batın tablosunun olmaması ve semptomlarının gerilemesi üzerine hasta taburcu edilmiş. Akşam saatlerinde şiddetli karın ağrısı şikayetiyle tekrar acil servise başvurdu. hasta değerlendirildi. Vitalleri değerleri Ateş:36,8 Nb:49 Ta:80/50 Spo2: 98 idi. Fizik muayenede batında yaygın hassasiyet, distandü görünüm, defans ve rebound mevcuttu. Hemogram, biyokimya, kan gazı, troponin tetkikleri istendi. Laboratuvar Parametrelerinde Biyokimyada Glukoz:132 Mg/Dl Üre:53,7 Mg/Dl Egfr:42,46 Kreatinin:1,31 Mg/Dl , Ast:24u/L, Alt:13 U/L, Amilaz:217 U/L, Lipaz: 29,4 U/L Kalsiyum:9,1 Mg/Dl, Total Bilirubin: 2,82 Mg/Dl, Direkt Bilirubin: 0,39 Mg/Dl, İndirekt Bilirubin:2,43 Mg/Dl, Ck:112 U/L, Ck-Mb: 11,9 U/L , Alkalen Fosfataz: 62 U/L, Crp:37,3 Mg/L, Ggt: 12,6 U/L , Sodyum: 137,4 Mmol/L, Potasyum: 3,59 Mmol/L, Klor: 102,9 Mmol/L, Inr:1,01 , Aptt:28,1 Sec , Pt: 8,82 Sec , Hemogramda Wbc:7,16 K/Ul,Hgb: 16,2 G/Dl , Hct: 47,5% , Mcv: 94,8fl , Mch: 32,3 Pg , Mchc: 34,0 G/Dl, Plt: 186k/Ul, Mpv: 10,3fl. Kan Gazında Be(Vt):0,8 , Ca++: 1,12 Mmol/L , Cohb:1,3 , Glucose: 137 Mg/Dl, Hco3: 23,6 Mmol/L , Hct: 49, Hhb: 27,5, K+: 3,64 Mmol/L , Lactate: 3,64 Mmol/L , Methb: 0,5 , Na+:140,8 Mmol/L , O2cap:22,8 , O2hb: 70,7, PCO2:33,1 Mmhg, Ph: 7,471, PO2:35,1 Mmhg, Tco2: 24,6 Mmol/L, Thb: 16,7 G/Dl Olarak Geldi. Görüntülemede ayakta direkt batın grafide ve kontrastlı batın btde hava sıvı seviyeleri gözlenmekteydi. Hastaya 100 Cc/Saatten NACL başlandı. İleus olabileceği düşünüldüğünden lavman Verildi. Akut Batın Açısından Genel Cerrahiye Ve Kadın Doğuma Danışıldı. Hastaya Kadın Doğum tarafından yatış verildi. Sonrasında genel cerrahi tarafından intestinal perforasyon sebebiyle opere edildi(Resim 1).



Resim 1. Hastaya ait Bilgisayarlı Tomografi Görüntüsü

TARTIŞMA

Rahim içi araç, uterin perforasyonu yapabilir ve komşu organlara göç ederek perforasyona, abse oluşumuna, fistül oluşumuna sebep olabilir(3). Bu gibi durumlarda rahim içi aracın çıkarılmasında öncelikli tedavi yöntemi, daha küçük insizyon alanı olması, taburculuktan sonra yaşam kalitesinin fazla olması, aynı anda hem rianın çıkarılması hem de doku onarımına olanak vermesi sebebiyle, laparoskopidir. rahim içi aracın laparoskopik olarak görülemediği durumlarda laparotomi yapılması gerekir. hastalarda her zaman akut batın tablosu gelişmeyebilir ve hastalar asemptomatik de seyredebilir (2).

Bİzim vakamızda, hastanın acil servise ilk başvurusunda akut batın tablosu tam olarak oturmamıştı. muayene bulgusu yoktu. Ancakikinci başvurusunda distandü görünüm, defans, rebound eşlik etmekteydi ve akut batın düşündüren hasta kliniği mevcuttu.

Hastanın yaşı göz önüne alındığında, ilerleyen yaşla beraber incelen kas dokusunun uterin ruptur ve intestinal ruptür olma ihtimalini arttırdığını düşünüyoruz.

SONUÇ

İntrauterin kontrasepsiyon aracı, nadir olarak da olsa ölümcül komplikasyonlara sebep olabilir. hastalar asemtomatik de seyredebilir. Riaya yönelik girişimsel işlemler sonrasında veya karın ağrısı ile gelen rahim içi araç kullanan hastalarda perforasyon, abse oluşumu, migrasyon gibi durumların göz önünde bulundurulması, bu komplikasyonların erken tanı alması açısından önem arz etmektedir.

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SEREBROVASKÜLER HADİSELER İLE BAŞVURAN HASTALARDA AORT DİSEKSİYONU UNUTULMAMALI..

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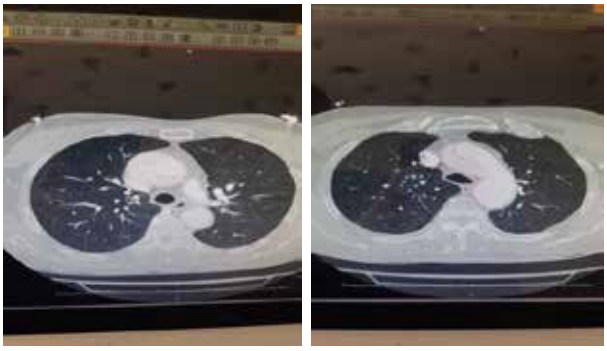
GİRİŞ

Aort diseksiyonu, akut, keskin ve sırta doğru yayılan ağrı ile prezente olan bazı durumlarda semptomlarının da belirgin olmadığı, yıkıcı sonuçları olan bir hastalıktır (1,2). Çoğu hastada başlangıçta akut koroner sendrom, perikardit, pulmoner emboli ve kolesistit gibi daha sık görülen hastalıklar düşünülmekte, sonrasında aort diseksiyonu saptanmaktadır (1). Bu vakamızda biz, atipik semptomlarla acil servise başvuran aort diseksiyonu olan hastamızın 4-5 sn gelişen süren absans nöbet kliniği ile de gelebileceğine dikkat çekmek istedik.

VAKA TAKDİMİ

68 yaş erkek hasta evde aniden gelişen etrafa ilgisizleşme, donuklaşma, nedeni ile 112 tarafından acil servise getirildi. HASTANIN anamnezinde 4-5 sn süren absans nöbet tarzında etrafına ilgisizleşme ve bir noktaya sabit bir şekilde bakma şeklinde bir semptom geliştiği alındı. Nöbet öncesi ve sonrası eşlik eden göğüs ağrısı yoktu. Bilinen hastalığı olmayan hastanın geliş vitalleri ta: sol:80/40 mmhg sağ:75/40 mmhg nb:44 atım/dk ateş:36,7 spo2:93%,genel durumu orta kötü idi. fizik muayenede solunum sesleri doğal. 4 ekstremite nabızları açık ve eşitti. Sağ üst ekstremitede 4/5 kuvvet kaybı dışında diğer nörolojik muayene bulguları doğaldı. Batın rahattı, defans, rebound yoktu. Hasta monitörize edildi. Ekgde sinüs bradikardisi mevcuttu. Beyin bt ve diffüzyon mr istendi. Tomografi ve mrda akut patoloji saptanmadı.Hastanın tetkiklerinde biyokimyada Glukoz:106 MG/DL Üre:64,9 Mg/Dl Egfr:59,53 Kreatinin:1,23 Mg/Dl , Ast: 17 U/L, Alt: 11 U/L, Amilaz: 66 U/L, Kalsiyum:8,95 Mg/Dl, Total Bilirubin:1,12 Mg/Dl, Direkt Bilirubin:0,21 Mg/Dl, İndirekt Bilirubin:0,91 Mg/Dl, Ck:56 U/L, Ck-Mb:21 U/L , Alkalen Fosfataz:71 U/L, Crp:2 Mg/L, Ggt:14,9 U/L , Sodyum:139,4 Mmol/L, Potasyum: 3,58 Mmol/L, Klor:107,2 Mmol/L, Inr:1,16, Aptt:29,2 Sec , Pt:10,2 Sec , Troponin:5,24 Ng/L . Hemogramda Wbc:7,85 K/Ul , HGB:13,3 G/DL , HCT:40,8 % , PLT:157 K/uL, MPV: 9,2fL, Lactate:2,16 Mmol/L , Methb:0,1 , Na+:140,8mmol/L , O2cap:19,6, O2hb:54,2, Pco2:52,5 MMHG, PH:7,31, PO2:30,6 mmhg olarak geldi. Kontrol Diffüzyon Mr Çekildi Ve Yine Patoloji Yoktu. Bradikardisi devam eden hastaya 1 mg atropin yapıldı. hasta nöroloji ve kardiyolojiye konsülte edildi. Hastanın kontrolünde tansiyonların ve nabızların normal olması, ekgnin nsrye dönme ve ek patoloji olmaması sebebiyle konsültanların önerisiyle kardiyoloji ve nöroloji poliklinik kontrolü önerilerek taburcu edildi.

Hasta ertesi gün kontrol amacıyla kardiyoloji polikliniğine başvuruyor. Yapılan Ekokardiyografide flap olması sebebiyle Aort Diseksiyonu şüphesiyle sedyeyle acile getirildi. Bilinç Açık. Gks:15 İdi. Sağ kolunda uyuşma hissettiğini söyleyen hastanın nabızlarına bakıldığında sağda atım zayıf İdi. Vitallerinde A:36,5 Nb:65 Ta:110/70 Spo2: 98 İdi.Tetkikleri Alındı. Biyokimyada Glukoz: 109mg/Dl Üre:74,9 Mg/Dl Egfr:47,59 Kreatinin:1,48 Mg/Dl , Ast: 21u/L, Alt:11 U/L, Amilaz:51 U/L, Kalsiyum: 8,51mg/Dl, Total Bilirubin: 1,52mg/Dl, Direkt Bilirubin:0,28 Mg/Dl, İndirekt Bilirubin:1,24 Mg/Dl, Ck:95 U/L, Ck-Mb:14,9 U/L , Alkalen Fosfataz:62 U/L, Crp:19,4 Mg/L, Sodyum:138,1mmol/L, Potasyum:4,18 Mmol/L, Klor:107,5 Mmol/L, TROPONİN:873,74 NG/L . HEMOGRAMDA WBC: 10,70K/uL , HGB: 2,6G/DL, PLT:156 K/uL, MPV: 10,6fL. Kan gazında BE(VT):-2,2, CA++:1,17 MMOL/L ,Cohb:1,8, Glucose:115 Mg/Dl, Hco3:23,9 Mmol/L , Hct:38, Hhb:56,5, K+:4,09 Mmol/L , Lactate:1,09 Mmol/L , Methb:0,0 , Na+:138,4mmol/L , PH:7,33, PO2:24,6 MMHG olarak geldi. sağ kolda nabzın zayıf olması sebebiyle abdominal aort anjiografi ve torakal aort anjiografi planlanan hastada DEBAKEY 1 düşünülmesi üzerine kalp damar cerrahisi tarafından açık kalp ameliyatı yapılabilecek ileri merkeze sevk edildi(Resim 1).



Resim 1. Hastaya ait Bilgisayarlı Tomografi Görüntüsü

TARTIŞMA

Aort diseksiyonu, aortta intima tabakasının yırtılması ve kanın oluşan lümenlere dolmasıdır. Ani gelişen ve ölümcül seyreden bir acildir(3). Hastalar asemptomatik gelebileceği gibi, göğüs ağrısı, senkop, şok tablosu ile de gelebilir. Gelen hastalarda konjestif kalp yetmezliği, inferior miyokard infarktüsü, stroke, fokal nörolojik defisitler, karın ağrısı, akut böbrek yetmezliği eşlik ediyor olabilir (1). Bizim hastamızda ilk başvurusunda eşlik eden göğüs ağrısı mevcut değildi ve hastanın tüm nabızları açık ve dolgundu.Tek patolojik bulgusu sağ kol güçsüzlük mevcuttu. Sonraki başvurusunda hastanın nabız defisiti mevcuttu. Bu durum bize ilk başvuruda nabız defisitinin olmamasının diseksiyonu ekarte ettiremeyeceğini, ekokardiyografi yapılmasının diseksiyon tespiti açısından önemli olduğunu gösterdi.

SONUÇ

Sonuç olarak, farklı klinik belirtilerle başvuran hastalarda serebrovasküler hastalık,absans nöbet tarzında klinik bulgularla gelen hastalarda aort diseksiyonu mevcut olabilir ve bu noktada ekokardiyografi, hasta takibi ve aort diseksiyonu olabilir farkındalığı önem kazanmaktadır.

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ACİL SERVİSTE NADİR BİR ATEŞ SEBEBİ : SEROTONİN SENDROMU

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ÖZET

Ateş acil servise başvuran hastaların en sık yakınmalarından biri olmakla birlikte genellikle üst solunum yolu enfeksiyonu başta olmak üzere çeşitli enfeksiyöz nedenlerle görülür. Non-enfeksiyöz ateş daha az görülmekle birlikte maligniteler, otoimmün hastalıklar başlıca sebepleridir. Serotonin sendromu nadir görülen bir non-enfeksiyöz ateş nedenidir. Artan antidepresan kullanımına paralel olarak toplumda insidansı giderek artmaktadır. Bazı antidepresanların terapötik düzeyde kullanımı bile serotonin sendromuna yol açabilmektedir. Klinik bulguların daha sık görülen farklı etiyolojilere bağlanması, hafif vakaların gözden kaçması, klinisyenlerin ön tanı olarak serotonin sendromundan şüphe duymaması acil serviste bu hasta grubunun tanı alamamasının başlıca nedenleridir. Biz bu olguda ateş ve titreme şikayetiyle acil servise başvurup serotonin sendromu tanısıyla interne edilen hastayı tartışmayı amaçladık.

GİRİŞ

Ateş acil servise başvuruların sık bir nedenidir. Ateşin kaynağı sıklıkla enfeksiyöz nedenler olmasına rağmen non-enfeksiyoz etiyolojiler nedeniyle de ateş görülebilir. Enfeksiyöz ateşe bakteriyel, viral, fungal, parazitik enfeksiyonlar sebep olabilir. Non-enfeksiyöz ateş sebepleri arasında maligniteler, otoimmün hastalıklar, sıcak çarpması, tiroit fırtınası, kan transfüzyon reaksiyonu, nöroleptik malign sendrom, malign hipertermi, serotonin sendrom sayılabilir (1). Serotonin sendromu acil servise ateş şikayetiyle başvuruların nadir bir sebebidir. Bu yazıda acil servisimize ateş ve titreme şikayetiyle başvuran ve 3 gün önce suisid amaçlı ilaç alımı öyküsü olan kadın hastada fluoksetin kullanımına bağlı gelişen serotonin sendromu tartışılacaktır.

VAKA

27 yaşında kadın hasta acil servise birkaç saat önce başlayan titreme şikayetiyle başvurdu. Hastanın özgeçmişinde bilinen ankiyete bozukluğu tanısının olduğu, başka bir ek hastalığının olmadığı öğrenildi. Özellikle ellerde daha belirgin olmak üzere tüm vücutta titreme şikayeti olan hastanın anamnez ve fizik muayenesinde herhangi bir enfektif süreç düşündürecek bir semptomunun olmadığı görüldü. Hastanın orofarenks muayenesinin olağan, solunum seslerinin doğal, batın muayenesinin rahat olduğu, ense sertliği olmadığı görüldü. Geliş vitalleri kan baısncı : 120/87 , nabız:91 , SpO2:95 ve ateş:38,7 olduğu görüldü. Genel durumu düşkün görülen hastadan ateş ve titreme etiyolojilerinin ayırıcı tanısına yönelik tam kan, biyokimya, c-reaktif protein(crp) ve tam idrar tetkiki ve elektrokardiyografi(EKG) istendi, hastaya intravenöz(İV) hidrasyon uygulandı. Tetkik sonuçlarıyla değerlendirilen hastanın tetkiklerinde özellik olmadığı görüldü. Hastanın kontrol vitallerinde hala ateşinin olması ve genel durumunun düşkün olması üzerine anamnezi derinleştirilen hastada 3 gün önce suisid amaçlı kendi ilaçları olan flurbiprofen 100mg etken maddeli ilaçtan 8 tablet, mefenamik asit 500mg etken maddeli ilaçtan 14 tablet, fluoksetin 20mg etken maddeli ilaçtan 24 tablet kullandığı öğrenildi. Hastanın mevcut başvurusunda Ulusal Zehir Danışma Merkezi (UZEM) tarafından fluoksetin yarı ömrü 4-6 gün olduğu için takip amaçlı servis yatışı önerildiği, hastanın kabul etmeyerek kendi isteğiyle acil servisten ayrıldığı, hastaya tedavi ret ve kendi isteğiyle taburcu formu imzalatıldığı görüldü. Bunun dışında özellikle alt extremitelerinde istemsiz kasılmaları olduğu tarifleyen hastanın kliniği serotonin sendromu ile uyumlu olarak değerlendirildi. Hasta nörolojik acillerin ekarte edilmesi ve psikiyatrik değerlendirmeyi takiben dahiliye branşı adına takip ve tedavi amacıyla interne edildi. Takiplerinde şikayetleri gerileyen, komplikasyon gelişmeyen hastanın 2 gün sonra şifa ile taburcu edildiği öğrenildi.

TARTIŞMA

Seratonin sendromu santral sinir sisteminde bir nörotransmitter olan serotonin molekülünün artmış aktivitesiyle ilişkilidir. Serotonin santral sinir sisteminde dikkat, davranış ve termoregülasyon üzerinde etkilyken, periferik sinir sisteminde intestinal enterokromoffin hücrelerden salınır ve gastrointestinal motilite, vazokonstrüksiyon, uterin kontraksiyon ve bronkokonstrüksiyon üzerine etkileri mevcuttur.Postsinaptik 5HT-1A ve 5HT-2A reseptörlerinin uyarımı sonucunda serotinin sendromu görülür.(2)

Suisid amaçlı yüksek doz ilaç alımıyla, ilaç etkileşimi sonrası serotejenik ajanların artmış aktivitesiyle görülebildiği gibi nadir de olsa terapötik dozda ilaç kullanımıyla da görülebilmektedir (3). Serojenik ajanların artan kullanımına bağlı olarak serotonin sendromu insidansı da giderek artmaktadır(2,3,4). Selektif serotonin geri alım inhibitörleri (SSRI) serotonin sendromuyla en çok ilişkili ilaç grubudur(5). Buna rağmen monoamin oksidaz inhibitörü (MAOi) grubu ilaçların sebep olduğu serotonin sendromu daha ciddi klinik ve kötü prognoz ile ilişkilidir. Klinik bulguların daha sık görülen farklı etiyolojilere bağlanması, hafif vakaların tanı almaması, klinisyenlerin sendromdan şüphelenmemesi literatürdeki insidansın serotonin sendromunun gerçek insidansının çok daha altında olduğunu düşündürmektedir(5).

SSRI ve MAOi ilaçların yanında amfetamin, ekstazy, kokain gibi maddeler serotonin salınımını artırarak, meperidin ve tramadol gibi opiad analjezikler ve siklik antidepresanlar sinaptik aralıktan serotonin geri alımını azaltarak, triptan grubu ilaçlar ve fentanil direkt serotonin reseptör agonisti etkisiyle, lityum ise postsinaptik reseptörlerde serotonin duyarlılığını artırarak serotonin sendromuna neden olabilmektedir(5).

Hastaların kliniği serotonerjik aktivitenin derecesine göre değişmekle birlikte temel olarak mental durum değişikliği, otonomik bozukluklar ve nöromusküler bozukluklar olarak 3 kategoride değerlendirilebilir. Mental durum bozukluğu olarak hastalarda anksiyete, ajitasyon, deoryantasyon görülebilirken bazı ciddi vakalarda tablo deliryuma kadar ilerleyebilir(5). Otonomik bozukluklar sonucunda bulantı, kusma, ishal, hipertansiyon, hipertermi, taşıkardi, terleme görülebilir(2). Nöromusküler bozuklar arasında ise tremor, myoklonus, hiperrefleksi bulunur(2). Bizim hastamızda genel durumda düşkünlük, anksiyete, ateş, terleme, kol ve bacaklarda myoklonusla uyumlu istemsiz kas hareketleri ve ellerde belirgin olmak üzere yaygın bir tremor mevcuttu.

Serotonin sendromu tanısında Hunter Toksisite Kriterleri yaygın olarak kullanılmaktadır(5).Kriterlere göre serotonerjik ilaç kullanan hastalarda spontan klonus olması, indüklenebilir klanus yanında ajitasyon ya da terleme olması, oküler klanus yanında ajitasyon ya da terleme olması, tremor ve yanında hiperrefleksi olması, hipertonusite olup ateşi 38 üzeri olan hastalarda yanında oküler klonus ya da indüklenebilir klonus olması tanı koydurucu olarak belirtilmiştir. Kriterlere göre serotonin sendromu tanısı için serotonerjik ilaç kullanmak ve bir kriteri sağlamak yeterli olmaktadır. Bizim vakamızda fluoksetin aşırı doz kullanımı ve sonrasında gelişen, nöroloji konsültasyonuyla da dökümente edilen spontan aşil klonusu mevcuttu.

Literatürde serotonin sendromu vakalarının çoğunun bir ilaç kullanımından ya da ilacın doz değişiminden sonraki ilk 24 saat içerisinde olduğu bildirilmesine rağmen(2) bizim vakamızda semptomların ilaç alımını takiben yaklaşık 24-36 saat sonra başladığı ve yaklaşık 72 saat sonra belirginleştiği görülmüştür. Bu durum hastanın kullandığı fluoksetin ve aktif metaboliti olan norfluoksetin yarı ömrünün diğer SSRI grubu ilaçlardan farklı olarak 2 ila 4 gün arasında olması sebebiyle olabilir(6).

Ciddi vakalarda serotonin sendromunun bir komplikasyonu olarak disemine intravasküler koagülasyon, rabdomiyoliz, metebolik asidoz, renal yetmezlik, miyoglobinüri ve akut respiratuvar distress sendromu görülebildiği literatürde bildirilmiştir(2).Bizim vakamızda herhangi bir komplikasyon gelişmemiş olup semptomlarda 2 gün içerisinde düzelme görülmüş ve hasta şifa ile taburcu edilmiştir.

SONUÇ

Ateş acil servise başvurunun en sık sebeplerinden biridir. Başvuruların çoğunu interne edilmesi gerekmeyen basit viral enfeksiyonlar oluştursa da servis ya da yoğun bakım takibi gerektiren hasta grubunu yeşil alan polikliniklerinde tanımak önemlidir. Artan SSRI kullanımına bağlı olarak insidansı giderek artmakta olan serotonin sendromu acil servise ateş ile başvurunun nadir bir sebebi olabilir. Klinisyenlerin bu konudaki farkındalığı bu hasta grubunun tanı almasını kolaylaştıracaktır.

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KALBİN RİTMİ Mİ NEFESİN RİTMİ Mİ

Dr. Ömer Turalioğlu, Dr. Nabi Bayramoğlu, Dr. Mevlana Ömeroğlu

GİRİŞ

İmplantable Cardiac Defibrilatör, kişinin hayatını tehlikeye sokacak bir problem ortaya çıktığında şok vererek kalbin ritmini düzene sokan bir kalp pilidir. ICD takılması sırasında hastada çeşitli komplikasyonlar oluşabilir. Bu komplikasyonlardan bazıları yara yeri enfeksiyonu, damar patolojileri- hasarlanması, plevral hasar, pnömotoraks, ritim bozuklukları olarak sayılabilir.

Bu çalişmada ICD yerleştirme sonrasi gelişen ve nadir bir komplikasyon olan girişim sonrası pnömotoraks ve ampiyem gelişimi anlatılacaktır.

VAKA:

Elli yedi yaş kadın hasta, bilinen ht, kky tanıları mevcut. Hastanemize başvurmadan 6 gün önce dış merkezde ICD yerleştirilmiş. Acil servise yeni gelişen göğüs, sırt ağrısı ateş ve bulantı şikayetiyle başvurdu. Hastanın fizik muayenesinde sol akiğerde dinlemekle solunum sesleri alınamadı. Hastada takipne ve dispne gözlendi. ICD etrafında ekimotik alanlar, basmakla olan hassasiyet, kizarıklık ve ısı artışı saptandı. Hastanın ICD işlemi öncesi yapılan radyolojik görüntülemeleri normaldi. Hastanın acil serviste değerlendirildikten sonra yapılan radyolojik görüntülemelerinde sol akciğerde yaygın pnömotoraks -ampiyem ile uyumlu görünüm tespit edildi. Hastaya acil serviste gerekli tedavi başlandı. Hasta göğüs cerrahisi kliniğine konsülte edildi, hastanın yatışı yapıldı.

SONUÇ:

ICD takılması işlemi ne kadar hayati olsa da gelişebilecek komplikasyonlar da bir o kadar hayati olabilir. Acil servise ICD takılmasi gibi birçok girişimsel işlem sonrası gelişen komplikasyonlarla hastalar başvurabilir. Acil hekimlerinin hastaya daha önce yapılan girişimsel işlemler hakkında bilgi alması ve koyulan tanıların bu girişimsel işlemler ile ilişkili olabileceğini akılda tutması gerekir.

ANAHTAR KELİME: ıcd, defibrillator, pil, kardiyak pil, aritmi,

HOCAM SADECE BURNUNA DARBE ALDI BAŞINA VURMAMIŞLAR

Dr. Ömer Turalioğlu, Dr. Nabi Bayramoğlu , Dr. Zeynep Çakır

GİRİŞ: Kafa travmaları acil servise başvuran hastaların önemli bir kısmını oluşturmaktadır. Başvuran hastaların bir kısmı mortal seyrederken bir kısmı da değerlendirme sonrası önerilerle taburcu edilir.

Bu çalışmamızda hastanın kendi ifadesine göre izole burun travması olan değerlendirilen ancak kliniğimizde kafa travması nedeniyle değerlendirdiğimiz bir vakadan bahsedilecektir.

VAKA: On yedi yaşında, bilinen bir hastalığı olmayan erkek hasta acil servise burunda ağrı, baş dönmesi, bulantı şikayetiyle başvurdu. Anamnezde boks antrenmanı sırasında burnuna darbe aldığı öğrenildi. Hastanın vital bulguları normaldi. Glascow coma scale (GCS:15) idi. Yapılan muayenelerde burunda hassasiyet dışında başka bir bulguya rastlanmadı. Hastada kafa travması nedeniyle uygun radyolojik görüntülemeler yapıldı. Radyolojik görüntülerde non deplase nazal fraktür ve sol hemisferde intrakranial hemoraji (ICH) ile uyumlu görüntü rapor edildi. Hasta beyin cerrahisi kliniğine konsülte edildi. Hasta beyin cerrahi kliniği tarafından yatırıldı.

SONUÇ: : Acil servise travma ile başvuran hastalarIn yönetimi oldukça zordur. Bu hastalar hakkInda karar verme aşamasI da bir o kadar tecrübe ve bilgi isteyen bir süreçtir. İzole tek bölge travma olarak değerlendirilen hastalarIn tüm sistem muayeneleri dikkatlice yapılmalıdır. travma dışı olan vücut bölümlerinde travmaya bağlı patolojileri gelişmiş olabilir. Bu sebeple travma ile gelen hastaların tıbbi hikaye, fizik muayene ve klinik izlemleri dikkatle yapılmalıdır.

Anahtar : kafa travması, ıch, hemoraji, nazal fraktür, deplase fraktür,

BEYİN OPERASYONU SONRASI TİTREME

Dr. Ömer Turalioğlu, Dr. Nabi Bayramoğlu, Dr. Fatma Tortum

GİRİŞ: Beyin operasyonları sonrası hasta bakımında yara yeri bakımı oldukça önemli bir husustur. Eğer hasta yara yeri bakımını yeterli düzeyde yapamaz ise santral sinir sistemi dahil olmak üzere birçok enfeksiyon çeşidi ile karşı karşıya kalabilir. Bu süreç operasyon sonrası hastanın iyileşme sürecini etkilediği gibi operasyon başarısını etkileyen en önemli hususlardan birini teşkil eder.

Bu çalışmada beyin operasyonu sonrası yara yerinde yumuşak doku enfeksiyonu gelişen hastanın klinik durumu tartışılacaktır.

VAKA: Kırkbeş yaşında erkek hasta acil servise üşüme, titreme şikayetleriyle başvurdu. Hastanın kronik bir hastalığı veya düzenli kullandığı bir ilaci yoktu. Hasta acil servise başvurmadan bir hafta önce kafa travması sebebiyle opere olmuştu. Anamnezinde birkaç gündür ateşi olduğu öğrenildi. Sistemik muayenesi yapılan hastanın vital bulgularında taşikardi (120 atım/dakika), ateş yüksekliği (38.5 C°saptandı. Nörolojik muayenede patolojik bir durum saptanmadı. Geçirdiği operasyona seconder oluşan kesi yeri dikkatle muayene edildiğinde yara yerinden pürülan bir akıntı olduğu görüldü. Glascow coma scale (GCS:15) idi.Hastanın enfeksiyon odağının araştırılması için kan ve idrar tetkikleri alındı. Ateşi olan hastanın ateş odağı belirlenmesi amacıyla radyolojik görüntüleme yapıldı. Hastanın labaratuvar tetkikleri ve radyolojik görüntülemeleri normal olarak gözlendi. Hasta beyin cerrahi ve enfeksiyon hastalıkları kliniğinin önerisi ile uygun antibiyoterapi reçete edilerek taburcu edildi.

SONUÇ: Acil servise ateş ,titreme şikayeti ile gelen hastaların ateş odağı aranırken vücutta bilinen sistem muayeneleri dikkatle yapılmalıdır. Fizik muayene içerisinde hastalarin kıyafetleri sebebiyle görülemeyen ve enfeksiyon odağı oluşturabilecek lezyon ve yaraların mutlaka değerlendirilmesi gerekir.

Anahtar kelime : postop ateş, titreme, yara yeri enfeksiyonu

A RARE CAUSE OF SEPSIS: OSTEOMYELITIS

INTRODUCTION:

Sepsis is one of the important clinical syndromes with high mortality and morbidity seen in the emergency department (ED). Frequently, the source of infection are respiratory system, urogenital system, central nervous system, or intra-abdominal organs. As a rare cause osteomyelitis is also one of the sources that should be considered in sepsis patients.

Here we present a case with non-hematogenous osteomyelitis that developed after repetitive intramuscular injection.

CASE:

A 66-year-old female patient, who had diabetes mellitus, was presented to the ED by ambulance due to worsening general condition.

In the physical examination, she was disorientated, in somnolence, and GCS: 13.

The patient had 38,9ºC fever with severe hypotension (70/40 mm-hg). There was sinus tashycardia on ECG. At the secondary look crepitation and limitation of movement were detected in the proximal left femur. The other system examinations were normal. Her lactate level was 4.6 mmol/L on the venous blood gas test and septic shock treatment was initiated. According to the information received from her son, it was learned that she had been given regular Nsai drug injections for the last 3 months. Extensive intramuscular air was observed in the pelvic tomography imaging performed while the patient was stable, and it was interpreted as osteomyelitis of the femoral head. Intramuscular injection was considered as the source of osteomyelitis. The patient died on the 4th hour of the admission to the intensive care unit.

DISCUSSION:

Sepsis is common in the ED, and various scoring systems have been used to diagnose it. Early diagnosis of sepsis, early recognition of source of infection and early initiation of antibiotherapy are very important. In addition to common source, rarer causes such as osteomyelitis should not be overlooked.

Non-hematogenous osteomyelitis most commonly occurs with the spread of infection from adjacent soft tissues. Surgery, trauma, bites and punctures are the sources of this infection. The causative agent is often Staphylococcus Aureus.

In addition to the common causes of sepsis in the ED, rare causes should not be neglected. Physical examination and detailed anamnesis should be prioritized while searching for the infection source.

GREENSTICK FRACTURE

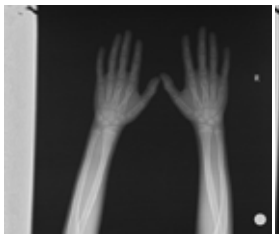
Fatih FIRAT, Hasan SENEL, Abdullah Osman KOÇAK

INTRODUCTION : Upper extremity trauma is one of the most common types of injuries seen in emergency medicine involving simple fingertip injuries and complex injuries that include multiple tissue structures. Children with a fracture or dislocation typically admit to hospital with a history of trauma and have local tenderness, swelling, or deformity.

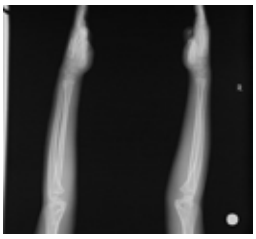
CASE :A six-year-old boy patient was admitted to the emergency service with the complaint of pain in the left elbow after falling from a slide. He had suffered a severe blow with his left palm to the ground according to the information receiver from the patients relative. The patient's vital signs were normal, and his general medical condition was good. In the physical examination, there was no obvious feature other than tenderness in the left elbow. Radiological imaging requested including the upper and lower joints with the area of tenderness due to trauma originating from the left hand. Two-way direct radiographs of the left elbow joint, left wrist, and left shoulder were requested as imaging. A green stick fracture (Picture1, Picture2) was detected at the distal end of the radius of the left wrist of the patient.

CONCLUSION : Although the joint with tenderness and limited range of motion guides us in extremity traumas admitted to the emergency services, it should be taken care that the proximal and distal joints of this joint may also be damaged.

KEYWORDS:green stick fracture , extremity trauma , child trauma



Picture1



Picture2

PERITONSILLAR ABSCESS

Fatih FIRAT, Hatice Kübra TAŞCI, Zeynep CAKIR

INTRODUCTION: Peritonsillar abscess is the most common deep infection of the head and neck in adults. It generally begins with a superficial infection that can progress between the tonsillar capsule and the upper constrictor muscle. Peritonsillar abscess is typically caused by a combination of aerobic and anaerobic bacteria (group A hemolytic streptococci, S. aureus and H. influenzae).

Fever, sore throat, dysphagia and trismus are the most common complaints. Pain in the ipsilateral ear and torticollis may also be seen. In the oral examination, by looking at the oral cavity, hypertrophy of the affected tonsil and deviation of the uvula towards the healthy side can be seen. The definitive diagnosis of patients who have clinical findings that support peritonsillar abscess is made by contrast-enhanced neck computed tomography (CT).

CASE: A 35-year-old female patient admitted to the emergency department with complaints of sore throat, fever and difficulty of opening her mouth. The patient was oriented,cooperative and GCS was 15. The vital signs of the patient were not pathological. According to the anamnesis taken from the patient, it was learned that she had complaints of fever, sore throat, earache for 10 days. The patient was discharged about 1 week ago, after being prescribed antibiotics by another health center. It was learned that there was no regression in her complaints despite getting antibiotics regularly. However, it was learned that she had difficulty of eating and drinking in the last few days, even opening her mouth. In physical examination, the oropharynx was hyperemic, right tonsil was hypertrophic, uvula deviated to the left and plica edema was noticed. No acute pathology was observed in other system examinations. With the preliminary diagnosis of peritonsillar abscess, laboratory tests and contrast-enhanced neck computed tomography were requested from the patient. In laboratory tests, C-Reactive Protein (CRP) and White Blood Cell (WBC) were above the normal range. CRP was 177 mg/L and WBC was 14□103. On the tomography, an appearance compatible with an abscess with 14□21 mm contrast enhancement in the right peritonsillar area (Picture 1) was observed. The patient was consulted to the otolaryngology clinic and hospitalized.

CONCLUSION : Upper respiratory tract infections constitute the majority of the patients examined in the green area. Complete physical examination of the patients prevents development of serious complications in the cases that need simple treatment and it also prevents recurrent emergency applications by enabling the diagnosis of the patients.

KEYWORDS : Peritonsillar abscess , Upper respiratory tract infection

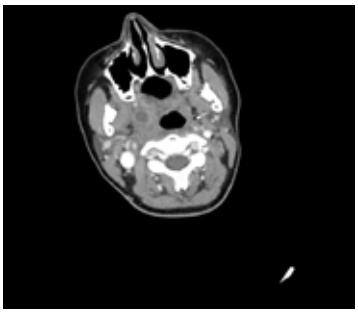


Figure1: Peritonsillar abscess tomography image

SHOULDER JOINT DISLOCATION AFTER EPILEPSIAN ATTACK

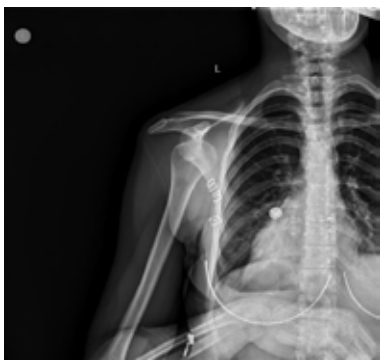
Fatih FIRAT, Emine ÖZDAL, Atif BAYRAMOGLU

INTRODUCTION: Epilepsy is a disease characterized with seizures and causes injuires due to contractions and trauma. These injuries may occur as a result of trauma or, although rare, may occur due to incompatible excessive contraction of the body. Due to the absence of a typical history of trauma, conditions such as fractures and dislocations can be missed.

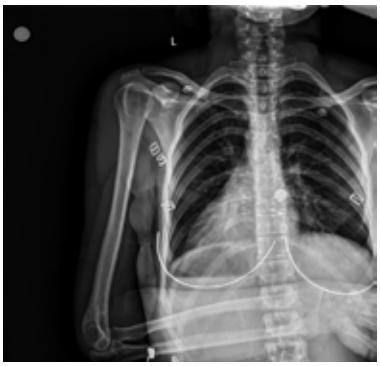
CASE :A 20-year-old female patient with diagnosis of epilepsy was admitted to the emergency service with the complaint of seizure. Her family stated that they found the patient while having a seizure on the floor. She had no known disease other than epilepsy. The physical examination of the patient, whose vital signs were normal, was unremarkable except for limited range of motion and pain in the left arm. Peripheral pulses were palpable and neurological examination was normal. There was a dislocation in the left shoulder joint (Figure 1) seen in requested bilateral direct graphy. The patient's shoulder joint was reduced under sedoanalgesia. It was seen in the control radiograph that the reduction was successful (Picture 2). The patient was discharged without sequelae.

CONCLUSION : Patients who have seizures can admit to emergency services with different clinics. It is always important to perform a detailed examination from head to toe in emergency services. Detailed physical examination provides early diagnosis and early treatment for the patient since patients who had seizure may not be able to explain their state. Harming of the body during the seizure should be taken care other than the reason of the seizure.

KEYWORDS :epileptic emergency , shoulder dislocation , dislocation due to epilepsy .



Picture1



Picture2

EMPHYSEMATOUS PANCREATİTİS

Fatih FIRAT , Erdem Yakup ÇİMEN , İbrahim ÖZLÜ

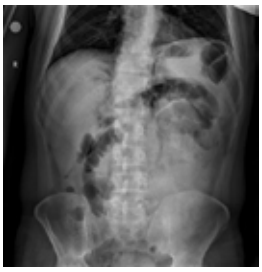
INTRODUCTION: Acute pancreatitis is an acute inflammatory process of the pancreas.Most patients who suffer from acute pancreatitis have acute onset, persistent, severe epigastric and left upper quadrant abdominal pain. In some patients, the pain may be localized on the right upper quadrant or, rarely, on the left upper quadrant. In about 50 percent of patients, the pain expands to the back. The pain persists for several hours to days and may be partially relieved by sitting or leaning forward. Most patients with acute pancreatitis have mild disease and recover within three to five days without complications or organ failure. However, 20 percent of patients have moderately severe or severe acute pancreatitis with local or systemic complications or organ failure.

In this study, we described a case of pancreatitis with complication.

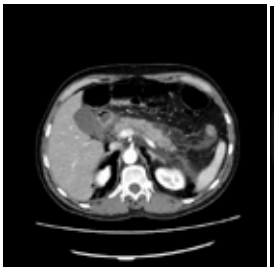
CASE:A 49-year-old male patient admitted to the emergency department with the complaints of epigastric pain, nausea and vomiting. There was no pathological finding in his vitals during the admission. In the physical examination, no significant feature was observed except tenderness on the epigastric region. In the direct graphy of the abdomen, apart from the intense gas shadows in the intestinal loops, there were free gas densities that were incompatible with the intestinal loops (Picture 1). In blood tests, White Blood Cell(WBC) was 12□103, Amylase was 712 U/L, Lipase was 2608 U/L, C-Reactive Protein (CRP) was 41 mg/L, and no other feature was observed. In the abdominal tomography, edematous density changes in the pancreas (Picture 2), inflammation in the fatty planes of the peripancreatic area, and free gas densities in the bilateral perirenal areas (Picture 3) were observed. The patient was consulted to the general surgery clinic by getting antibiotherapy, and he was hospitalized.

CONCLUSION: Pancreatitis is a common clinical case presented with different clinical symptoms. The mortality and morbidity rates can be reduced with the diagnosis made as a result of the clinical findings, laboratory results and imaging techniques and the early treatment. Therefore, pancreatitis is a preliminary diagnosis that should be kept in mind for the patients who suffer from severe and persistent epigastric pain.

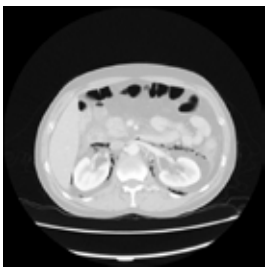
KEYWORDS: Emphysematous pancreatitis, acute pancreatitis, complications of pancreatitis



Picture1



Picture2



Picture3

POLO MINT SIGN IN PULMONARY EMBOLISM

INTRODUCTION:

Pulmonary embolism (PE) occurs when there is a disruption to the flow of blood in the pulmonary artery or its branches by a thrombus (1).The diagnosis can be difficult due to the wide variety of nonspecific clinical signs and symptoms in patients with acute PE. Therefore, several imaging findings have been referred-on chest radiographs or computed tomography (CT) scans-to signs, symbols, or naturalistic images (2).

Here, we present a patient with 'polo mint sign' diagnosed pulmonary embolism.

CASE:

A 66-year-old male presented to the emergency department with dyspnea for four days. He had larynx cancer, COPD and hypertension in her past medical history. In addition, his left leg was amputated because of acute ischemic necrosis. He had no recent chemotherapy. On arrival, he was tachycardiac (107 beats/min) and tachypneic (22/min), but had no fever(36,8°C). His blood pressure was 142/82 mm/Hg and saturation 92% on room air. On her physical examination, he was uncomfortable, but lung sounds were equal bilaterally, and there was no other pathological sign at auscultation. The other systems were all normal. Her electrocardiogram was normal except sinus tachycardia. His venous blood gas analysis revealed pH: 7.43, pCO2: 44.5mmHg, pO2: 43.6mmHg.The other laboratory results were all normal. In CT pulmonary angiography was seen filling defect in mean pulmonary artery.Postero-anterior lung radiography was unremarkable. Intravenous contrast enhanced pulmonary angiography was performed and filling defect compatible with thromboembolism was detected in main pulmonary artery distals (Figure-1). After administration low molecular weight heparin, the patient hospitalized in chest diseases ward.

DISCUSSION:

Although diagnosis of acute PE has an important clinical component, imaging is required for its definite diagnosis. Pulmonary CT angiography is presently considered the gold standard imaging modality (1)One of the conventional radiographic signs described for PE, the 'polo mint sign' is a description given to a venous thrombosis on contrast enhanced CT imaging. Itwas first described in 2004 by Wittram. When viewed in the axial plane, a thin rim of contrast persists around a central filling defect due to thrombus (2). This gives an appearance like that of the popular mint sweet, the polo, also referred to as the 'mint with a hole'. Its recognition is very important for clinicians and radiologists, because it represents a marker of acute embolism.

Emergency physicians should remember the polo mint sign on axial planes of CT for the diagnosis of acute pulmonary embolism.

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GERİATRİK HASTADA ATİPİK PNÖMOMEDİASTINUM

Özet; Pnömomediastinum, diğer adıyla mediastinal amfizem, özofagus yada solunum yollarından merkezi göğüs boşluğuna hava kaçışı olaran tanımlanır. Biz bu olgumuzda genel durumu kötüleşme şikayeti ile acil servise getirilen ileri yaş bir hastanın, yapılan tetkikler sonrası psöas kasa kadar uzanan bir spontan pnömomediastinum vakasını sunumayı hedefledik.

Anaktar kelimeler; pnömomediastinum, genel durumda bozukluk, geriatri

GİRİŞ

Pnömomediastinum ilk defa 1939 yılında Louis Hamman tarafından bildirilmiştir(1). Pnömomediastinum hava yolu veya gastrointestinal sistemi organların perforasyonu nedeniyle havanın mediastende bulunmasıdır. Bu durum çoğunlukla travma sonrası acil servisler görülmektedir. Spontan pnömomediastinum ise daha nadir bir durumdur. Klasik olarak sağlıklı genç, uzun erkeklerde, sigara kullanılması sonrası periferal pulmoner alveollerin rüptürü sonucunda görüldüğü bildirilmiştir. Ani olarak görülen nefes darlığı, eşlik eden göğüs ağrısı, çarpıntı, prodüktif öksürük şikayeti eşlik edebilr(2). Bilindiği üzere bu semptomlar acil servis sık başvuru nedenidir.

Pnömomediastinum spontan ve sekonder olarak ikiye ayrılmıştır. Spontan pnömotoraks belirli bir etken madde olmadan (travam, cerrahi, medikal işlem) meydana gelmektedir. Sekonder pnömomediastinum alta yatan bir nedene bağlı olarak gelişir. Biz bu olgumuzda genel durumun bozulma şikayeti nedeniyle acil servise getirilen bir 65 yaşındaki hastada psöas kasa kadar uzanan spontan pnömomediastinum tehşisi konulan bir hastamızı sunmayı planladik.

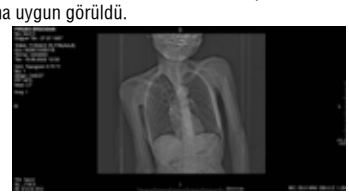
OLGU SUNUMU

65 yaşında kadın hasta 2 gündür olan oral alımda azalma ve genel durum bozukluğu nedeniyle acil servise yakınları tarafından getirildi. Hasta bitkin ve dehidrate görünümlü idi. Hastanın yakınlarından terminal dönem kolon CA ve HT tanılı olduğu öğrenildi. Hastanın yapılan fizik muayenesinde tansiyon 100/60, oda havasında saturasyon 95, ateş 36.7, nabız 110/dak, solunum sayısı 20/dak ve akçiğer seslerinde belirgin patoloji saptanmadı. Hastanın bilinçi letarjik, GKS 12 ve EKG'de sinus taşikardisi olduğu görüldü. Hasta hemen kırmızı alana alındı, monitörilize edildi ve 2 damar yolu açıldı. Hastadan alının rutin laboratuvar sonuçlarına ise; WBC 22 /mm^3, HGB 13 g/dl, PLT 277 / mm^3, CRP 133 mg/L, BUN 175 mg/dL, Kreatinin 1,90 mg/dL, na 121 mmol/L, potasyum 3 mmol/L, AST 32 U/L, ALT22 U/L , GLUKOZ 148 mg/dL, Ph 7.50, Pco2 50 mmHg, Hco3 38 mmol/L ve idrar değerleri normal olarak saptandı.

Hastanın enfeksiyon değerlerinin yüksek olaması olması nedeniyle ilk olarak paac grafi istendi. Terminal dönem kanser hastası olması nedeniyle, ayrıca hasta kendini çok net tarif edemediği için olabilecek akut patolojiyi değerlendirmek için hastaya toraks ve batın bilgisiyarlı tomografi (BT) çekilmesi planlandı.

Çekilen BT'ler, biz acil çalışanları tarafından hızlıca değerlendirildi. Öncelikle kontrast madde verilmeden yapılan toraks BT incelemesinde, mediastinal kompartmanlarda yaygın hava değerleri izlendi. Bu durum kolon CA tanılı bir hastada sekonder pnömomediastinum lehile tanımlandı. Bununla beraber gene kontrast madde verilmeden yapılan batın BT kesitlerinin incelenmesinde sağda retroperitonda psoaz ka komşuluğunda milimetrik boyutlarda bile olsa hava dansiteleri olduğu izlendi. Hastamızda akut batın bulgusu yoktu. Batın içi serbets sıvı izlenmedi. İntraperitoneal serbest hava değerleri yoktu.

Sağ psoaz kasa kadar uzanan sekonder pnömomediastinum ön tanısı koyduğumuzdias ve akut böbrek yetmezliği bulunan ayırıca elektrolit-asid baz bozukluğu olan dahili yoğun bakıma yatışına uygun görüldü.



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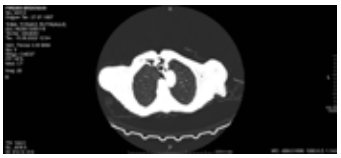

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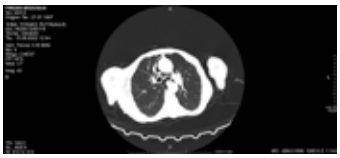

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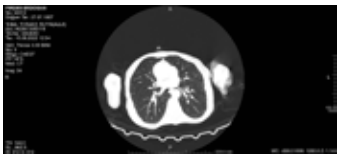
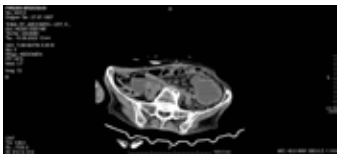


Şekil 4pnömomediastinum



Şekil 5psoaz kas'daki hava dansiteleri

TARTIŞMA

Pnömomediastinum spontan ve sekonder nedenlere bağlı olarak gelişir. Spontan pnömomediastinum (SPM), bilinen bir etken faktör(travma, cerrahi, enfeksiyon, medikal işlemler) olmaksızın gelişen mediastinal amfizem olarak tanımlanır. SPM'ne sebeb olabilecek bir neden, hastalık olmaz(3). Bununla birlikte nadir görülen bir durum olup, genç ve erkek popülasyonda daha sık meydana geldiği bildirilmiştir(4, 5).

Sekonder pnömomediastinumda ise alt yatan bir nedene bağlı olarak mediastende hava saptanır. Alta yatan nedenler bazıları iyatrojenik olabilir. Bunlar; entübasyon sırasında, akciğer ve batın operasyonları sırasında, santral venöz katater, endoskopik işlemler sırasında, plevral aralığa uygulana işlemler hatta doğum eyleminin bir komplikasyonu olarakda ortaya çıkabilir.

Bronşektazi, interstisyel akciğer hastalıkları, akciğer kistleri ve akciğer maligniteleri, akut alevlenmelerle ve öksürük krizleriyle seyreden astım, KOAH ve pulmoner enfeksiyonlar gibi solunum yolu hastalıklarında da sekonder pnömomediastinuma neden olabilir(6, 7)

Diğer sekonder pnömomediastinuma sebep olabilecek nedenler ise, acil servislerde sık kullandığımız mekanik ventilasyon sırasindaki bartravma. Ayrıca hiperbarik tedavi, suya dalışın yükselme fazı astma veya yabancı cisim gibi obstruktif hava yolu hastalıkları da sekonder pnömediastinuma neden olur. Aynı zamanda diş çekimi tonsilektomi, trakeostomi, baş ve boyun cerrahisi sonrası ve kraniofasial travma sonrası da pnömomediastınum bildirilmiştir(8).

Karakteristik belirti ve bulgular, göğüs ağrısı, subkutanöz amfizem, kalp seslerinin derinden gelmesi, krepitan kalp sesi, pnömotoraks, mediastinal basınç artışına ait bulgular(dispne, siyanoz , dolgun venler ve dolaşım yetmezliği) ve mediastende havanın radyolojik kanıtıdır. Potansiyel letal birdurum olması nedeni ile hızlı tanı önemlidir. Tansiyon ve/veya bilateral pnömotoraks yanında kardiak komresyona ve kardiak outputun azalmasına neden olan tansiyon pnömomediastinum gibi ciddi komplikasyonlar bildirilmiştir. Bu sorunların oluşmaması için pnömomediastinumlu hastalar monitorize edilerek yakın takip edilmelidir. Komplike olmayan pnömomediastinumlu hastalarda istirahat, ağrı kesici ve valsalva manevrasından kaçınarak spontan rezolusyonu beklenir. Ciddi komplikasyonlar için mediastinal iğne aspirasyonu,servikal mediastinotomi, trakeostomi veya acil torakotomi yöntemleri kullanılabilir(8).

Pnömomediastinumdan şüphelenilen olgularda ilk tercih tanı yöntemi posteroanterior akciğer grafisidir. Ama bu yöntem ile her zaman tanı koymak malesef yeterli olmayabilir. Grafilerin yetersiz kaldığı olgularda toraks BT kesin tanı yöntemi olarak istenmelidir. Toraks BT ile akciğer grafisinde saptanamayan pnömotoraks, pnömoperikardiyum gibi diğer patolojilerde değerlendirilebilir(9). Hızlı yapılan ilk müdahaleler ve tanı hastanın ileride tedavisi için önemlidir. Ayrıca acil servis hekimi radyolojik tetkiklerde gördüğü bulguları iyi analiz edebilmesi hasta için hayat kurtarıcı olabilir.

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ARE SCORING SYSTEMS SUPERIOR TO EACH OTHER IN CLINICAL FOLLOW-UP PLANNING AND MORTALITY ASSESSMENT OF COVID-19 PATIENTS?

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INTRODUCTION

Covid 19 SARS-CoV-2 pneumonia, which emerged as a severe acute respiratory disease, was declared a pandemic in 2020 (1). The requirements for critical care and mortality rates varied between countries throughout the pandemic (2).

Differentiating between a mild disease that does not require hospitalization, a serious disease that requires hospitalization, and a critical disease according to the facilities of hospitals such as critical care units and mechanical ventilators required more studies in the COVID-19 pandemic (3). However, initiating intensive medical treatments at an early stage requires a new urgency for the effectiveness of scoring systems to prevent the dysfunction of other affected organ systems other than the respiratory system (4, 5).

In COVID-19 patients, different scoring scores are used to predict the course of disease severity. Although the effectiveness of the different scores planned in the present study in predicting mortality was demonstrated in different studies, their comparisons were not evaluated sufficiently so far. The purpose of the present study was to investigate the superiority of scoring systems over each other in mortality evaluation in SARS-Cov2(Covid-19) patients.

MATERIAL AND METHOD

STUDY DESIGN

The study was planned in a retrospective, observational, and single-center design. The population of this study consisted of real-time patients who applied to the emergency department between 01.04.2020 and 01.09.2020 with various symptoms and complaints with one or more COVID-19 symptoms such as fever, cough, sputum, shortness of breath, loss of taste or smell, and sore throat. It consists of Covid-19 patients over the age of 18 whose diagnosis was confirmed by the Reverse Transcription Polymerase Chain Reaction (RT-PCR) Test. The criteria for not being included in the study were being younger than 18 years old and having missing data.

RESULTS

A total of 1279 full data of 1404 Covid-19 patients between 01 April - 01 September 2021 were reached and 129 patients were excluded because of lack of data. In the study, the data of 1279 hospitalized patients with confirmed COVID-19 were analyzed (Table 1). Among the 1279 patients who were included in the study, 641 (50.1%) were male and the mean age of the patients was 61.6±17. A total of 119 patients died within 28 days of admission to the emergency department. The 28-day mortality rate was 9.3% for the entire study. The demographic characteristics of SARS-Cov2 patients, clinical results in the first 24 hours, comorbidities, and vital parameters at presentation are given in Table 1. Especially in patients with a mortal course, diseases including hypertension and diabetes risk factors were found to be higher than those who survived. When the characteristics, vital signs, laboratory findings, and comorbidities of the patients were evaluated, it was seen that especially age, systolic and diastolic blood pressure from vital signs, diabetes and hypertension from comorbid diseases, COPD, Chronic kidney failure, and CAD affect the mortality of Covid-19 patients. It was also found that cerebrovascular disease did not affect survival (Table I).

Table I. Clinical baseline characteristics of COVID-19 patients

Characteristics	Survivors (Mean±SD)	Patients with Mortal (Mean±SD)	P value
Age	60.3±17.5(22-82)	75.1±12.8(23-94)	<0.05
Gender			0.531
Male n(%)	575(%90.3)	62(%9.7)	
Female n(%)	580(%91.1)	57(%8.9)	
Vital Signs			
GCS	14.8±0.2	12.9±2.1	<0.05
Systolic Blood Pressure	126.3±22	116±29	<0.05
Diastolic Blood Pressure	76.2±13.1	67.3±17.3	<0.05
Pulse	98±18.2	102.8±22.8	<0.05
Temperature	37.3±3.5	36.7±0.5	<0.05
SPO2	90.8±6.8	81.3±10	<0.05
Number of days of hospitalization	9.3±8.1	15±11.1	<0.05
Mechanical ventilator support-n(%)	47(%34.6)	89(%65.4)	<0.05
NIMW support n(%)	162(%94.7)	9(%5.3)	<0.05
Presence in comorbidity	1.3±1.3	2.2±1.3	<0.05
Hypertension	454(%39.9)	69(%58.5)	<0.05
diabetes	320(%28.1)	39(%33.1)	<0.05
CODP	81(%7.1)	18(%15.3)	<0.05
CAD	110(%13.6)	16(%18)	0.26
Cerebrovascular disease	35(%4.3)	5(%12.5)	0.58
Chronic kidney disease	146(%12.8)	35(%19.3)	<0.05
Laboratory Findings			
Urea	38.2±25.2	81.9±61.3	<0.05
Creatine	20±38.6	18.5±44.2	<0.05
Albumin	33.2±4.6	29.4±4.7	<0.05
C-reactive protein (0-6 mg/L)	127±26.4	157±27.2	<0.05
Note* sign and P < .05 was considered statistically significant. CODP: Chronic obstructive pulmonary disease CAD: Coronary Artery Disease,GCS:Glascow Coma Score			

When the scores that were evaluated in the study with mortality and spearman correlation were evaluated, the MEWS score showed a weak positive correlation, and the qSOFA, NEWS, and C-Mortality scores showed a moderate and positive correlation (Table II).

Table II. Evaluation of the correlation of scoring systems with survival

Score	Correlation coefficient (rs)	P value
QSofa score	0.435	<0.05
MEUS score	0.219	<0.05
NEWS score	0.341	<0.05
4C Mortality score	0.456	<0.05
As statistical analysis, Spearman rank correlation method was used. * =p<0.05 was considered significant.		

The mortality evaluations of the Covid 19 patients, who were the subject of the present study, are summarized in Table 3, including MEWS, NEWS, 4C Mortality, and qSOFA scores. In this context, when the scores between the survivors and the deceased were evaluated, statistically significant differences were detected between the groups in MEWS, NEWS, 4C Mortality, and qSOFA scores (<0.05).

Table III. Evaluation of mortality in Covid 19 patients according to scoring systems.

Characteristics	Survivors (Mean±SD)	Patients with Mortal (Mean±SD)	P value
qSOFA	0.3±0.6	1.7±0.8	<0.05*
Meus	2.4±1.3	3.7±1.7	<0.05*
News	6.2±2.8	10.4±3.7	<0.05*
4C-Mortality	8.3±4.1	15.2±3.4	<0.05*
As statistical analysis, Mann-Whitney U test was used. * =p<0.05 was considered significant.			

ROC analysis for qSOFA, MEWS and NEWS,4C Mortality score The laboratory parameters of the COVID-19 patient groups are shown in Table IV (Figure 1).

Table IV. ROC analysis results of scoring systems

Score	Cut-off value	AUC	p value	95% CI (lower bound-upper bound)	Sensitivity %	Specificity %
qSofa	2.5	0.878	0.000	0.841-0.915	21	98
MEUS	6.5	0.721	0.000	0.667-0.775	37	93
NEWS	4.5	0.836	0.007	0.792-0.881	34.6	98.2
4C Mortality	14.5	0.895	0.000	0.863-0.927	64	98.2

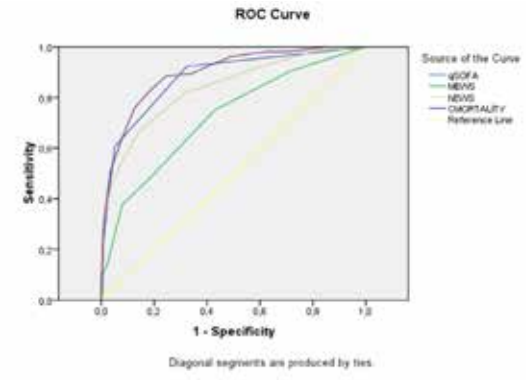

Figure 1. Roc analysis of scoring systems in predicting mortality in Covid 19 patients

DISCUSSION

According to the results and evaluations of the present study, when the effects of vital signs and comorbidities on the mortality of Covid-19 patients were evaluated regarding the mortality of Covid-19 patients, it was found that age and systolic and diastolic blood pressure scores were especially effective among vital signs and characteristic findings, and especially diabetes, hypertension and CAD were effective among comorbidities. In the present study, the purpose was to compare the superiority of these scores to each other in the evaluation of mortality by including many scoring systems especially used in hospitals. It is obvious that MEWS, NEWS, 4C Mortality, and qSOFA scores, which were the subjects of our study, give significant results, but it was found that qSOFA Score and 4C Mortality Score were more significant in mortality evaluation than others.

Although their superiority over each other is still a matter of debate in studies conducted on scoring systems, the calculation of MEWS, NEWS, 4C Mortality Score, and qSOFA during hospital admission can predict critical clinical outcomes in COVID-19 patients, according to the results found in the present study. Although all the scorings evaluated here were useful in predicting mortality, we think that qSOFA, NEWS, and 4C Mortality Scores were superior to MEWS. Especially, from the first admission to the hospital to the critical period, early interventions can improve clinical outcomes in COVID-19.

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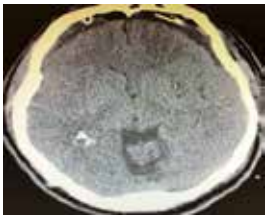
KONTROLE GELDİ AMELİYATA GİTTİ

Dosya no:32995 ismet büyüktaş

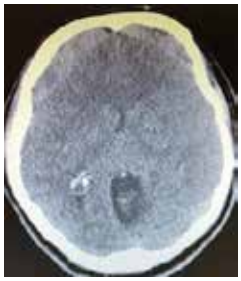
GİRİŞ: Subdural hematom (SDH), beyni çevreleyen dural ve araknoid membranlar arasındaki boşluğa kanama ile karakterize bir kafa içi kanama şeklidir. Kronik subdural hematom genelde yaşlılarda görülen bir hastalıktır. Minör travma yada kafaya direkt olmayan travmalarda bile görülme ihtimali vardır. Yapılan muayenede fokal nörolojik defisit, değişmiş zihinsel durum tespit edilebilir. Tanısı beyin bilgisayarlı tomografisi (BT) olan nörogörüntüleme ile konur. Tedavi edilen hastaların %20'sinde nüks gelişebilir.

VAKA: 51 yaşında erkek hasta baş dönmesi şikayeti ile acil servise başvurdu. Alınan anamnezde hastanın 3 gün önce kendi seviyesinden düşmüş olduğu öğrenildi. Düşme sonrası ara ara olan baş dönmeleri kendini rahatsız edince de hastanemize kontrol amaçlı ayaktan geldi. Hastanın bakılan vitallerinde bir özellik yoktu. Yapılan nörolojik muayenede ataksisi dışında patolojik bulgu yoktu. Hasta 1 yıl kadar önce SVH geçirmiş ve düzenli olarak aspirin almaktaydı. Hastadan CBC, BYK, INR tetkikleri ile beyin BT istendi. İstenilen beyin BT de her iki hemisferde konveksite komşuluğunda kronik-subakut dönem subdural hematom olduğu ve sola doğru şift görüldü. Hasta beyin cerrahisi kliniğine konsulte edildi ve aynı klinik tarafından acil ameliyata alındı.

SONUÇ: Acil servise başvuran özellikle yaşlı hastalarda düzenli olarak antiagregan ile antikuagülan kullanımı sorgulanarak minör kafa travmalarında bile hastalarda subdural hematom oluşabileceğini düşünmeliyiz.



Şekil 1



Şekil 2

KORONER BY-PASS İŞLEM SONRASI GELİŞEN PNÖMOMEDİASTİNUM; VAKA TAKDİMİ

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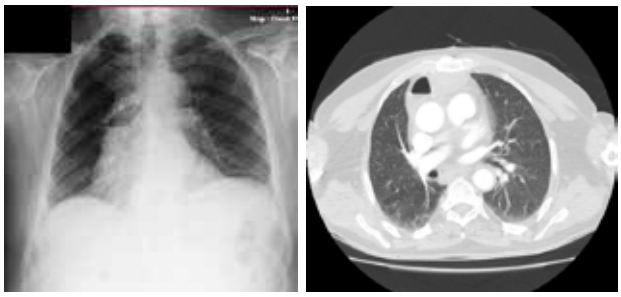
GİRİŞ

Pnömomediastinum, mediastende hava bulunması olarak açıklanan nadir görülen bir durumdur (1). Pnömomediastinum spontan olabileceği gibi, travmatik ve iatrojenik de gelişebilir(2). Biz bu vakamızda bypass sonrası pnömomediastinum gelişebileceğine ve bypass sonrası dispne ile gelen kişilerde pnömomediastinumun da ayırıcı tanıda düşünülmesi gerektiğine dikkat çekmek istedik.

VAKA TAKDİMİ

68 yaş erkek hasta yatınca olan nefes darlığı şikayeti ile acil servisimize başvurdu. müphem bir göğüs ağrısı da eşlik ediyordu. Hastanın 2 hafta önce geçirilmiş bypass operasyonu öyküsü mevcuttu. Geliş vitalleri doğal ve stabildi. Gks:15, fizik muayene doğal idi. Pretibial ödem yoktu. Solunum sesleri doğal idi.Ekg çekildi.tetkikleri alındı.

Biyokimyada Glukoz: 104 Mg/Dl Üre:40,6 Mg/Dl Egfr:81,92 Kreatinin:0,95 Mg/Dl , Ast:15 U/L, Alt:10 U/L, Amilaz:38 U/L, Kalsiyum:8,58 Mg/Dl, Total Bilirubin:0,99 Mg/Dl, Direkt Bilirubin:0,17 Mg/Dl, İndirekt Bilirubin:0,82 Mg/Dl, Ck:43 U/L, Ck-Mb:11,4 U/L , Alkalen Fosfataz:57 U/L, Crp:68 Mg/L, Ggt:27,2 U/L , Sodyum:135,4 Mmol/L, Potasyum:3,77 Mmol/L, Klor:102,7 Mmol/L, Inr:0,998, Aptt:28,4 Sec , Pt:8,74 Sec , Troponin:73,55 Ng/L. Hemogramda Wbc:9,33 K/Ul , Hgb:11,4 G/Dl , Hct:34,5 % , Plt:189 K/Ul, Mpv: 10,4fl, 3. Saat Kontrol Troponin Değeri 70,88 Ng/L İdi. Çekilen Pa Akciğer grafide dikkat çeken bir seviyelenme gözlendi. Bunun üzerine Toraks Bt çekildi. Tomografide perikardiyal alanda 11 mm kalınlıkta efüzyon mevcuttu. Anterior mediastende perikard komşuluğunda sagitalde 26 mm kalınlığa ulaşan içerisinde hava değerleri içeren koleksiyon saptandı. sağ hemitoraksta hafif plevral efüzyon ve komşu akciğer parankiminde pasif atelektazi izlenmekteydi. Sternum düzeyinde insizyon hattı boyunca uzanan ve umblikus düzeyine uzanan hava değerleri içeren 15 mm kalınlığa ulaşan mayi lokülasyonu izlenmekteydi. Hasta kardiyoloji ve göğüs cerrahiye konsülte edildi. Kardiyoloji doktoru tarafından uygulanan yatak başı ekoda değerlendirilebildiği kadarı ile EF %55, kalbi çepeçevre saran, LV ve Apeks komşuluğunda minimal, sağ ventrikül komşuluğunda 5 mm kadar perikardiyal effüzyon izlendi. Diyastolik kollaps izlenmedi. Tamponad bulgusu yoktu. Göğüs cerrahi doktoru tarafından opere edildiği kliniğe sevk edildi (Resim 1).



Resim 1.Hastaya ait Bilgisayarlı Tomografi Görüntüleri

TARTIŞMA

Mediastinal dokulara, trakeoalveolar dokulardan, gastrointestinal sistemden, özellikle özefagustan, boyundan hava geçişi olarak tanımlanan pnömomediastinum, genellikle asemptomatik seyretse de göğüs ağrısı ve dispne ile de seyredebilir (3). Koroner bypass sonrası, pnömotoraks, pnömomediastinum, pnömoperikardiyum ve perikardiyal effüzyon 3 ay boyunca asemptomatik seyredebilir(4). Bizim hastamızda perikardiyal effüzyonda görülen beck triadı komponentleri mevcut değildi.

Koroner bypass sonrası, pnömotoraks, pnömomediastinum, pnömoperikardiyum ve perikardiyal effüzyon tedavisi için girişimsel işlemde bulunulması yeniden bu hastalıkların oluşmasına sebep olabileceğinden, sürekli bir döngü hali oluşturabilir. Hastada uygulanan poststernotomi operasyonları sonrası sternal dehissens ve mediastinit gibi ciddi komplikasyonlar oluşabilir(5). Bizim vakamızda da pnömomediastinum, pnömoperikardiyum ve perikardiyal effüzyon mevcuttu ancak pnömotoraks yoktu. Bu noktada komplikasyonların acil serviste erken teşhisinin hastanın girişimsel işlemlere gerek kalmadan konservatif tedavi veya medikal tedavi ile tedavi edilebilmesine imkan sağlayacağını düşünüyoruz.

SONUÇ

Sonuç olarak, bypass girişimi sonrası dispne şikayeti ile gelen hastalarda pnömomediastinum, pnömoperikardium ve pnömotoraksın da ayırıcı tanıda düşünülmesi yanlış tanı konulmaması adına önem arz etmektedir.

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IS FAMILIAL MEDITERRANEAN FEVER A RISK FACTOR FOR URINARY SYSTEM CANCERS? A CASE PRESENTATION AND LITERATURE REVIEW

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ABSTRACT

Familial Mediterranean fever (FMF) is the most common monogenic periodic fever syndrome and characterized by recurrent episodes of fever, serositis, arthritis, dermal manifestations, and long-term renal complications. The main long-term complication of the disease is AA amyloidosis (1, 2). A FMF gene (MEFV) has been identified on the short arm of chromosome 16, and several mutations in this gene have been identified in FMF patients(3). Although it is claimed that the incidence of cancer decreases (4, 5) in FMF patients, there are studies showing that the incidence of cancer increases (6, 7). Here in we report the case of a 63-year-old Turkish male patient with a previous diagnosis of FMF presenting with abdominal pain and distension which were found to be due to ureteropelvic stenosis and discuss their association by means of a literature review.

KEYWORDS: Familial Mediterranean fever, Prostate Cancer, Renal Cell Cancer, Amyloidosis

INTRODUCTION

Familial Mediterranean Fever (FMF) is the most common monogenic periodic fever syndrome and characterized by recurrent episodes of fever, serositis, arthritis, dermal manifestations, and long-term renal complications. The main long-term complication of the disease is AA amyloidosis (1, 2). A FMF gene (MEFV) has been identified on the short arm of chromosome 16, and several mutations in this gene have been identified in FMF patients (3). MEFV encodes for the pyrin protein (8), which is a key regulator of the inflammasome, a major mediator of the innate immune system. This cytoplasmic protein is expressed mainly in circulating myeloid lineage cells, synovial fibroblasts, and dendritic cells (9) but has also been found in cell lines derived from colorectal and prostate cancer (10). Due to the low sensitivity and specificity of genetic testing, the diagnosis of FMF is based mainly on the clinical presentation and response to treatment with colchicine. Autoimmune inflammatory conditions mainly develop due to dysfunction of the adaptive immune system leading to a propensity for cancer by various mechanisms. FMF is a member of a different group of inflammatory syndromes, referred to as autoinflammatory diseases (11). To date, few studies have investigated the association of FMF with cancer incidence. However, the relationship between FMF and cancer is still unknown. The burden of inflammation may predispose FMF patients for cancer. In this case, a patient with a diagnosis of FMF presenting with two different tumors is presented.

CASE

A 63-year-old Turkish male patient was admitted to our hospital because of abdominal pain and distention. He had been diagnosed with FMF because of recurrent fever and abdominal pain attacks with familial history over the last 40 years. Genetic analysis revealed that the patient was homozygous for the M694V, E148Q, R202Q mutations in the MEFV gene. He suffered about 20 to 24 recurring peritoneal attacks a year. He used colchicine regularly. The patient had never smoked. Renal amyloidosis secondary to FMF was detected.

The patient applied with the complaint of abdominal pain in 2013. Abdominal ultrasound revealed a 17 cm mass in the right kidney. Unclassifiable renal cell carcinoma was found in the pathology of the right radical nephrectomy material. No tumor was detected at the surgical margin.

A mass in the prostate gland was detected in the urinary system USG of the patient who applied with the complaint of abdominal pain in 2017. Pathological examination of radical prostatectomy material revealed prostate adenocarcinoma. No tumor was detected at the surgical margin.

Ureteropelvic stenosis was detected in the left kidney in the non-contrast abdominal tomography and retrograde pyelography performed at the last admission of the patient to our hospital with the complaint of abdominal pain. The patient was recommended an operation for pyeloplasty. However, the patient refused the operation.

His laboratory evaluations were as follows: Hemoglobin: 13,4 g/dL (12-18 g/dl), WBC: 4600 mm^9/L, thrombocyte: 216x10^9 mm^3/L, Urea: 68 mg/dL, Creatinine: 2,21 mg/dL, Sodium: 137 mmol/L, Potasium: 3,9 mmol/L, Calcium: 10 mg/dL, Phosphorus: 3,03: mg/dL, ALT: 13,5 U/L, AST: 17,6 U/L, ALP: 88 U/L, GGT: 14 U/L, CRP: 0,29 mg/dL (0.0-0.8).

DISCUSSION

FMF is an autoinflammatory disease manifested as recurrent serosal inflammation. An association between FMF and malignancy has not been evaluated. MEFV encodes for the pyrin protein (8), which is a key regulator of the inflammasome, a major mediator of the innate immune system. This cytoplasmic protein is expressed mainly in circulating myeloid lineage cells, synovial fibroblasts, and dendritic cells (9) but has also been found in cell lines derived from colorectal and prostate cancer (10).

Autoimmune inflammatory conditions mainly develop due to dysfunction of the adaptive immune system leading to a propensity for cancer by various mechanisms. FMF is a member of a different group of inflammatory syndromes, referred to as autoinflammatory diseases (11). To date, few studies have investigated the association of FMF with cancer incidence.

In two large cohort studies conducted in Turkey (5) and Israel (4), it has been shown that the incidence of cancer development is lower in patients with FMF compared to the normal population. However, the underlying mechanism has not been elucidated. This result may be related to the drugs used by the patients in the treatment of FMF.

FMF could influence tumorigenesis in several ways. Although the exact function of pyrin is not completely understood, its mutant form is suspected to enhance inflammasome activity, a feature of FMF. A high frequency of inherited variants in the MEFV gene was identified in a study in patients with MM. This result suggested that the MEFV gene may be a cancer susceptibility gene (12).

Generalized systemic inflammation, activated inflammatory cells, and continuous cytokine exposure in these disorders are the factors which may increase the cancer risk in affected individuals (3).

Further studies in this patient population may open up new avenues regarding cancer risk assessment, immunoprevention, and even treatment of cancer, particularly in patients with a high risk.

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WELLENS' SYNDROME

INTRODUCTION: Wellens' syndrome is a pattern of electrocardiogram (ECG) changes including deeply inverted or biphasic T waves and is highly suggestive of left anterior descending artery (LAD) stenosis. Failure to diagnose this condition, with subsequent inappropriate management, may have fatal consequenecs. In this article, we present a case of Wellens syndrome triggered by COVID-19 infection.

CASE: A 69 years old male patient was admitted to the emergency room with complaints of pressure on the chest, shortness of breath and subfebrile fever that started 2-3 days ago. No complaints of cough, sputum, wheezing, hemoptysis. No history of cardiac and pulmoner disease. The patient had a history of diabetes and hypertension. On physical examination; the patient appeared alert and oriented. Vital signs were normal: blood pressure was 110/60 mmHg; heart rate was 64 bpm; peripheral oxygen saturation was 99% in room air; a normal respiratory

rate (15 b/m) was present; and there was no fever. Hearts sounds were rhythmic: No murmur was detected. There was no defance or rebound. There are tine crackles on listening to both lung bases. ECG has biphasic t waves in leads v2-v3 (Figure-1). In laboratory studies leukocyte:14200/mm3, CRP:218, Troponin 54 and 2 hours later control troponin:62. glukoz:185 mg/dl, kreatinin:0,85 mg/dl, üre:35 mg/dl, GGT:35 U/L, AST:29 U/L, ALT:31 U/L, Sodium:130 mmol/L, Potasyum:4,1 mmol/L, Magnezyum:2,19 mmol/L, Amilaz:55 U/L, Lipaz:40 U/L, ph:7,40 , Hb:10,3, PLT:1500000 . When sections compatible with thorax computed tomography images were seen COVİD19 pneumonia with CORADS 5 Score. In this patient, COVID-19 infection was confirmed by a positive SARS-CoV-2 reverse transcription-polymerase chain reaction (RT-PCR) from a nasopharyngeal swab. He was taken to the intensive care unit with the pre-diagnoses of ACS and COVID-19.

CONCLUSION: Coronary arery disease often refers to coronary atherosclerotic disease that results in severe coronary artery narrowing and leads to insuffcient blood flow to the myocardium. It is clear that COVID 19 pneumonia is characterized by cytokine storm with severe endothelial inflammation, microvasculer trombosis and multiorgan failure. As result of the effects of COVID 19 on both thrombosis and myocardial damage, myocardial infarction freguently seen in these patient. Wellens' syndrome and COVID 19 are very high risc for the development of extensive myocardial infarction of the anterior wall and death.

KEYWORDS: Hyperkalemia, chronic renal failure, COVID-19, sharp T waves, hemodialysis

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ATYPICAL T WAVES IN A MAN WITH ATYPICAL CHEST PAIN

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INTRODUCTION: Hyperkalemia is one of the most common and life-threatening metabolic emergencies in emergency departments. It is frequently seen in people with known chronic renal failure or end-stage renal disease. Clinically, paresthesia and weakness that can progress to flaccid paralysis are seen, while sharp T waves, prolonged PR intervals or enlarged QRS complexes are seen on the ECG. Calcium, insulin, beta adrenoreceptor agonists, bicarbonate, diuretics, sodium polystyrenesulfonate and hemodialysis are recommended for the correction of hyperkalemia and clinical findings.

CASE: A 29-year-old male patient applied to the emergency department with the complaints of stabbing pain in the chest and numbness in the hands and feet that started 2 hours ago. The patient had a history of chronic kidney failure and hypertension. He is receiving routine hemodialysis. He is receiving hemodialysis on Tuesdays, Thursdays and Saturdays. On Physical Examination; conscious, oriented cooperative GCS: 15, Neurological examination was normal. Heart sounds were rhythmic, no murmur. Lung sounds were normal, no ral rhonchi. No defense, no rebound. Bilateral radial and femoral pulses were clear. ECG showed sharp T waves and widened QRS (Figure-1). In blood gas, the patient's serum potassium level was 7.8 mmoL/L. 20 units of regular insulin in 300 cc 20% dextrose plus 2 grams of calcium gluconate was administered. A nephrologist was consulted for the patient and he was taken to emergency hemodialysis. ECG of the patient after hemodialysis was normal sinus rhythm (Figure-2).

CONCLUSION: Early treatment with calcium gluconate resulted in the recovery of the life-threatening cardiac rhythm disorder in the early period. Time is needed for the effects of treatment approaches to reduce potassium levels. For this reason, it should be kept in mind that weakness, fatigue, chest pain are indicators of severe hyperkalemia in patients with chronic renal failure, end-stage renal disease, and hemodialysis treatment. Calcium treatment should be the first choice. The cardiac protective effect of calcium starts in 1-3 minutes, but since its effect ends in 30-60 minutes, it is recommended to reduce serum potassium levels with hemodialysis in severe cases.

KEYWORDS: Hyperkalemia, chronic renal failure, sharp T waves, hemodialysis

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THE SPLENIUM INFARCT

INTRODUCTION : Transient lesions of the splenium of the corpus callosum (SCC) are a rare phenomenon that can occur in a variety of conditions. Morphologically, these lesions are located in the middle part of the SCC, are oval in shape and well demarcated. These lesions are unlikely to enlarge and acquire a hemorrhagic character, and follow-up imaging studies usually do not show new formation of accompanying lesions. In addition, focal diffusion is limited in diffusion-weighted MR images. Cranial computed tomography (CT) may be unremarkable. Cytotoxic edema is the most common cause in the etiopathogenesis of such lesions and may result from the toxic effects of various drugs, especially antiepileptics. Additionally, systemic metabolic or infectious diseases may cause a similar appearance with focal demyelination. Clinically, patients may present with encephalopathy with mild signs of impaired consciousness. We discussed the radiological features, risk factors and prognosis of this rare entity in the context of the case reports.

CASE: A 24-year-old female patient with no known systemic disease is admitted to our emergency department with the complaint of sudden vision loss. When the history was touch, it turn up that the loss of vision was intermittent which lasts for a few minutes and than goes back to normal. We also learned that the patient has been on an aggressive diet in the last 45 days and has lost 7kg. Vitals; blood pressure: 120/75 mmHg pulse: 98/min pulse oximetry: 98% fingertip blood sugar: 98, fever: 36.7 degrees. No pathology was detected in the blood tests of the patient who did not have pathology in his examination. The patient with bilateral sudden vision loss is being consulted with eye diseases. No pathology was detected in the peripheral visual pathways and the patient was investigated centrally. In the diffusion MRI taken, acute diffusion restriction in the corpus callosum splenium region was observed and he was admitted to the neurology department. (fig. 1 – fig.2)

CONCLUSION : Although SCC involvement does not indicate the presence of a specific disorder, certain conditions may be associated with lesions in this anatomical region. Various local or systemic infections can affect SCC. Initially, the patient may present with nonspecific signs and symptoms such as mildly elevated body temperature, nausea, vomiting, headache, nasal congestion, and mild mental changes.

However, in some patients, the clinical picture may become more dramatic with more severe mental changes and epileptic seizures.

KEY WORDS: transient vision loss, corpus callosum, splenium ınfarct

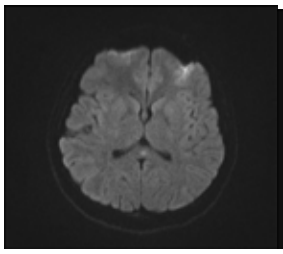

FIG.1

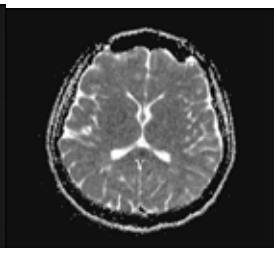

FIG.2

POSTPARTUM AORT DİSEKSİYONU

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GİRİŞ: Gebelikte ileri anne yaşı akut koroner sendrom (AKS) görülebilmesini yaygın hale getirebilmektedir. Gebelikte AKS, gebe olmayan aynı yaş kadınlara göre 3 kat daha sık görülür. AKS nedeni genellikle spontan koroner arter diseksiyonu, koroner vazospazm veya koroner embolidir. Spontan koroner arter diseksiyonu, gebeliğe bağlı akut miyokart enfarktüsünün en yaygın nedeni olup tüm vakaların yaklaşık % 40'ından sorumludur. En sık 3. trimester ve postpartum dönemde görülür. Gebelikte aort diseksiyonu ise çok nadirdir ve genellikle 3. trimester ve doğum sonrası dönemde görülür.

OLGU: 39 yaşında kadın hasta 112 ile acil servisimize yeni başlangıçlı göğüs ve sırt ağrısı şikayeti ile getirildi. Özgeçmişinde hasta 20 gün önce sezaryen doğum yapmıştı ve kronik hastalığı yoktu. Ayrıca ilaç kullanım öyküsü ve sigara öyküsü yoktu. Fakat hastanın ailesinde erken yaşta AKS öyküsü mevcuttu. 112 ekipleri tarafından ölçülen hastanın vitalleri; kan basıncı 140/80 mm/hg, kan şekeri 138 mg/dl, nabız 76, spo2 % 94 idi. 112 tarafından çekilen EKG'de ise inferior derivasyonlarda ST segment elevasyonu mevcuttu. 112 ekibinden devir alınan hasta, acil serviste kontrol EKG çekileceği esnada kardiyak arrest geçirdi ve defibrilatörde VF görüldü. Hastaya hızlıca defibrilasyon uygulanıp, kılavuza uygun olarak ileri kardiyak yaşam desteği gerçekleştirildi. 25 dk kardiyopulmoner resüsitasyon süresince 12 kez VF'ye giren hastaya her defasında defibrilasyon yapıldı. 25 dakikalık kardiyopulmoner resüstasyon sonrasında spontan dolaşımı geri dönen hastanın kontrol EKG'sinde anterior derivasyonlarda yaygın st çökmesi ve t negatifliği görüldü. Vitalleri stabillenen hastanın kan tahlil sonuçları şu şekildeydi; troponin 26 pq/mm, d-dimer 1,8 ug/ml, ph:7,04 laktat:10, pco2 :21, hco3:5,7, BE:23,4, diğer metabolit değerleri, bft, kcft ve hemogram değerleri normal aralıktaydı.

Hasta postpartum AKS tanısıyla kardiyolojiye konsülte edildi. Hasta, kardiyoloji uzmanı tarafından inferior miyokart enfarktüsü ön tanısıyla acil perkütan koroner anjiyografiye alıdı. Koroner anjiografide ise aort kökünden başlayan ve abdominal aort boyunca devam eden aortik diseksiyon tespit edildi. Ayrıca sağ koroner arter diseksiyon nedeniyle görüntülenemedi. Diseksiyondan etkilenen tüm arterlerin saptanabilmesi için toraks ve abdomen CT angiografi çekildi (Figure 1-5). Cerrahi tedavi için kalp-damar cerrahisine konsülte edilen hasta operasyona alınamadan exitus oldu.

SONUÇ: İleri yaş gebe hasta grubunda veya postpartum dönemdeki hastalarda ani başlayan göğüs ve sırt ağrılarında aortik diseksiyon ayırıcı tanıda mutlaka akılda bulundurulmalıdır.

ANAHTAR KELİMELER: postpartum, gebelik, aort diseksiyonu

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İNTRODUCTİON

20% of strokes are hemorrahage and 10% of these are subarachnoid hemorrhage (SAH). Most spontaneous SAH is caused by ruptured saccular aneurysms. Other causes include occult trauma, arteriovenous malformations/fistulas, vasculitides, intracranial artery dissections, amyloid angiopathy, bleeding diathesis, and illicit drug use (especially cocaine and amphetamines). Most SAH is caused by rupture of intracranial aneurysms. Therefore, risk factors for aneurysm formation overlap with risk factors for SAH.First of all, risk factors associated with intracranial aneurysm formation are discussed separately.These include smoking, hypertension, genetic risk, alcohol, sympathomimetic drugs, estrogen deficiency, antithrombotic therapy, etc.

CASE

Female patient with known hypertension disease, 43 years old, who applied with the complaint of headache. GCS(glaskowcomascore):15.Oriented Cooperative. Bp:140/80mmHgHR: 90/min SpO_2:92%. Patient had sudden onset headache for 1 hour without nausea and vomiting.The patient's neurological examination were normal. She has no additional complaints. The patient who was scheduled for analgesic treatment was taken to the resuscitation room due to a regression in consciousness.Elective endotrarecal intubation was applied when GCS: 8-9.There was diffuse NASAH in the brain CT (Figure.1,Figure.2) taken after the patient was stabilized.

Emergency surgery was not considered for the patient who was consulted to neurosurgery. She was admitted to the intensive care unit for treatment and follow-up.After intensive care and service follow-ups, she was discharged with recovery.

CONCLUSİON

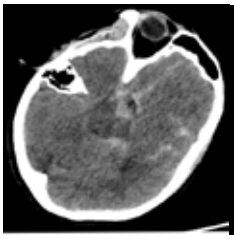
SAH are caused by ruptured saccular aneurysms. An estimated 15 to 20 percent of patients with nontraumatic SAH are nonaneurysmal. The causes of NASAH are potentially diverse, and the mechanism of bleeding in these cases are often not identified.

Theclinicalpresentation of NASAH oftenmimics that of aneurysmal SAH. The general care of patients with NASAH should be the same as aneurysmal SAH patients.

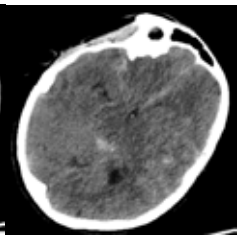
The diagnosis of SAH is usually made by CT of the brain, which shouldalways be performed emergently in a patient. All patients with SAH should be evaluated with basic laboratory testing including complete bloodcount, serum chemistries, and coagulation studies and toxicology screening.

Complications of aneurysmal SAH; hydrocephalus, vasospasm,cerebral ischemia, seizures, hyponatremia and cardiac abnormalities also occur in NASAH. In this regard, patients with NASAH should be managed similarly to aneurysmal SAH.

KEYWORDS: subarachnoid hemorrhage, nonaneurysmatic subarachnoid hemorrhage, spontane subarachnoid hemorrhage



(Figure.1)



(Figure.2)

INTRODUCTION: Pulmonary embolism is an obstruction of the pulmonary artery or its branches with material originating from another part of the body. It is often caused by lower extremity deep vein thromb us. Although it is more common in men than women in general; The risk increases with age in women. Among the risk factors, there are many hereditary and acquired factors (such as recent surgery, immobilization, hormone therapy, active cancer).

CASE: A 66-year-old male patient presented at he Emergency Department complaining of fatigue. His general condition was moderately conscious, cooperative and oriented, his vitals were: ta:125/75 mmHg, pulse:110/min, fever:36.1 oxygen saturation:80 mmHg. The patient has a history of pancreatic cancer, diabetes mellitus, hypertension and coronary artery disease (with bypass). The patient received 3 cycles of chemotherapy and applied to the Medical Oncology Clinic for the 4th cycle of chemotherapy. He was hospitalized and discharged. The patient presented to us afterwards. on examination, there was no guardıug or rebound tenderness in the abdoumen, rol and rouehus was not noted on chest auscuitatiou, it was pretibia edema: artifact / artifact. There was no difference in temperature and diameter in the legs, and homans was negative. Arterial blood gas showed hypoxia and hypocarbia. In his hemogram, there was no significant feature other than hg 9.6 (consistent with basal value). The patient had a filling defect starting from the right main pulmonary artery and an infiltration area (infarct?) in the right lower lobe in the thorax CT angiography performed with the preliminary diagnosis of pulmonary embolism. (Figure 1-2) The patient, who was evaluated by the Chest Diseases Clinic, was planned for IV thrombolytic therapy, and was admitted to the intensive care unit.

CONCLUSION: Malignant patients are at higher risk for thrombotic complications due to hypercoagulation and their mortality may be higher. For this reason, pulmonary embolism should be included in the preliminary diagnosis in patients with malignancy who present to the emergency department, by performing a detailed assessment together with the risk factors and clinical features of the patient.

KEYWORDS: Fatigue, pancreatic cancer, pulmonary embolism

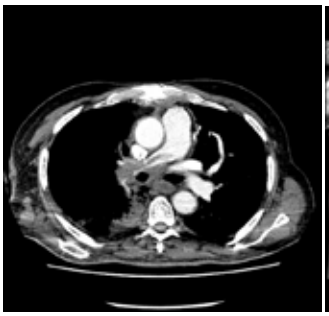


Figure 1

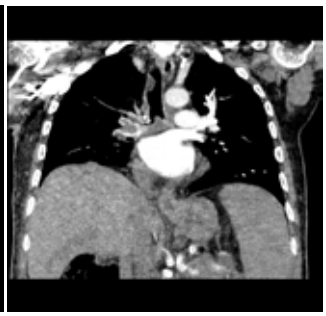


Figure 2

ÖZET

AMAÇ: Acil servislerimizde sık rastladığımız Kronik Obstrüktif Akciğer Hastalığı (KOAH), zaralı gaz ve partiküllere karşı havayollarıve akciğerin artmış kronik inflamatuar yanıtı ile ilişkili ve genellike ilerleyici özellikteki kalıcı gava akımı kısıtlanması ile karakteri, yaygın görünmekle beraber önlenebilir ve tedavi edilebilir bir hastalıktır. Bu hastalık sık alevlenmeler ile seyreder. Hastalıkların akut evresinde yeni bir belirteç olarak kullanılmayı hedefleyen stres hormonu copeptini ve fibroz, inflamasyonun bir biyobelirteçi olarak kullanılan galektin-3'u çalışarak akut KOAH alevlenmesi olan hastalar üzerinde değerlerini araştırdık.

GEREÇ VE YÖNTEM: Çalışmamız 01/11/2018 - 30/06/2019 tarihleri arasında Yozgat Bozok Üniversitesi Araştırma Ve Uygulama Hastanesi Acil polikliniğine KOAH alevlenme ile başvuran 34'ü kadın, 51'i erkek olmak üzerine 85 hasta dahil edildi. Hastalarımız post bronkodilatör sonrası solunum fonksiyon testleri sonucu ile GOLD'a göre sınıflandırıldı. GOLD 1'de postbronkodilatör sonrası beklenen FEV1 orası % 80'den yüksek yada eşit olaması, hafif derecede hava akım kısıtlanmasıdır. GOLD 2'de beklenen FEV1 oranın %50 ve %80 arasında kalan kısım orta derecede hava akım kısıtlanmasıdır. GOLD 3 ağır ve GOLD 4 ise çok ağır hava akım kısıtlanması anlamına gelir ve alevlenme riski yüksek oranlara ulaşmaktadır(1). Buna göre 4 hasta grubu ve 1 kontrol gurubu olmak üzere 5 grup oluşturuldu. Tanı ve tedavi amaçlı alınan venöz kanlarından Copeptin ve Galactin 3 düzeyleri ölçüldü. Veriler SPSS versiyon 20.0 kullanılarak değerlendirilmiştir. İstatistiksel fark ki kare testi ve Student's t testi ile değerlendirilip $p<0.05$ olan değerler anlamlı kabul edilmiştir.

BULGULAR: Çalışmamızda elde ettimiz sonuçlar bize FEV 1 oranı düştükçe Gal-3 ve copeptin değerlerinde anlamlı artış olduğunu gösterdi. Bu durum bize hastalığın şiddeti arttıkça bu iki değerinde artığını gösterdi. Tüm gruplar arasında p değeri anlamlılık düzeyi < 0,05 dir. Bununla beraber WBC ve CRP değerlerinde hastalığın şiddeti ile bir artış olduğunu gördük. GOLD ve sağlık kontrol grubu arasında Copeptin ve Galektin 3 enzimleri incelendiğinde bu iki değerde gruplar arasında anlamlı farklılık olduğu ve istatistiksel olarak anlamlı derecede yüksek olduğu gördük(P= 0,000). Bu iki değerin çok ağır KOAH hasta grubu olan GOLD 4'de daha yüksek olduğu gözlemlenmektedir. Buna kıyasla, Copeptin ve Galetin-3 değerlerlerinin GOLD 1 ve sağlıklı kontrol grubunda daha düşük olduğunu gördük.

SONUÇ: Akut KOAH alevlemeleri acil servislerde sık rastladığmız, yüksek mortalite ve morbiditeye sahip olan bir hastalıktır. Akut KOAH şiddetini, prognozunu ve alevlenmelerini tanımlamak ve belki de tahmin etmek için çeşitli biyobelirteçlerle ihtiyaç vardır. Çalışmamız bildiğimiz kadarıyla literatürde ilk defa olarak Copeptin ve Galectin-3 akut KOAH alevlenmeleri hastalarda ilk defa beraber değerlendirilmiştir. Daha önce yapılan çalışmalarda bu değerler ayrı ayrı incelenmiş olup ve çoğu çalışmada anlamlı sonuçlar göstermiştir.

Akut KOAH alevlenmeli hastalarda hastalığın şiddeti ve prognozunu tahmin etmek için yaptığımız bu çalışmada bize anlamlı sonuçlar vermiştir. Bu rağmen, Akut KOAH alevlenmeli hastalarında ve prognostik değeri ve hastalığın şiddetini açıklamak için daha ileri çalışmalara ihtiyaç vardır.

ANAHTAR KELİMELER: KOAH, Copeptin, Galectin -3

FRACTURE-DISLOCATİON OF MONTEGGIA

INTRODUCTİON: Monteggia fracture dislocation; It is the name given to the proximal fracture of the ulna together with the dislocation of the radial head. It is more common in children than adults. It is often seen after low-energy trauma such as falling on the hand. While it can be treated conservatively in children; Open reduction is required in adult patients.

CASE: A 37-year-old female patient was brought to us with an in-vehicle traffic accident with 112 staff. Her general condition was moderate, oriented cooperative, GCS 15, vitals were stable. While taking the history, she only described pain in the left arm. She had no known chronic condition and drug use. On examination, there was tenderness, swelling and deformity in the left elbow. Neurovascular examination of the patient who had no open wound was normal. Her systemic examination revealed unremarkable finaling . Extremity X-ray showed left radial head dislocation and proximal ulna fracture (dislocation with monteggia fracture). (Figure 1-2) The patient was consulted to the Orthopedics Clinic. The patient, who was hospitalized by the Orthopedics depatment, was discharged after under goin surgery and fun recevery.

CONCLUSION: Fracture-dislocation of Monteggia is a complex injury of the elbow joint. Radial head dislocation should be reduced and protected in its treatment. If it is not recognized correctly, if the reduction is delayed, it may result in loss of function in the elbow joint. Therefore, early diagnosis and treatment of these patients should be performed in the emergency department.

Key words: Elbow joint, monteggia, Radius head dislocation

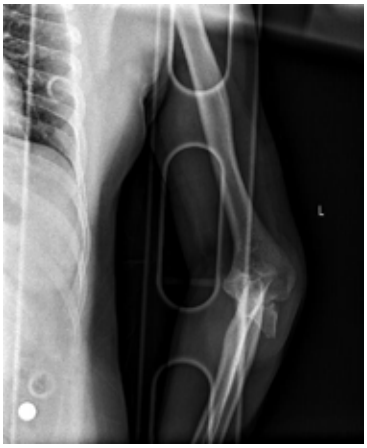


Figure 1

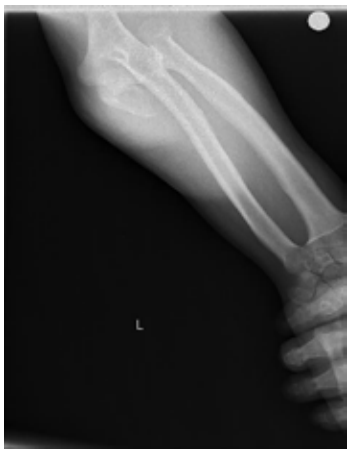


Figure 2

INTRODUCTION:

Foreign body aspiration is the inhalation of foreign bodies into the larynx and more distal airways. It is more common in children than adults. While trauma, drug or alcohol poisoning are risk factors in adults; In addition, elderly patients have slowed swallowing, drug use, and stroke. The clinical picture may vary depending on the location and duration of the foreign body in the airway. The most common symptom is chronic cough due to obstruction of the distal airways. Rarely, adults may present with acute asphyxia due to large foreign bodies blocking the upper respiratory tract.

CASE:

A 78-year-old male patient was brought by 112 staff due to sudden worsening respiratory distress while eating.The patient was taken to resuscifation room for safety measures . On arrival, the general condition was poorly agitated gcs: 10 saturation 60 mmHg (with oxygen) pulse 120 blood pressure 110/70 mmHg. Endotracheal intubation was applied to the patient with respiratory distress. According to the history taken from his relatives, the patient, who was diagnosed with laryngeal ca but did not receive active treatment, had shortness of breath, bruising, which suddenly developed while eating trotter soup, and 112 staff were informed. A foreign body was seen in the right main bronchus in the thorax CT (Figure 1-2). The foreign body in the right main bronchus was removed with rigid bronchoscopy. The patient, who was extubated after bronchoscopy, was discharged with recovery after service follow-up.

CONCLUSION:

Although foreign body aspirations are less common in adults, evaluation should be made when appropriate clinically. Especially in large foreign bodies obstructing the upper airways, mortality due to asphyxia can be high if early diagnosis and intervention is not performed.

KEYWORDS:

Asphyxia, aspiration, foreign body

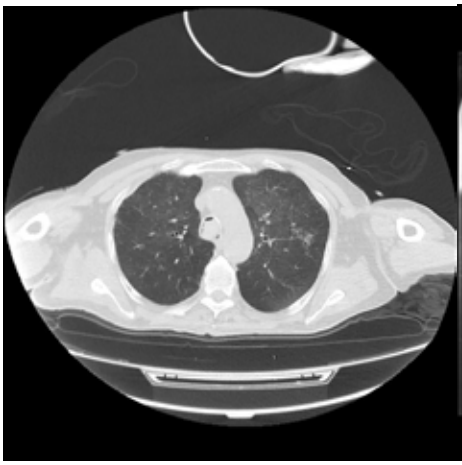


Figure 1

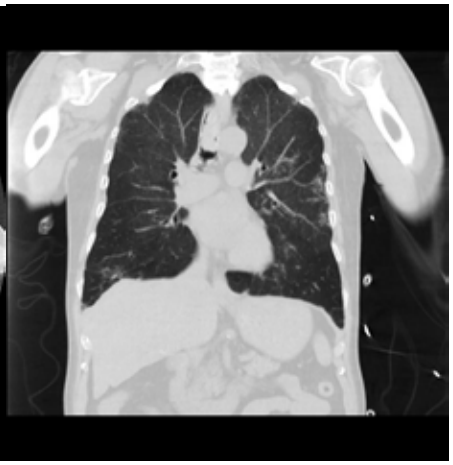


Figure 2

BILATERAL CALCANEUS FRACTURE

Sümeyye Gündüz, Hatice Kübra Taşci, Emine Özdal

INTRODUCTION:

The calcaneus is the most common tarsal bone prone to fracture, representing 60 percent of all tarsal fractures in adults. The clinical presentation of a calcaneal fracture depends on its location and the severity of the injury. Most calcaneal fractures result from axial loading of the foot after significant trauma, typically from a fall or jump from a height. The pain is usually quite severe and weight bearing is often impossible. Swelling and tenderness are typically prominent and can be severe. Deformation of the heel may be evident.

CASE: A 42-year-old male patient was brought to us by 112 staff due to a fall from a height. In the first examination, the patient's vital signs were stable, gcs 15 oriented and cooperative. The second examination of the patient, whose pathology was not observed in the first examination, was started. On examination, there was tenderness on the soles of the bilateral feet. Peripheral pulses were open, and distal capillary filling was normal. Neuromotor examination was suboptimal due to pain on. External system examination revealed unremarkable fiuding. The patient's examinations were requested and imaging was performed. Stabilization of the patient with bilateral calcaneal fracture (Figure 1) was achieved in the lower extremity CT. He was admitted to the orthopedic clinic after consultation.

CONCLUSION: Although calcaneus fracture is rare, it is one of the first condifious that should be considered in patients presenting with a fall from a height. Especially the presence of bilateral calcaneal fracture indicates high-energy trauma and requires multisystem evaluation.

KEYWORD : calcaneus fracture, fall from height, orthopedic emergencies

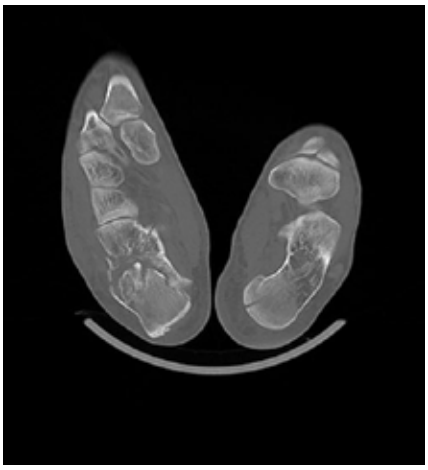


Figure 1

PATIENT WITH DYSURIA HAD RENAL ARTERIA ANEURSYM

INTRODUCTION

Renal artery aneurysms are rare and generally they are incidental.A renal artery aneurysm is defined when the diameter of the renal artery segment enlarges more than 50% of the normal diameter. Renal artery aneurysm may present with symptoms related to hypertension, pain, hematuria. Although asymptomatic patients have a better prognosis but the risk of rupture and fistula increases as the diameter increases.

CASE

A 76-year-old male patient. He applied with the complaint of left flank pain and burning during urination for a long time. The patient has poor self-care, known femoral artery occlusion, but does not use his medications. He also does not go to cardiovascular surgery appointments. On arrival, left arm blood pressure: 134/68 mmHg, right arm blood pressure: 178/96mmHg , Heart rate: 86/min, SpO_2: 93. On physical examination, oscultation were normal. Abdominal examination is normal. There was no right and left costovertebral angle tenderness. The lower extremity peripheral pulses of the patient could not be taken. Bilateral femoral pulses were also weak. Angio CT was performed with the preliminary diagnosis of dissection, renal artery aneurysm, and aortic aneurysm. CT report: Up to 28 mm dilatation in the abdominal aorta from the level of the renal artery to the exit level of the SMA, Aneurysmatic dilatation was observed in the lumen with the appearance of 10 mm partial thrombosis. Below this level, contrast filling was not observed down to the distal of the external iliacs, up to the aortic bifurcation point, and in the common iliac, external and internal iliacs. Contrast filling was observed in the external iliac and femoral arteries after approximately the iliac ligament level. Contrast filling was observed in SMA and IMA. Calibration loss was observed at the aortic outlet in the left renal artery. The patient was consulted to cardiovascular surgery and hospitalized. Calibration loss was observed at the aortic outlet in the left renal artery. The patient was consulted to cardiovascular surgery and hospitalized.

CONCLUSION

Contrary to popular belief, renal artery aneurysm is not uncommon. It usually presents with hypertension, flank pain and hematuria. Serious diseases can be detected even in patients presenting with simple symptoms. Therefore, a detailed anamnesis and detailed physical examination will be very life-saving.

Key words:renal arter aneurysm, dysuria, hematuria

ILEUS SUPPOSED GI BLEEDING

INTRODUCTION

In GI bleeding, patients may typically present with complaints of hematemesis, hematochezia and melena as well as nonspecific symptoms such as fatigue, dizziness and syncope. Hematemesis and melena indicate upper GI bleeding, while hematochezia is generally seen in lower GI bleeding. The main findings of ileus; abdominal pain,inability to defecate and pass flatus, nausea, vomiting, loss of appetite and abdominal distension.

In this case, we described the patient who was referred to emergency department with the suspicion of gastrointestinal bleeding, who vomited in brown color from the public hospital.

CASE

76 years old male patient. He applied with complaints of brown-colored vomiting and abdominal pain that started this morning. At the patient's admission, his blood pressure was: 170/95mmHg, Heart Rate: 101/min, SpO_2: 97%, Fever: 36.7° C degree. The patient with a known history of hypertension is using combination of ACE inhibitör and Tiazide-like diuretic. There is no known history of surgery. In the anamnes is that we had from the patient; he could not defecate for 5 days, and that he had pain and swelling in all quadrants of his abdomen. In the abdominal examination, there was widespread tenderness in the abdomen, and there was no defense and rebound. In the respiratory system examination; the lungs were normal with oscultation, no rales, no rhonchi. His ECG was in sinus rhythm. There were ileus compatible levels in the directradiograph(Figure-1). In the inserted nasogastrictube, there was brown colorored gastric content without blood. There was no decrease in hemoglobin levels. In the rectal examination rectum was empty. Brown vomit was considered as intestinal dilatation fluid. Gastrointestinal bleeding was not considered for the patient. We took in consideration ileus according to abdominal CT (Computed tomography) (Figure-2,-3,-4). The patient was consulted to general surgery and hospitalized for further examination and treatment.

CONCLUSION

In this patient, its observed that the symptoms of GI bleeding were together with intestinal dilatation fluid. Detailed anamnesis is very helpful in diagnosing patients. Patients should be questioned very carefully and detailed.

KEYWORDS: GI bleeeding, ileus

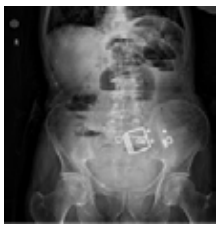


Figure-1

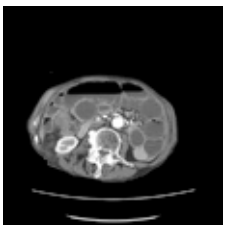


Figure-2

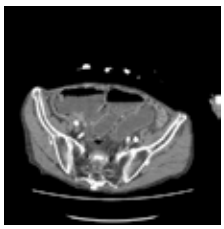


Figure-3

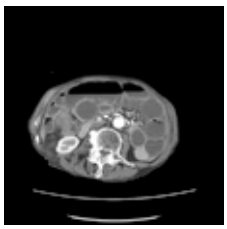


Figure-4

TRAVMA SONRASI ADRENAL DEŞARJ, TRAVMA İLİŞKİSİZ İNTRASEREBRAL KANAMA

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GİRİŞ:

İntraserebral hematomlar (İSH) hipertansiyonun etkili takip ve tedavisine rağmen kısmen azalma gösterse de halen yüksek mortalite ve morbidite oranına sahiptir (1).Tüm serebrovasküler olayların %10'u İSH'dur (2). Genel populasyonda yüzbinde 15 görülme sıklığına sahiptir (3). Olguların yaklasık üçte ikisi baslangıçta maksimal nörolojik defisit ile prezente olmakla birlikte progresif şekilde yerleşen nörolojik defisit ile de karşımıza çıkabilir (4). Tüm yaş ve lokalizasyonlarda hipertansiyon en sık [%45-91] İSH nedenidir (1).

İSH nedenleri : 1-Hipertansiyon , 2-Vaskülopatiler, 3-Hematolojik bozukluklar, 4-Tümörler, 5-İlaçlar, 6-diğer olarak özetlenebilir (2).

VAKA:

39 yaşında kadın hasta geçirdiği araç içi trafik kazası sonrasında bilinç bulanıklığı ile 112 tarafından acil servise getirildi. Hasta geldiğinde bilinç kapalı, GKS:3 ve nabız alınabiliyordu. Hastanın solunum riskinden dolayı entübe edildi. Tansiyonu 185/90 mmHg nabız:100/dk diğer vital değerleri olağandı. Yapılan ilk bakısında hastanın kafatasında herhangi travma bulgusuna rastlanmadı. Görüntülemeleri alınan hastanın ventriküller içine açılan intraserebral kanaması olduğu(Görsel 1,2,3), sağ tarafa 1 cm shift yaptığı , kafatası ve kafa tabanında herhangi fraktür bulgusu olmadığı gözlendi. Diğer görüntüleme bulgularında da intraserebral hemorajiye neden olabilecek herhangi bir patolojiye rastlanmadı. Hastanın yakınlarından alınan anamnezinde ve sistem sorgulamasında hipertansiyon tanısının ve antikoagülan ilaç kullanımı olmadığı öğrenildi. Hastaya başlanan antihipertansif tedavi sonrasında Beyin Cerrahisi bölümü ile iletişime geçilerek hastanın İSH tanısıyla YBÜ yatışı yapıldı.

TARTIŞMA:

Biz bu hastada belirgin GKS düşüklüğü olması ve yüksek enerjili travma olması üzerine çektiğimiz beyin BT'de intraparankimal serebral hemorajiye rastladık. Bu tanıyı destekleyecek herhangi bir travma bulgusunun olmaması ve hastanın hipertansif olması üzerine adrenal deşarj ile gelişen hipertansiyon sonrasında İSH olarak değerlendirdik. Bu vaka sonrasında yüksek enerjili travma ile gelen hastalarda gelişebilecek olan adrenal deşarjın yüksek kan basıncına ve sonucunda İSH'a neden olabileceğini düşünüyoruz.

SONUÇ:

Travma ile başvuran hastalardaki patolojik vital ve fizik muayene bulguları değerlendirirken yalnızca travma bölgesi odaklı düşünmemeliyiz. Bu vaka bize yüksek enerjili travma sonrasında adrenal deşarj ile hastanın geçmişi ve yaşı ile uyumsuz şekilde intraserebral hemoraji gelişebileceğini gösterdi.

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4: Bae H G, Lee K S, Yun I G et al. Rapid expansion of hypertensive intracerebral hemorrhage. Neurosurgery-1992:31;35-41

ANAHTAR KELİMELER:

Adrenal deşarj, Hipertansiyon, İntraserebral kanama, travma

POST TRAUMATIC ADRENAL DISCHARGE AND NON-TRAUMATIC INTRACEREBRAL HEMORRHAGE

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INTRODUCTION:

Intracerebral hematomas (ICH) still have a high mortality and morbidity rate, although they partially decrease despite effective follow-up and treatment of hypertension. (1) 10% of all cerebrovascular events are ICH (2). It has an incidence of 15 per hundred thousand in the general population (3). Approximately two-thirds of the cases initially present with maximal neurologic deficit, but may also present with progressive neurologic deficit (4). Hypertension is the most common [45-91%] cause of ICH in all ages (1). The causes of ICH can be summarized as: 1-Hypertension, 2-Vasculopathies, 3-Hematological disorders, 4-Tumors, 5-Drugs, 6-other (2).

CASE REPORT:

A 39-year-old female patient was brought to the emergency service by 112 with clouding of consciousness after an in-vehicle traffic accident. When the patient came GCS:3, she has unconscious and pulse could be taken. The patient was intubated due to respiratory risk. Her blood pressure was 185/90 mmHg, heart rate is 100 bpm, and the other vital values were normal. In the first examination, no signs of trauma were found in the skull of the patient. It was observed that the patient, whose images were taken, had intracerebral hemorrhage opening into the ventricles (image 1,2,3), shifted 1 cm to the right side, and there was no evidence of fracture in the skull. No pathology that could cause intracerebral hemorrhage was found in other imaging findings. In the anamnesis taken from the relatives of the patient and in the system questioning, it was learned that the diagnosis of hypertension and the use of anticoagulant drugs were not. After the antihypertensive treatment was initiated, the Department of Neurosurgery was contacted and the patient was admitted to the intensive care unit with the diagnosis of ICH.

DISCUSSION:

We found intraparenchymal cerebral hemorrhage in the brain CT performed in this patient due to significant low GCS and high-energy trauma. Since there was no trauma finding to support this diagnosis and the patient was hypertensive, we evaluated it as ICH after hypertension developing with adrenal discharge. We think that adrenal discharge, which may develop in patients who come with high-energy trauma after this case, may cause high blood pressure and consequently ICH.

CONCLUSION:

While evaluating the pathological vital and physical examination findings in patients presenting with trauma, we should not only focus on the trauma area.

This case showed us that after high-energy trauma, adrenal discharge and intracerebral hemorrhage can develop incompatible with the patient's history and age.

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KEYWORDS: Adrenal discharge, hypertension, intraserebral hemorrhage, trauma

A CASE OF RENAL INFRACTION WITH VOMITING AND CHEST PAIN

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INTRODUCTION:

Renal infarction is rare. In a series of almost 250,000 patients seen at an emergency department over four years, only 17 (0.007 percent) were diagnosed with acute renal infarction (1). The two major causes of renal infarction are thromboemboli and in situ thrombosis. Thromboemboli usually originate from a thrombus in the heart or aorta, and in situ thrombosis is usually due to an underlying hypercoagulable condition or injury to or dissection of a renal artery (2).

CASE REPORT:

A 59-year-old female patient presented to the emergency department with complaints of chest pain, back pain, nausea and vomiting. It was learned that his complaints started about half an hour ago. The patient has a known aortic aneurysm, 3 times coronary angiography and a history of cholecystectomy in the same year. When the patient came, her vital signs were normal. On physical examination, there was tenderness in the epigastric region.

Contrast-enhanced abdominal tomography was performed in the patient whose complaints did not regress after routine examinations and treatment. The patient was diagnosed with acute renal infarction when it was noticed that there was no flow distal to the right renal artery and there was no blood supply in the right kidney in the abdominal tomography.

CONCLUSION:

Although studies have proven that renal infarction is rare, it does not change the fact that it is a diagnosis with serious consequences and should not be missed.

As seen in this case, having atypical presentations and being at the bottom of our prediagnosis list can make this diagnosis difficult. Considering the patient's history, clinic and physical examination findings, renal infarction is actually among the possible diagnoses. However, such a low incidence leads us to different diagnoses in the foreground. With this case, we have seen that while evaluating the patient, it would be best to reach the result by giving all the preliminary diagnoses a chance. We found renal infarction in the contrast-enhanced tomography of the entire abdomen, which we took to exclude an abdominal vascular pathology in our patient who could not be cured by the treatment given. We think that in patients with atypical complaints and a history of vascular and coagulation pathologies, the diagnosis of kidney infarction, which is an end organ, should be kept in mind and should not be overlooked.

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KEYWORDS: Renal infarction, vomiting, chest pain, thromboemboli_

DEVELOPMENT OF METHEMOGLOBINEMIA IN FOLLOW-UP OF A CASE OF PNEUMOTHORAX ARISING FROM TRAFFIC ACCIDENTS

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INTRODUCTION:

Methemoglobin is an oxidized form of hemoglobin in which the heme iron configuration has changed from the ferrous (Fe2+) form to the ferric (Fe3+) form. Unlike normal hemoglobin, methemoglobin does not bind oxygen and, as a result, cannot deliver oxygen to the tissues. Methemoglobinemia is a rare but potentially fatal hemoglobinopathy(1). It leads to rapid oxygen desaturation and therefore requires rapid recognition and treatment. This situation is frequently reported in the perioperative period when topical anesthetics are used during bronchoscopy, laryngoscopy, or upper gastrointestinal endoscopy(2). According to one institution, the incidence of benzocaine-induced methemoglobinemia is one in 7000 bronchoscopy(3).

CASE REPORT:

A 63-year-old male patient was brought to the emergency room by 112 with the complaint of chest pain after an in-vehicle traffic accident. When the patient came, spO2:94% other vital values were normal. On physical examination, significant tenderness was detected on the right lateral ribs and left lateral ribs, on the sternum with palpation. On auscultation, it was determined that both hemithoraxes participated equally in respiration and there was no ral or rhonchi. As a result of the patient's examinations, fractures were found in the 2,3,4,5,6,7,8,9,10 ribs in the right hemithorax, 3,4,5,6,7,8 ribs in the left hemithorax and sternum. In addition, there was a smearing hemothorax and minimal pneumothorax in the right hemithorax. During the follow-up of the patient, the spO2 value decreased to 91%. The patient started to have respiratory distress and spO2 value decreased to 87% one day after being admitted to the thoracic surgery intensive care unit for observation. Bilateral massive pneumothorax was detected in the control chest x-ray. Thereupon, a thorax tube was inserted into both hemithorax and bronchoscopy was performed by applying topical lidocaine to open the mucosal plugs. Expansion of both hemithorax was observed in the control lung x-ray. However, when the patient's respiratory distress did not regress in the follow-up, it was observed that the D-Dimer level was high and the MetHb value was 5.5 in the examinations performed. No pulmonary embolism findings were found in the pulmonary angiography tomography. Respiratory distress and cyanotic condition regressed after ascorbic acid and 12 hours of oxygen therapy applied to the patient. It was observed that the control MetHb level decreased to 2.0 and the spO2 value increased to 94% again.

CONCLUSION:

Methemoglobinemia is a potentially lethal condition after exposure to routinely used drugs. Physicians should be aware of this complication for early diagnosis and treatment.

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KEYWORDS: Pneumothorax, lidocaine, methemoglobinemia, ascorbic acid

INTUSSUSCEPTION AFTER CESAR SECTION

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INTRODUCTION:

Gastrointestinal intussusception, existing in the wall of the luminous organs of the digestive system proximal bowel due to a lesion or an irritant event within the lumen is the pathological telescopic penetration of the distal segment. Although intussusception is the second most common abdominal emergency surgery in childhood after appendicitis, it accounts for 5% of the total cases in all age groups and 1-5% of all adult intestinal obstructions, hospitalization constitutes 0.003-0.02% of the applications (1). There are 2 or 3 cases per million population per year (2). While recurrent abdominal pain is the most common complaint (71-90%), nausea and vomiting are seen in 20% of the cases (3).

CASE REPORT:

A 23-year-old female patient presented with complaints of abdominal pain, nausea and inability to pass gas and defecation for 3 days. The patient has a history of cesarean section 1 month ago. In the abdominal USG performed 3 days ago, the diameter of the appendix was measured as 6 mm.In the physical examination of the patient, diffuse tenderness and rebound were detected in the abdomen. In the examinations performed, in contrast-enhanced abdominal tomography, it was observed that the patient had intussusception in the right upper and lower quadrants of the intestinal loops and air-fluid levels (Image 1,2,3). The patient was interviewed with the general surgery department and admitted to the ward.

DISCUSSION:

According to the clinical presentation of this case, we thought of a postoperative complication or acute abdomen after acute appendicitis based on the USG results 3 days ago. So much so that we were quite far from the diagnosis of intussusception due to the low incidence of intussusception and the low probability of being seen in terms of age. We were quite surprised to encounter intussusception as a result of the patient's examinations.

CONCLUSION:

No matter how rare it is, the diagnosis of intussusception is an important pathology that should be considered in terms of health professionals and should be included in the list of preliminary diagnoses. It should be kept in mind that if it is overlooked, it can have serious consequences.

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KEYWORDS: Cesarian section, invagination, intussusception, ileus

ACİL SERVİSTE DELİCİ GÖZ YARALANMALARINA YAKLAŞIM: OLGU SERİSİ
THE APPROACH TO PENETRATING EYE INJURIES IN THE EMERGENCY DEPARTMENT: CASE SERIES

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ÖZET

Acil servise göz şikayetleri ile başvuran hastalar içerisinde delici yaralanmalar nadir izlenmesine rağmen göz acilleri açısından önemli bir yer tutmaktadır. Acil servis şartlarında, ışık kaynağı ile muayenede delici göz yaralanmaları tanısında zorluk yaşanabilmektedir. Bu hastalığın erken tanı ve tedavisi görme fonksiyonu açısından prognostik öneme sahiptir. Özellikle küçük yaralanmalar muayenede kolaylıkla gözden kaçabilmektedir. Bu çalışmada acil servise başvuran 7 delici göz yaralanması olgusu değerlendirildi. 5 hastada başvuru anında ciddi görme keskinliği azalması ve göz tonüsünde azalma (%71), 4 hastada pupil şekil bozukluğu ve hifema (%57), 2 hastada orbita tomografisinde yabancı cisim (%28) izlenmekteydi. Tüm hastalarda görme keskinliğindeki azalma haricinde ışık kaynağı ile tespit edilebilecek en az 1 bulgu eşlik etmekteydi. Sonuç olarak göz travmalarında acil serviste yapılacak dikkatli bir göz muayenesi ile delici yaralanma tanısı açısından kuvvetli ipuçları saptanabilir.

ANAHTAR KELİMELER: Göz Travması, Delici Göz Yaralanması, Göz Acilleri

ABSTRACT

Penetrating injuries are rarely observed in patients admitted to the emergency department with eye complaints. However, penetrating injuries have an important place in terms of eye emergencies. In the emergency department, there may be difficulties in diagnosing penetrating eye injuries when examined with a penlight. Early diagnosis and treatment of this disease have prognostic importance in terms of the patient's visual function. Especially small injuries can be easily overlooked during the examination. In this study, 7 cases who were admitted to the emergency department due to a penetrating eye injury were evaluated. 5 patients had severe visual acuity reduction (71%), 5 patients had decreased intraocular pressure (71%), 4 patients had pupil deformity (57%), 4 patients had hyphema (57%), 2 patients had an intraocular foreign body (28%) on orbital tomography. In all patients, the decrease in visual acuity was accompanied by at least 1 other finding that could be detected by a penlight. As a result, a careful ocular examination in the emergency department can reveal strong clues for the diagnosis of penetrating injury.

KEYWORDS: Ocular Trauma, Penetrating Ocular İnjury, Ocular Emergency

GİRİŞ

Göz küresine sivri veya keskin bir yabancı cismin batarak göz dokularının bütünlüğünü bozması şeklinde gelişen yaralanmaları, delici göz yaralanması olarak tanımlamaktayız. Dünyada yıllık 100 bin nüfusa 3.5 delici göz yaralanması gerçekleştiği, ülkemizde ise acil servise başvuran göz hastalarının yaklaşık olarak yüzde 1 inin gözde delici yaralanma nedeniyle başvurduğu bildirilmiştir (1, 2). Ancak ülkemizde çok merkezli bir epidemiyolojik çalışma bulunmamaktadır. Delici göz yaralanmaları göz acilleri içerisinde önemli bir yer tutmaktadır. Acil servise başvuran delici göz yaralanması olan hastaların erken tanı ve tedavisi hastanın gelecekteki görme fonksiyonu açısından çok önemlidir. Yaralanmanın gerçekleşmesi ile cerrahi tedavi arasında geçen süre önemli bir prognostik faktördür (3). Acil servis şartlarında küçük yaralanmalar gözden kaçabileceği için hasta hikayelerinin dikkatli alınması ve göz bulgularının delici yaralanma açısından dikkatlice muayene edilmesi gerekmektedir.

VAKA SUNUMU

Bu çalışmada 2022 yılında kliniğimize delici yaralanma nedeniyle başvuran 7 olgu incelenmiştir. 7 hastanın hepsinde yaralanmaya bağlı olarak görme keskinliği (GK) azalmakla birlikte 5 hastada GK 3 metreden az mesafeden parmak sayma ve ışık hissi düzeyinde izlenmekteydi ve ciddi görme kaybı mevcuttu (%71). 5 hastada palpasyon ile göz tonüsü azalmıştı (%71). 4 hastada hifema (%57) izlenmekteydi. 4 hastada pupil şekil değişikliği veya pupil çekintisi izlenmekteydi (%57). 2 hastada yara yerinden iris ve koroid dokusu prolabe olmuştu (%28). 2 hastanın orbita tomografisi (BT) incelemesinde metalik yabancı cisim izlenmekteydi (%28). 6 hastanın tedavi sonrasında görme keskinliğinde belirgin artış izlendi, 1 hastanın görme keskinliği tam seviyesine çıktı, 1 hastanın tedavi süreçlerine rağmen görme yetisi kaybı oldu. Tüm hastalarda delici yaralanmadan şüphelenmemizi sağlayacak, acil serviste tespit edilebilecek, görme keskinliğinde azalma hariç en az 1 bulgu izlenmekteydi.

Olgu 1: 22 yaşında erkek hasta, iş yerinde gözüne kablo çarpmış. GK 0,1 olan hastanın ön kamarada hifeması mevcut. Palpasyon ile göz tonüsü azalmış. Korneal tam kat kesi ve pupil çekintisi izlenmekteydi. Orbita tomografisinde (BT) yabancı cisim izlenmiyor. İzole korneal delici yaralanma. Cerrahi tedavi sonucunda GK tam seviyesine ulaştı.

Olgu 2: 9 yaşında erkek hasta, babası tamirat yaparken bir plastik parça gözüne sıçramış. GK el hareketleri seviyesinde (EHS), korneal tam kat kesi ve pupil çekintisi mevcut, Ön kamarada hifema mevcut. Palpasyon ile göz tonüsü azalmış. Orbita BT de yabancı cisim izlenmiyor. Cerrahi tedavi sonucunda GK 0,5 seviyesine ulaştı.

Olgu 3: 50 yaşında erkek hasta, evde çekiç ile çalışırken gözüne metalik yabancı cisim gelmiş. GK 2 metreden parmak sayma düzeyinde (MPS). Skleral yaralanma mevcut, ön segment yapıları doğal, palpasyon ile göz normal tonüste. BTde vitreus boşluğu içerisinde metalik yabancı cisim izleniyor. Cerrahi tedavi sonrasında GK 0,3-4 seviyesine ulaştı.

Olgu 4: 18 yaşında erkek hasta, sağ gözüne çivi batmış, GK 2 MPS. Korneal tam kat kesi yara yerinden iris dokusu prolapsusu izleniyor. İris ve lens yaralanması mevcut. Pupil çekintisi mevcut, Palpasyon ile göz tonüsü azalmış. Orbita BTde yabancı cisim izlenmiyor. Cerrahi tedavi sonrasında GK 0,15 düzeyinde ancak tedavi süreci halen devam ediyor.

Olgu 5: 8y erkek hasta, sol gözüne değnek çarpmış. GK Işık hissi düzeyinde, parmak sayamıyor. Ön kamarada total hifema izleniyor, korneaskleral kesi ve yara yerinden iris dokusu prolapsusu izleniyor. Palpasyon ile göz tonüsü azalmış. Orbita BTde yabancı cisim izlenmiyor. Cerrahi tedavi sonrasında GK 0,6 seviyesine ulaştı.

Olgu 6: 5 y kız, koşarken sağ gözüne duvardaki tel batmış. GK 4-5 MPS. Limbusun 1 mm periferinde sklerada giriş yarası mevcut, pupil yara yerine çekilmiş. Palpasyon ile göz normal tonüste. Lens yaralanması mevcut. Orbita BTde yabancı cisim izlenmiyor. Cerrahi tedavi sonrasında GK:0,6 seviyesine ulaştı.

Olgu 7: 51 y erkek hasta, Fayans keserken sağ gözüne parça sıçramış. Gk ışık hissi düzeyinde, parmak sayamıyor. Ön kamarada total hifema mevcut, tam kat korneal kesi izleniyor, Palpasyon ile göz tonüsü azalmış. Orbita BTde bulbus oküli posterior duvarda metalik yabancı cisim izleniyor. Cerrahi tedavi sonucunda GK ışık algılayamıyor.

TARTIŞMA

Literatürde göz travmalarında ortalama yaş yaklaşık 30 olarak bildirilmektedir, erkeklerde kadınlara göre 3-4 kat daha fazla sıklıkla görüldüğü bildirilmiştir (3-6). Kliniğimize başvuran 7 olgunun 6 (%85) sı erkek cinsiyetteydi. Ortalama hasta yaşı 23.5 olarak izlendi. Hasta yaşındaki bu farklılığın sosyokültürel farklılıklardan kaynaklandığını düşünmekteyiz. Ülkemizde, bölgesel olarak delici yaralanmaların yarıdan fazlasının çocukluk çağında olduğu bildirilmiştir (5). Acil servis şartlarında ışık kaynağı ile yapılan muayenelerde delici yaralanmaları ayırt etmek her zaman mümkün değildir. Ancak dikkatli yapılan muayenelerde tespit edilecek, görme keskinliğinde azalma, hipotoni, pupil çekintisi, Pupil şeklinin bozulması, iris - koroid prolapsusu ve hifema delici yaralanma açısından bizi şüphelendirmesi gereken muayene bulgularıdır. National Eye Trauma System (NETS) verilerine göre hastaların yaklaşık yarısında (%43) ciddi görme kaybı, yaklaşık 3te birinde hifema (%35), katarakt (%32), iris ve koroid prolapsusu (%33) ve intraoküler yabancı cisim (%35) bildirilmiştir (4). Bizim olgularımızda da bu bulgulardan bir veya birkaç tanesi benzer oranlarda delici yaralanma tablosuna eşlik etmekte ve acil servis şartlarında tanı koymamızı kolaylaştırmaktadır. NETS verilerine göre delici göz yaralanmalarında intraoküler yabancı cisimler sıklıkla (%35) izlenmektedir, bu sebeple radyolojik görüntüleme her hastaya yapılmalıdır (4). Cismin yerleşimini ve seviyesini tespit edebilmek adına aksiyel ve coronal planları içeren ince kesit orbita BT incelemesi faydalı olacaktır. İkincil bir yaralanmaya sebep olacağı için metalik yabancı cisim tanısını dışlanmadan MR görüntüleme yapmak kontrendikedir.

Delici göz yaralanmalarında tedavi sonucunda görme prognozuna etki eden faktörler kısaca ilk başvuru anındaki görme düzeyi (3), yaralanmadan etkilenen kornea, skleral, iris, lens, koroid, retina gibi dokuların fazlalığı (7), metalik İntra oküler yabancı cisim varlığı (8), endoftalmi gelişmesi (9), ve yaralanma ile cerrahi arasında geçen süre (3) yer almaktadır.

Acil servise delici yaralanma ile başvuran hastalarda oral alım kapatılmalı, tetanoz proflaksisi, BT görüntüleme, medikal ajanlarla bulantı ve ağrı yönetimi yapılmalıdır. Hızlı göz konsültasyonu istenmeli, hastanın göz hekime ulaşacağı süre boyunca göz üzerine baskı yapılmayacak şekilde kapatılmalıdır. Göz dokularına toksik olabileceği için damla veya merhem şeklindeki topikal ajanların kullanılmasından kaçınılmalıdır. Adli süreçler açısından hastanın başvuru anındaki görme keskinliği, yaralanma hikayesi ve yaralanan dokular mutlaka kayıt altına alınmalıdır. Her göz travmasının aslında bir kafa travması olduğu unutulmamalı, göz travmasına odaklanarak hayatı tehdit edebilecek diğer patolojiler atlanmamalıdır. Benzer şekilde multiple travmanın eşlik ettiği kafa travmalarında göz yaralanmaları da mutlaka kontrol edilmelidir.

Sonuç olarak, acil servis şartlarında ışık kaynağı ile yaptığımız muayenelerde bazı delici yaralanmaları tespit etmek hayli güç olabilmektedir. Bu hastalarda ciddi görme azlığı, pupil çekintisi ve pupil yuvarlaklığının kaybolması, hifema, göz tonusunun azalması, ön kamaranın sığlaşması delici yaralanma açısından uyarıcı ipuçları olacaktır.

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A FAMILIAL MEDITERRANEAN FEVER PATIENT WITH A HOMOZYGOUS M694V AND R202Q VARIATION IN THE MEFV GENE

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KEYWORDS: Familial Mediterranean fever (FMF), Colchicine, Amyloidosis, Ultrasound

INTRODUCTION:

Familial Mediterranean Fever (FMF) is an autosomal recessive autoinflammatory genetic disorder, characterized by recurrent fever, recurrent peritonitis, abdominal pain, chest pain, pleuritis, arthritis or erysipelas-like rash. It has been shown that the gene causing FMF disease is the MEFV gene, localized in the short arm (16p13.3 locus) of Chromosome 16 and consists of 10 exons. FMF is most commonly affect Arabs, Armenians, Turks, Greeks, Italians, Persians and Jews in the Mediterranean region (1). One of the important complications of FMF is the development of serum amyloid A (SAA) amyloidosis that affects other organs, primarily the kidneys. Amyloidosis is one of the most crucial causes of renal failure that may cause the death of young adult patients. It was shown that 7-13% of Turkish FMF patients have amyloidosis (1,2).

CASE:

A 17-year-old female patient, who applied to the emergency department with complaints of fever, abdominal pain and chest pain for about 3 days. She also had arthritis among her symptoms. In addition to these, it was learned that because the patient had amyloidosis. Peripheral blood samples of case was obtained and whole exome sequencing of MEFV gene was carried out. As a result of screening of 10 exons of MEFV gene with next generation sequencing, homozygous M694V and homozygous R202Q variations were detected in the patient. Therefore, the patient was started on colchicine and his complaints regressed with colchicine. There was no obvious feature in his family history. The age of symptom onset of the patient was 11 and the frequency of symptoms was 1 in 3 days. No abnormality was detected in the hemogram, biochemistry and urinalysis. Hepatosplenomegaly and an appearance compatible with angiomyolipoma in the left kidney were detected in the whole abdominal ultrasound (US) examination.

DISCUSSION

Tel Hashomer clinical criteria are the most current criteria for the diagnosis of FMF (3). The main symptoms of the diseases are abdominal pain, chest pain, fever, skin rash and joint pain. Also, high fever, positive response to colchicine, a history of FMF in siblings and other family members, and a suitable genotype are used in the diagnosis of patients with FMF (3,4). Colchicine is the used for the treatment of patients with FMF since 1972 (5).

In addition to diagnosis of rare diseases such as a rare cause of delayed puberty and primary amenorrhea (6), rare condition of the Alzheimer's Disease with spastic paraparesis (7), MODY (8), White-Sutton syndrome (9), an ultra-rare condition of neurodevelopmental disorder(10), Boucher-Neuhauser syndrome (11), mucolipidosis III gamma (12), novel pathogenic variant in the AGTPBP1 gene (13), novel FBN1 variants (14), GCK MODY (15), xeroderma pigmentosum group-E (16), novel pathogenic variant of Alport syndrome (17), novel homozygous deletion mutation in the glucokinase gene (18), Myotonia Congenita (19), Megalencephalic Leukoencephalopathy (20), EEC syndrome (21), tuberous sclerosis (22,23), the detection of pathogenic variants in common diseases such as FMF can be done using Next Generation Sequencing Method (24). For example, the novel c.334-335 DelG P.Glu112fs variation in exon 2 (25), novel K447M(P.Lys447Met, C.1340 A>T) variation (2), A89T (p. Ala89Thr, c.265G>A) variation (26), rare E167D variation (27), rare 761_764dupCCGC p.Asn256Argfs variation (28), rare S288Y(P. Ser863Tyr, C.863 C>A) variation (29). It was reported that FMF patients with M6694V and R202Q compound mutation carriers have cardiovascular risk so these cases should be regular cardiological follow-ups (30). In addition to the understanding of the contribution of the specific variant to FMF clinics, the detection of the role of genotype-phenotype correlation in the diseases complication is important, too (1). It was reported that cases with with Klippel-Feil Syndrome(KFS) and a pathogenic M680I(G>C) variant in the MEFV gene should be regularly followed for kidney Failure (31,32).

CONCLUSION:

FMF patients with pathogenic homozygous or compound heterozygous variation in the MEFV gene should be followed regularly for the risk of developing amyloidosis.

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DİSSEKAN AORT ANEVRİZMA RÜPTÜRÜ: OLGU SUNUMU

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GİRİŞ

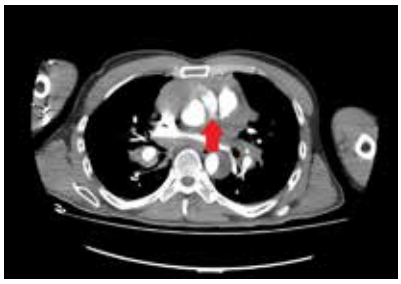
Aort diseksiyonu, aortik intima tabakasında meydana gelen yırtılmayı takiben ilerleyen kan akımının, uzun aks boyunca media tabakasını ayırması sonucu meydana yalancı lümen oluşumu ile karakterizedir (1). Arter çapındaki yüzde elliden daha fazla genişleme anevrizma olarak tanımlanır. Torasik aort anevrizması genellikle asemptomatik olup diseksiyon, rüptür ve ölüm gibi mortalite oluşturan komplikasyonlara sahiptir (2). Etiyolojide hipertansiyon, ateroskleroz, Marfan ve Ehler Danlos gibi bağ doku hastalıkları yer almaktadır (3,4). Tipik bulgu, yırtılma ya da parçalanma tarzında çok şiddetli göğüs ağrısı yanı sıra tutulan anatomik bölgeye göre alt ekstremitelerde duyu ve motor değişiklikler, karın ağrısı, üst ve/veya alt ekstremite arası kan basıncı farklılıkları ve ani kan basıncı değişiklikleri gözlenebilmektedir (5). Burada; ağır yük kaldırımı sonrası senkop yakınması ile acil servise başvuran bir olgu sunulacaktır.

ANAHTAR KELİMELER: aort diseksiyonu, anevrizma rüptürü, tamponad, elektriksel alternans

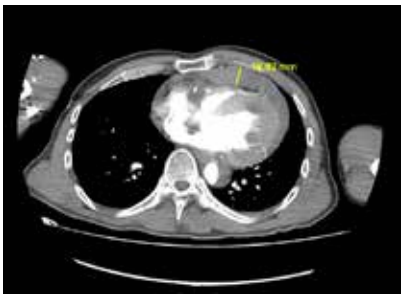
OLGU

Bilinen hiçbir ek hastalığı olmayan 55 yaşında erkek hasta, yük taşıma esnasında 5-10 saniye kadar süren baygınlık sonrasında nefes darlığı nedeniyle yakınları tarafından acil servise getiriliyor. Hasta acil servise geldiğinde bilinç açık, koopere, oryante, GKS 15, TA 110/70 mmHg, nabız 150/dk, solunum sayısı 16/dk, ateş 36.5 C, Pulse Oks. %97, sistem muayenelerinde dinlemekle kalp seslerinin derinden gelmesi dışında patolojik muayene bulgusuna rastlanılmadı. Hastanın fizik muayenesi yapılırken bir yandan da güvenlik çemberine alınarak iki adet damar yolu açıldı. Çekilen EKG'de sinüs taşikardisi ve elektriksel alternans bulguları görülmesi üzerine yapılan hasta başı EKO'da perikardial mai tespit edilmesi üzerine ön tanı dahilinde ileri görüntüleme yöntemleri planlandı. Çekilen tomografide tip 1 aort diseksiyonu ve asendan aort rüptürüne bağlı mediastene kontrast ekstravazasyonu saptanmıştır. Çekilen EKG ve tomografiler ışığında asendan aort rüptürüne bağlı hemorajinin perikarda açıldığı, bunun sonucunda tamponad bulgusu oluşturduğu saptandı ve hasta acil ameliyata alındı.

Şekil 1. Olgunun EKG'sinden bir bölüm (D1, D3, aVR, aVL ve V3 derivasyonlarında daha bariz görünen, elektriksel alternans olarak tabir edilen ardışık QRS komplekslerinin yüksekliğindeki değişkenlik)



Şekil 2. Asendan aort rüptürüne bağlı kontrast ekstravazasyonu ve desendan aortada Aort diseksiyonu



Şekil 3. Yaklaşık 19 mm perikardiyal effüzyon

TARTIŞMA VE SONUÇ

Erişkin bir hastada ani kardiyak ölümlerin en sık nedeni kardiyovasküler hastalıklardır. Etyolojide sıklıkla akut myokard infaktüsü ve koroner arter hastalıkları yer alırken aort diseksiyonu ve rüptürü ise mortal seyretmekle birlikte nadir görülmektedir (6). Aort diseksiyonu ve rüptürü en sık ateroskleroz ve hipertansiyona sekonder gelişirken travma veya travma dışı nedenlerle de meydana gelebilmektedir. Ayrıca Ehler-Danlos sendromu ve Marfan sendromu gibi genetik geçişli bağ doku hastalıkları da ortaya çıkmasında etkili olabilmektedir (7). Akut aort diseksiyonu noninvaziv tanı yöntemlerindeki gelişmelere rağmen hala mortalitesi yüksektir. Tanının gecikmesi saatlik mortalitesini %1 oranında artırmaktadır. Doğru ve hızlı tanı ölüm oranını %50'nin altına çekebilmektedir. Hastalığın mortalite oranı, özellikle çıkan aortayı tutan diseksiyonlarda ilk 24 saat için her saat başına %1 iken, bu oran 2. haftanın sonunda %75'e ulaşmaktadır. Bu açıdan bu olgularda tanının erken saatlerde konulması prognozu olumlu yönde etkileyen önemli bir faktördür (8). Zamanında yapılacak müdahale ile ölüm oranınının %50'nin altına düşürüleceği (8) göz önüne alındığında; karın, göğüs veya sırt ağrısı ile gelen vakalarda aort diseksiyonu olabileceği unutulmamalıdır.

Sonuç olarak, dissekan aort anevrizma rüptürü klasik olarak orta yaşlı ve yaşlı erkek bireylerde daha sık olmak üzere; göğüs ağrısı, nefes darlığı, sırt ağrısı, senkop, bel ağrısı, yan ağrısı gibi semptomlarla karşımıza çıkabilecek mortal bir hastalıktır. Burada bilinen bir hastalığı olmayıp senkop geçiren, sonrasında göğüs ağrısı ve nefes darlığı tarifleyen bir vakayı sunduk. Bu semptomlar birçok ayırıcı tanıyı işaret etse de bu durum; gerçek bir acil olması ve mortalitesi yüksek olması nedeniyle her zaman ön tanılarımızda bulunması gereken bir durumdur.

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RENAL ANJİYOMYOLİPOM KAYNAKLI AKUT BATIN OLGUSU

ÖZET

Anjiyomiyolipomlar genellikle insidental rastlanan mezenşimal kaynaklı benign tümörlerdir. En sık böbreklerden kaynaklanır, daha az sıklıkla karaciğer, lenf nodları, dalak ve akciğerde rastlanır. Renal anjiyomiyolipomalarda yan ağrısı, makroskopik hematüri, anemi, böbrek fonksiyon bozuklukları tanımlanmıştır. Yazımızda beklenmedik bir komplikasyon olan anjiyomiyolipomun retroperiton içine kanaması oluşan hematom vakası anlatılacaktır.

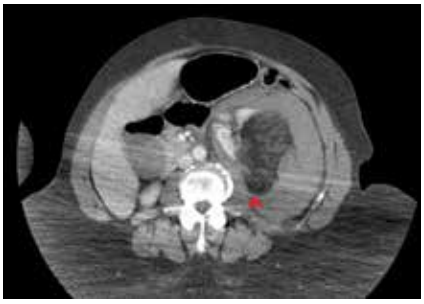
ANAHTAR KELİMELER: Renal anjiyomiyolipom, Hematom, USG, BT

GİRİŞ

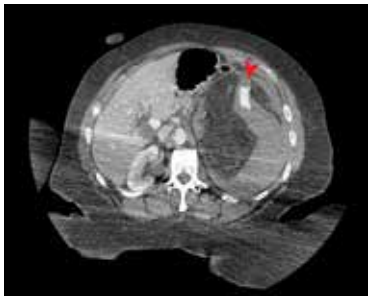
Anjiyomiyolipom (AML)'lar böbrekte meydana gelen iyi huylu neoplazmlardır. Kan damarlarına, düz kaslara ve yağ dokusuna benzeyen çeşitli miktarlarda dokudan oluşurlar. [1] Sporadik renal AML'de kanama nadirdir; örneğin büyük bir çalışmada, sporadik AML'lerin yüzde 0.4'ü kanamıştır. [2] Yan ağrısı veya hassasiyet, makroskopik hematüri, anemi, böbrek fonksiyonunda akut bozulma aktif AML kaynaklı kanama düşündürür. Bu bulgular varsa bilgisayarlı tomografi (BT) veya manyetik rezonans (MR) ile hızlı görüntüleme gerekir. Renal AML'lerden kaynaklanan kanama hemorajik şok, etkilenen böbreğin fonksiyon kaybı ve ölümle sonuçlanabilmektedir. [3] Şok bulguları varsa resüsitatif önlemler ve vaka uygunsa kanamayı durdurmak için hızlı anjiyografi ve selektif arter embolizasyonu (SAE) altın standart yönetimdir. SAE'si olmayan veya SAE girişiminden sonra renal AML'den yaşamı tehdit eden kanaması devam eden hastalara kısmi veya tam nefrektomi yapılmalıdır.

OLGU

Elli dört yaşında kadın hasta, şiddetli karın ağrısı, halsizlik ve baş dönmesi şikayetleri ile acil servise başvurdu. Öyküsünde; daha önceden renal AML tanısı olduğu ancak takip ettirmediği öğrenildi. Fizik muayenesinde; cilt soluk, dinlemekle her iki akciğer sesleri normal, batında defans, rebaund, sol kostavertebral açıda hassasiyet mevcuttu. Tansiyon arteriyel 100/60 mmHg, nabız: 95 atım/dk, solunum sayısı: 25 /dk, oksijen satürasyonu: %94, ateş: 36.4 °C ölçüldü. EKG bulguları normaldi. Laboratuvar bulguları: HGB: 8.2 g/dL, HCT: %24.8, WBC: 15.32 10^3/uL, üre: 39 mg/dL, kreatinin: 0.64 mg/dL, pH 7.23, BE: -6.1 olarak geldi. Diğer rutin Biyokimya değerleri ve APTT, PT, INR değerleri normal sınırlar içindeydi. Abdominal ultrasonografi (USG) incelemesinde; sol böbrek üst kesimde en geniş yerinde 125x92x133 mm ölçüsünde ve 16x13x15 mm ölçüsünde hiperekoik posteriyoruna akustik güçlenme veren solid lezyonlar izlendi. Kistik dejenerasyon ya da kalsifikasyon saptanmadı (anjiomyplipom?). Büyük lezyon çevresinden başlayıp para-perirenal boşluğu dolduran uzun aksı 21 cm ölçüsünde içerinde kistik alanlar barındıran solid hipoekoik görünüm mevcuttu (rüptüre-kanamış anjiomyolipom-hematom?). İntravenöz kontrast madde verilerek yapılan abdominal bilgisayarlı tomografi (BT) incelemesinde sol böbrek orta polden kaynaklanıp egzofitik uzanan 13x11cm ebatlı makroskopik yağ içeren sporadik anjiyomyolipom ile uyumlu lezyon izlendi (Resim 1). Kaynaklanan retroperitonda yaklaşık 2 litre hematom izlendi (Resim 1). AML'den kaynaklanan sol retroperitoneal alanı doldurup sol parakolik oluktan pelvise dek uzanan aktif ekstravazasyon bulunan hematom izlendi (Resim 2). Ayrıca hematom nedeniyle sol böbrek üst pol, sol renal ven basılı görünümde idi.



Resim 1. Sol renal AML (kırmızı ok)



Resim 2. Kontrast ekstravazasyonu (kırmızı ok)

BT'nin ilk değerlendirmesi yapıldıktan sonra girişimsel radyoloji ve üroloji birimlerine konsültasyon yapıldı. Vaka selektif embolizasyon için uygun görülmedi. Üroloji ekibince acil cerrahi kararı alındı.

Kan hazırlığı ve cerrahi profilaksi yapıldıktan sonra acil cerrahiye alındı. Sol nefrektomi 2,5 litre hematom drenajı yapıldı. Post-op yoğun bakımda 3 gün takip edilip stabilizasyon sağlandıktan sonra komplikasyon gelişmeyen hasta 6 gün serviste takip edildikten sonra şifa ile taburcu edildi.

TARTIŞMA-SONUÇ

AML en sık böbrekte görülen benign bir tümördür. Çoğunlukla asemptomatik olduklarından, USG veya BT tetkiki esnasında tesadüfen saptanırlar. İzole AML'ler genellikle daha büyük, soliter, unilateral lezyonlardır ve en sık 5.-6. dekadda, kadınlarda görülür. [4] Boyutu 4 cm'den küçük tümörler genellikle asemptomatiktir. 4 cm'den büyük tümörlerin %90'ı semptomatik olarak bildirilmiştir. [5] Semptom ve bulgular tümörün boyutları, büyüme hızı ve psödoanevrizmanın büyüklüğü ile yakından ilişkilidir [6]. Renal AML'nin bildirilen en sık bulgu ve semptomları; karın ağrısı, palpabl kitle, hematüri, toplayıcı sistem obstrüksiyonu, üriner sistem infeksiyonu, nefrolitiasis ve böbrek yetmezliğidir. Bizim olgumuzda şiddetli karın ağrısı mevcuttu. Tümörün komplikasyonları nadir görülür, fakat ciddidir. Komplikasyonlar tümörün boyutu ve içeriğine bağlı değişir. Büyük boyutlu tümörlerde spontan rüptür riski artar, subkapsüler, perirenal veya pararenal hematom gelişebilir, hatta %10 hastada fatal sonuçlanabilen masif kanama görülebilir [7]. Bu tümörlerin ayırıcı tanısını yapmak tedavi ve prognozda önemli rol oynamaktadır. Renal AML'ler benign tümörler olduklarından genellikle tedavi gerektirmezler ve USG ile takip edilebilirler. Ancak büyüme gösterirlerse zamanla semptomatik hale gelebilirler. Tedaviye karar verirken tümörün boyutu, büyüme hızı, semptomları, komplikasyonları ve radyolojik olarak tanının kesinlik derecesi göz önüne alınır. Ağrı, hematüri semptomları varsa, boyutu 4 cm'den büyükse ya da malignite ekarte edilemiyorsa tedavi endikedir. Selektif transluminal arteriyel embolizasyon, akut dönemde psödoanevrizmanın tedavisinde ve kanama kontrolünde etkili bir yöntemdir [4]. Bunun dışında kriyoterapinin renal fonksiyonları korumada etkinliği konusunda klinik çalışmalar devam etmektedir. Tedavide vakaya göre selektif arteriyel embolizasyon veya cerrahi tedavi yapılır. Cerrahi tedavi eğer renal dokuyu korumak mümkün ise enükleasyon veya parsiyel nefrektomi gibi konservatif olmalıdır. Bizim olgumuzda tümör boyutunun çok büyük olması, kanamanın devam etmesi ve hastanın genel durumunun bozulması nedeniyle, acil total nefrektomi yapılmıştır.

Sonuç olarak AML benign karakterde olmasına rağmen, büyüme eğilimi gösterir ve doubling time 47- 55 aydır. Bu nedenle boyutu 4 cm'den küçük tümörler klinik ve radyolojik düzenli olarak takip edilirler. 4 cm'den büyük ve semptomatik olan tümörlerde, kanama veya rüptür gelişmesini önlemek amacıyla, tümörün enükleasyonu veya parsiyel nefrektomi gibi nefron koruyucu cerrahi yöntemler ya da selektif arteriyel embolizasyon uygulanır.

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THE INVISIBLE SIDE OF THE ICEBERG: RETINAL EMERGENCIES

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INTRODUCTION:

The aim of our study is to evaluate the etiology of patients with emergency retinal pathology and to discuss the issues to be considered in the first examination, among the patients who applied to the emergency department of our tertiary education and research hospital with eye complaints.

METHOD:

The study was carried out by scanning the data of patients who applied to the emergency department with eye complaints and requested eye consultation between January 2019 and August 2022 via the hospital automation system.

RESULTS:

According to the data obtained from the consultation notes, 71 (2.98%) of the 2376 eye consultations requested from the emergency department included the diagnosis of emergency retinal pathology. The mean age of patients with emergent retinal pathology was 62 (min 23-max 87), female/male ratio was 1.36 (41/30). Distribution of patients according to their diagnoses; Vitreous hemorrhage 0.58% (n=14), uveitis 0.54% (n=13), retinal and posterior hyaloid detachments 0.50% (n=12), optic neuropathies 0.37% (9), retinal veins occlusions 25% (n=6), trans ischemic attack 0.21% (n=5), traumatic retinopathy 0.21% (n=5), Endophthalmitis 0.08% (n=2), toxic retinopathy 0% 08 (n=2), retinal artery occlusions 0.08% (n=2), Hypertensive retinopathy 0.04% (n=1).

CONCLUSION:

The diagnosis of a significant part of eye emergency pathologies is made by emergency physicians without the need for further examination and the necessary treatments are planned. However, many retinal and optic disc emergent pathologies require further investigation and ophthalmologist consultation. This is an important limiting factor in the evaluation of emergency retinal pathologies in the emergency department. It is very important that the diagnosis of emergency retinal pathologies is made promptly and treatment is started in the same way. In this study, the characteristics of patients admitted to the emergency department and diagnosed with emergency retinal pathology, as well as the issues that emergency physicians should pay attention to in their approach to emergency retinal pathologies are discussed.

KEYWORDS:

Retina, optic disc, emergency,

MEDİAN ARKUAT LİGAMENT SENDROMU: OLGU SUNUMU

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ÖZET

Median arkuat ligament sendromu, median arkuat ligamentin çölyak arterin aortadan ayrıldığı kısımda çölyak arter köküne, ekspiryumda daha belirgin olarak bası yapması sonucu gelişen ve postprandial ağrı, bulantı vs. gibi gastrointestinal semptomlar ile karakterize klinik bir durumdur. Çölyak arter kökünde basıya sekonder gelişen stenoz, gastrointestinal sistem kanlanmasında azalmaya neden olur. Yetersiz kan akımına bağlı klinik belirtiler ortaya çıkar. Epigastrik ağrı, bulantı ve zayıflama en sık rastlanan bulgulardır. Teşhisde ayırıcı tanılar ekarte edilmeli ve anjiografik olarak bası gösterilmelidir. Tedavide median arkuat ligament kesilerek bası ortadan kaldırılmaktadır. Kliniğimize karın ağrısı şikayeti ile başvuran 55 yaşında bir kadın hasta bu çalışmada olgu olarak sunulacaktır.

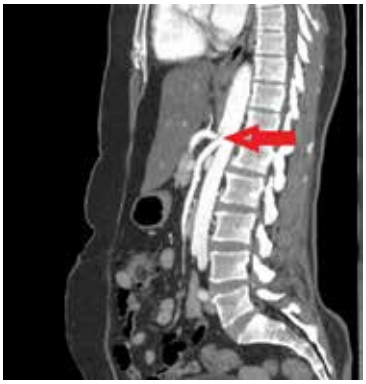
ANAHTAR KELİMELER: median arkuat ligament, acil, trunkus çölyakus

GİRİŞ

Median arkuat ligament sendromu, turunkus çölyakus kompresyon sendromu veya Dunbar sendromu olarak da adlandırılan (1,2), median arkuat ligamentin aort çıkışında çölyak arter proksimaline basısına bağlı gastrointestinal sistem organlarının perfüzyonunun bozulması sonucu gelişir. Hastalar genellikle asemptomatik olmakla birlikte yemeklerden sonra ekspiryum ile artan epigasrik ağrı, bulantı, kusma ve zayıflama sık görülen gastrointestinal semptomlardandır. (3,4). Genelde genç orta yaşlarda görülür. Bu durumun tedavisi, klasik olarak açık veya laparoskopik olarak median arkuat ligamentin çölyak pleksus üzerine bası yapan kısmının kesilerek basının ortadan kaldırılmasıdır. Burada acil serviste nadir görülen median arkuat ligament sendromunun, özellikle acil servise tekrarlayan başvurusu olan ve geçmeyen karın ağrılarında unutulmaması gereken bir tanı olan median arkuat ligament sendromu literatür eşliğinde tartışılacaktır.

VAKA SUNUMU

55 yaşında kadın hasta, son üç gündür var olan karın ağrısının başvuru öncesi yediği yemek sonrasında giderek şiddetlenmesi üzerine acil servise başvurmuş. Mevcut ağrının epigastrik bölgeden başlıyarak tüm karına yayıldığı tariflenmekteydi. Hastanın soy ve öz geçmişinde herhangi bir hastalığı ve sürekli kullandığı bir ilacı yoktu. Yapılan fizik muayenede, genel durumu orta, koopere, oryante, GKS 15, vital bulguları TA 120/70 mmHg, nabız 85/dk, ateş 36.7 C, Pulse Oks. %98, batın muayenesinde epigastrik bölgede palpasyonla hassasiyeti mevcut olup diğer sistem muayenelerinde herhangi bir patolojik bulguya rastlanılmadı. Muayene sonrasında damar yolu açılarak semptomatik tedaviye başlandı. Muayene ve anamnez bulguları dahilinde tetkikleri istendi. Laboratuvar tetkiklerinde hastanın mevcut semptomlarını açıklayacak bulguya rastlanılmaması üzerine ileri görüntüleme tetkikleri istendi. Çekilen abdominal kontrastlı bilgisayarlı tomografide çölyak turunkus üzerine bası olduğu görüldü. Mevcut bulgular dahilinde hastaya genel cerrahi konsültasyonu istendi ve elektif şartlarda cerrahi önerildi.



Şekil 1. Çölyak turunkus üzerine bası bulgusu görülmektedir.

TARTIŞMA VE SONUÇ

İzole çölyak arter kompresyon sendromunun ateroskleroz ve median arkuat ligament basısı olmak üzere iki önemli etyolojik nedeni vardır. Bu durum özellikle postprandial ağrı, bulantı ve kilo kaybı triadı ile kendini gösteren nadir bir kliniğe sahiptir (1,2). Batılı toplumlarda asemptomatik kişilerde insidansı %10-24 arasında bildirilirken en düşük insidans bildirimi %2,3 ile Japonya'dan yapılmıştır (3,5). Yemek sonrası ağrı özellikle ekspiryum sırasında ortaya çıkar. Median arkuat ligament, aort önünde T12-L1 düzeyinde bulunur ve diyafram kuruslarını birleştirir. Semptomlar median arkuat ligamentin aort çıkışında çölyak artere basısına bağlı kan akımındaki azalmaya bağlıdır. Özellikle ekspiryum esnasında diyaframın kraniale doğru yer değiştirmesi ile median arkuat ligamanın gerilmesine bağlı çölyak basının daha da artması semptomların belirgin hale gelmesine neden olmaktadır (1-4). Ancak ciddi çölyak daralması olmasına rağmen bazı hastalar asemptomatiktir. Bu durum, superior mezenterik arter'den çölyak arter veya dallarına gelişen kollaterallere bağlı olarak gelişmektedir. En sık kollateral gelişimi gastroduodenal arterden olmaktadır (5). Median arkuat ligament sedromunda semptomları açıklamak için iki teori öne sürülmüştür. İlk teori mezenter iskemi gelişmesidir. Mezenter iskemi direkt olarak foregut mezenter iskemi olabileceği gibi superior mezenterik arter ile çölyak arter arasına gelişen kollateraller aracılığı ile superior mezenterik arter'den çölyak artere postprandial arteriel kaçış olmasına bağlı midgut iskemi de görülebilir. İkinci teori de ise çölyak ganglion veya çölyak pleksus basısına bağlı gelişen nörojenik stimülasyon ile sempatik ağrı liflerinin irritasyonuna bağlı olarak gelişir (6).

Sonuç olarak, median arkuat ligament sedromu, nadir görülen bir klinik durum olarak özellikle genç hastalarda epigastrik ağrı, bulantı ve zayıflamanın olması halinde ayırıcı tanıda düşünülmeli ve tedavi edilmelidir. Acil servise başvuran hastalarda bu hastaların tespiti; ağrısı geçmeyen hastalarda anamnez, fizik muayene ve laboratuar testleri ile tespit edilemeyen bazı acil durumları saptanması amacı ile yapılan görüntülemeler ile rastlanabileceği unutulmamalıdır. Her ne kadar acil bir hastalık olmayıp, elektif bir cerrahi olsa da acil serviste geçmeyen karın ağrılarına tanı koyup hastayı yönlendirmek açısından aklımızda bulunması gereken, tecrübemizi ve ayırıcı tanılarımızı arttırmaya yardımcı bu olguyu paylaşmak istedik.

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CASE STUDY:56-YEAR-OLD FEMALE WITH MYXEDEMA COMA WITH HYPONATREMIA

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INTRODUCTION

Hypothyroidism is a clinical presentation that results from deficiency of thyroid hormone effects. myxedema coma is a life-threatening rare clinical condition, unless it is diagnosed and treated early. Fortunately, İt is considered rare because of the possibility of TSH analysis procedures, which gives the possibility of its occurrence or not. A report from Spain showed that the incidence rate of myxedema coma is 0.22 per million per year, in Japan it rises to be 1.08 per million people (1-2). The mortality rates may be as high as 25–60% even with the best possible treatment (3). Its symptoms are usually severe, from hypothermia, hypotension, bradycardia, decreased pulse pressure, normal systolic pressure, to confusion, stupor, slow speech, delayed reflexes, seizures, and coma.

Here we presented a case of myxedema coma in a patient with a patient who was previously diagnosed with papillary thyroid cancer and underwent a total thyroidectomy.

KEYWORDS: Hyponatremia, Hypothyroidism, Myxedema Coma

CASE REPORT

She was rushed to the emergency department via EMS services for confusion, stupor, and slow speech which was noticed by the patient's family that started 24 hours before coming to the ER. The patient was a 56 -year-old woman with a past medical history of hypertension type 2 diabetes, atrial fibrillation and was diagnosed with papillary thyroid cancer four months ago. Family of the patient denied alcohol or tobacco use and denied taking any narcotics. The patient four months ago because of papillary thyroid cancer had a total thyroidectomy, and five days ago it was the last radioactive iodine (RAI) treatment session.

On arrival to the ER her vitals were as follows: blood pressure (BP):80/40 mmHg, heart rate (HR) 130 beats/min, respiratory rate (RR) 32/min, temperature: 35.4 oxygen saturation: 98% on room air.

on physical examination General: the patient was not alert or oriented to person, place, or time, however, he did respond to painful stimuli. Glasgow Coma Scale (GCS) was 6 (eyes 2, verbal 2, motor2). Skin was cool and moist, without rash, with swelling in the lower extremities and eyes, tachycardia and tachypnea was exist

After the physical examination, laboratory tests were requested, and symptomatic treatment was started. Laboratory tests of the patient were remarkable for acute abnormalities, her venous blood gas showed pH 7.34, pCO2 of 47mm Hg, and pO2 of 58 mm Hg Gluc 130 mg/dl Na 96 mmol/L (normal range 135-145 mmol/L), Cl 61 mmol/L (normal range 98-106 mmol/L). A complete blood count, leukocyte 20.13 x 10/mcl (91.4% neutrophils,4.2% lymphocytes,4% monocytes). Based on the patient's history including papillary thyroid cancer and total thyroidectomy, thyroid function tests were performed. TSH >100 µIU/Ml (normal range 0.35-4.94 µIU/Ml) FT4: 0,067 ng/dl (normal range0.7- 1.47 ng/dl), FT3:1,01 (normal range0.7- 1.47 ng/dl)

Based on the patient's history, clinical examination, and Laboratory results Myxedema coma was established, the patient was consulted by the department of endocrinology diseases. She was hospitalized in intensive care.

DISCUSSION

Myxedema coma is a rare endocrine emergency but once they appeared, prompt diagnoses and treatments are needed. Myxedema coma can be a result of any of the well-known causes of primary hypothyroidism, for example autoimmune thyroiditis and post-surgical hypothyroidism. Myxedema coma (MC) is an extreme manifestation in patients with untreated hypothyroidism. The typical clinical manifestation includes decreased mental status, hypothermia, hypoventilation, bradycardia, hypotension, and hypoglycemia to confusion, stupor, slow speech, delayed reflexes, seizures, and coma. Diagnosis based on clinical presentations and medical histories, and prompt treatments should not be delayed because of waiting for the results of thyroid function tests. (4-5)

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4-Myxedema Coma Patient in Emergency Department: A Case Report

Ko-Wen Han, Chih-Chuan Lin,corresponding author Chih-Yu Chen, Hsiao-Yun Chao, Cheng-Yu Chien, and Hsien-Yi Chen

5-Journal of Medical Cases, ISSN 1923-4155 print, 1923-4163 online, Open Access

BAŞ DÖNMESİ ETİYOLOJİSİNDE VERTEBRAL ARTER DİSEKSİYONU

ÖZET

Baş dönmesi, hastalar tarafından semptomları tanımlamak için sıklıkla kullanılan spesifik olmayan bir terimdir. Bu terim altında toplanan en yaygın bozukluklar arasında vertigo, spesifik olmayan baş dönmesi, dengesizlik ve presenkop bulunur. Değerlendirmedeki ilk adım, tipik semptomları olan hastayı bu kategorilerden birine sığdırmaktır. Benign paroksismal pozisyonel vertigo (BPPV), Meniere hastalığı gibi periferik kaynaklardan gelişebileceği gibi beyin sapı iskemi, geçici iskemik atak gibi santral kaynaklardan da gelişebilir. [1] Yazımızda ani başlangıçlı baş dönmesi ile başvuran vakada yakalanan vertebral arter diseksiyonunu tartışacağız.

ANAHTAR KELİMELER: Baş dönmesi, Diseksiyon, Vertigo,

GİRİŞ

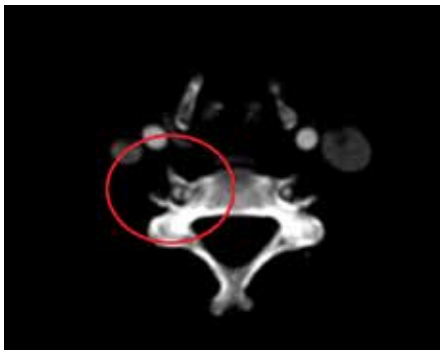
Acil servise baş dönmesi ile başvuran hastaların ortalama yaşı 46'dır. Bu grubun %56sı periferik kaynaklı, %16sı psikiyatrik kaynaklı, %6sı presenkop kaynaklıdır. %8inin nedeni bulunamaz [2,3].

Semptomlardaki pozisyon değişiklikleri, ortostatik kan basıncı ve nabız değişiklikleri, yürüyüşün gözlemlenmesi ve nistagmusun saptanması fizik muayenede en çok yardımcı olan etkenlerdir [4].

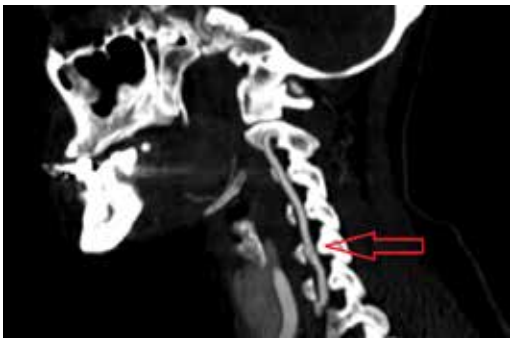
Açık uçlu sorular sormak, hastanın semptomlarına ilişkin açıklamasını dinlemek ve belirli sorulardan ek bilgileri kontrol etmek ve toplamak, klinisyenin baş dönmesi tipine ilişkin bir hipotez oluşturmasına izin verir.

OLGU

37 yaş kadın hasta dün gelişen ani başlangıçlı baş dönmesi ve hafif şiddette boyun ağrısı ile acil servise başvurdu. Bilinen ailevi akdeniz ateşi (FMF) ve hipertansiyon (HT) öyküsü var. Yirmi dört saat içinde üç farklı merkeze başvurmuş ancak semptomları gerilememiş. Fizik muayenesinde; genel durumu iyi oryante koopere, dinlemekle her iki akciğer sesleri normal, batında defans, rebaund yok, serebellar testleri becerikli ancak yürürken hafif ataksi mevcuttu. Tansiyon arteriyel 195/100 mmHg, nabız: 90 atım/dk, solunum sayısı: 15 /dk, oksijen satürasyonu: % 97, ateş: 36.4 °C ölçüldü. EKG bulguları normaldi. Parmak ucu kan şekeri 98 ölçüldü. Laboratuvar bulguları: HGB: 12 g/dL, HCT: %35.8, WBC: 11.06 10^3/uL, üre: 10 mg/dL, kreatinin: 0.38 mg/dL olarak geldi. Diğer rutin Biyokimya değerleri normal sınırlar içindeydi. Hastanın ataksik yürümesi olması sebebiyle beyin BT istendi hemoraji izlenmedi. Difüzyon MR'da iskemik lezyon izlenmedi. Hipertansif seyreden ve boyun ağrısı olan hasta için carotis ve vertabral arter doppler istendi. 'Sağda vertebral arter V1-V2 asegment bileşke düzeyinden başlayarakproksimalde yaklaşık 3 cmlik segmentte akıma izin veren en belirgin yerinde 2,5mm ulaşan duvar kalınlaşması mevcuttur(tromboze diseke segment ?)'. Vertebral arter diseksiyonu düşündüren bulgular sebebiyle BT Anjiyografi istendi. Sağ vertebral arter V2 segment proksimal kesimde konturda lobülasyon izlendi. V2 segment ortak esimde fokal diseksiyon mevcut olup bu düzeyde 6x2 mm ebatlı dissekan anevrizma izlendi. (Resim-1,2)



Resim 1. Sağ vertebral arter V2 düzeyinde dissekan anevrizma



Resim 2. Disseke segment (kırmızı ok)

Klinik olarak baş dönmesine boyun ağrısı eşlik eden, hipertansif seyreden, ataksisi olan hasta vertebral arter diseksiyonu ayırıcı tanıda akla getirilmişti. USG ve BT ile tanıya gidildi.

Girişimsel radyoloji ve Nöroloji konsültasyonları yapıldı. Endo-vasküler girişim planlanmadı. Efektif TA kontrolü sağlandıktan sonra semptomatik iyileşme sağlandı. Nöroloji asetil salisilik asit 150 mg başlanarak taburculuğunu önerdi. Hastanın 3 aylık ve 6 aylık kontrollerinde disseke segmentin gerilediği görüldü.

TARTIŞMA-SONUÇ

Baş dönmesinin sık nedenleri; BPPV, vestibüler nörit, meniere hastalığı, vestibüler migren, vertebrobaziler yetmezlik, beyin sapı infarktı, serebellar infarkt veya kanamadır. [1]

Baş dönmesi ani başlangıçlıysa, eşlik eden semptomlar iyi sorgulanmalıdır. Vakamızda boyun ağrısı bizi tanıya götürmüştü ancak boynuna masaj yaptırma veya kütletme sonrasında da vertebral arter diseksiyonu görülebilir.

Uygun görülen vakalarda stentleme yapılır. Medikal tedavi kararı verilmişse ekstrakraniyal diseksiyonlarda antikoagülan, intrakraniyal diseksiyonlarda subaraknoid kanama riskini azaltmak için antiplatelet tedavi başlanır [5].

Vertebral arter diseksiyonu şiddetli semptomatik iyileşme izlenmeyen ve eşlik eden servikal ağrı olan vakalarda akılda tutulmalıdır.

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DİYALİZ SONRASI GELİŞEN RETROPERİTONEAL KANAMAYA BAĞLI KARIN AĞRISI

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GİRİŞ:

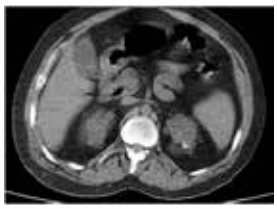
Akut karın ağrısı, sık acil servis başvuru nedenlerinden biridir. Etyolojide birçok dahili veya cerrahi neden yer almakta olup ölümle sonuçlanabilecek patolojilerin erken dönemde tanınması mortalite açısından önemlidir. Özellikle batın içi kanamaların eşlik ettiği olgularda hemodinamik stabilizasyonun sağlanabilmesi için erken dönemde tanı konulmalıdır.

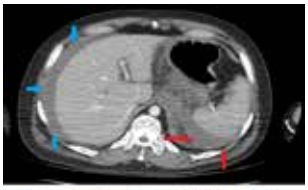
Retroperitoneal kanama, travma, girişimsel işlemler, malignite, vasküler patolojiler sonucunda ortaya çıkabileceği gibi antikoagülan kullanımı sonrasında da spontan olarak meydana gelebilen bir durumdur (1). Bu durum hemodiyaliz uygulanan Kronik Böbrek Yetmezliği hastalarında ve renal hücreli karsinomu olanlarda karın ağrısı gelişmesi halinde mutlak olarak akla gelmelidir (2). Burada hemodiyaliz tedavisi alan hastada spontanretroperitoneal kanamaya bağlı olarak gelişen akut karın ağrısı olan olgu tartışılacaktır.

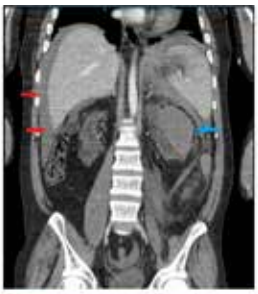
ANAHTAR KELİMELER: acil, retroperitoneal kanama, üroloji

OLGU SUNUMU:

35 yaşında erkek hasta, hemodiyaliz sonrası yaklaşıkikinci saatte başlayansol üst kadran ağrısının tüm kadranlara yayılım göstermesi ve giderek şiddetinin artması üzerine ilçe devlet hastanesine başvurmuş. Hastanın takipleri esnasında geçmeyen karın ağrısına hemodinamik unstabilitenin eklenmesi ve laboratuar parametrelerinde patolojik bulgulara rastlanması üzerine hastanemize kabul edildi. Özgeçmişinde; polikistik böbrek hastalığı nedeniyle yaklaşık 20 yıldır haftanın 3 günü rutin hemodiyaliz aldığı öğrenildi. Diyaliz günleri hariç 100 mg asetilsalisilik asit kullanıyormuş. Fizik muayenede; hastanın kabulü sonrası TA:80/60 mmHg, nabız:128/dk, solunum sayısı: 18/dk, SO_2: %98 ,ateş:36,4 0C, parmak uçu kan şekeri:132 mg/dl, GKS:14 uykuya meyilli olduğu görüldü. Batın muayenesinde; batın distandü, sol üst kadranda daha belirgin olmak üzere tüm kadranlarda palpasyonla hassasiyet mevcuttu. Hastanın bütün ekstremitelerinde nabızları eşit, ritmik fakat filiform olarak palpe edildi. Diğer sistem muayenelerinde herhangi bir patolojik bulguya rastlanılmadı. Muayene sonrasında damar yolu açılarak şok tablosunda olması nedeniyle sıvı resüsitasyonunabaşlanarak tetkikleri istendi. Hastanın hemoglobin 8gr/dl (dört gün önce 10.7 gr/dl), trombositleri 270000/ml, kan Ph: 7,2, baz defisiti -10 mmol/L, laktat 9,2 mmol/L olarak tespit edildi. Acil serviste hasta başı yapılan abdominal ultrasonografide perihepatik, perisplenik ve pelvik bölgede yaygın serbest sıvısı tespit edilmesi üzerine çekilen Abdominal Bilgisayarlı Tomografi de sol böbrek üst polden başlayarak solda sürrenal loj-anterior pararenalfasya boyunca retroperitoneal alana yayılım gösteren öncelikle hematom ile uyumlu koleksiyon alanı ve perihepatik-perisplenik alanlarda serbest mayi tespit edildi. Evre 3 şok olarak kabul edilen hasta üroloji konsültan hekimi tarafından değerlendirilerek nefrektomi yapılmak üzere acil operasyona alındı.







TARTIŞMA-SONUÇ:

Ani başlayan karın ağrısına hipotansiyonun eşlik ettiğianstabil hasta grubunda ön tanıda intraabdominal hemoraji düşünülmeli ve mevcut merkez imkanları dahilinde erken dönemde görüntüleme tetkikleri istenmelidir.Hasta başı USG ile kanama şüphesi hızlı ve pratik bir şekilde değerlendirilebilmektedir. Unstabil hasta grubunun değerlendirilmesi esnasında arteryal kan gazı mutlaka çalışılmalıdır. Hemodinamik stabilizasyon için uygun kan ürünleri replasmanı yapılmalıdır. Özetlehızlı tanı, uygun tedavi ve erken cerrahi ile mortalitenin önüne geçilebilir.

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BILATERAL PULMONARY EMBOLISM IN A PEDIATRIC PATIENT WITH COVID-19 PNEUMONIA: A CASE REPORT

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INTRODUCTION

The COVID-19 infection induced by the novel coronavirus (SARS-CoV-2), which emerged in China at the end of 2019, has been accepted as a global outbreak by the World Health Organization (WHO). In emergency departments (ED), the most common complaints of patients are fever, cough, severe fatigue and shortness of breath.(1-6) The most alarming reasons for hospitalization are severe interstitial pneumonia and acute respiratory distress syndrome (ARDS). According to recently published case series and retrospective studies, thromboembolic events are frequently observed in COVID-19 patients, especially in critical care units and even individuals taking prophylactic anticoagulation (2,3).

Here we presented a case of bilateral pulmonary embolism in apediatric patient without any risk factor and d dimer levels were normal the patient recently diagnosed COVID-19 pneumonia (six weeks prior).

CASE REPORT

The patient brought to the emergency department via EMS services for severe dyspnea and with shortness of breath that started four days before come to the ER.

She was a 17-year-old female with no significant past medical history. recently diagnosed COVID-19 pneumonia (six weeks prior) . She denied alcohol or tobacco use and denied taking any medications.

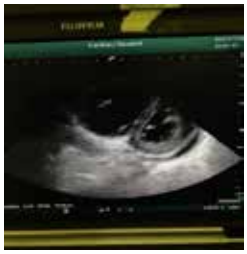
On arrival to the ER her vitals were as follows blood pressure (BP):120/80 mmHg, heart rate (HR) 78 beats/min, respiratory rate (RR) 14/min, temperature: 36.4 oxygen saturation: 98% on room air. The general condition is alert and oriented, in no apparent distress Her body mass index was 39. on physical examination There is no tachycardia,no tachypnea no murmur-rub-bing-galloping. Respiratory system examination is clear to auscultation bilaterally.

After the physical examination, laboratory tests were requested and symptomatic treatment was started. Laboratory tests of the patient were normal (Electrocardiogram (ECG) was normal sinus rythm ,troponin and d dimer levels were normal) Chest and abdominal X-rays were unremarkable. After symptomatic treatment, she discharged from hospital.

İn the next day the patient with the same complaint brought again to emergency services. Vital signs on arrival were normal. Physical examination and laboratory tests were normal with no change from the pervious day.

The echocardiography was performed by the ED physician. (figure 1 -2).

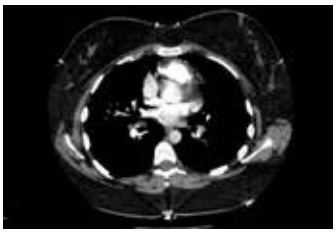
(Figure_1)



(Figure_2)

D-Shaped left Ventricle Pulmonary Embolism

CT-angiography of her chest was obtained and revealed the filling defect in bilateral main pulmonary artery branches (figure 3-4-5). The patient was treated with heparin and she was admitted to the chest diseases Intensive Care Unit where she was also treated with systemic glucocorticoids, antithrombin III infusions. she was successfully transitioned to warfarin and discharged home on day 13.



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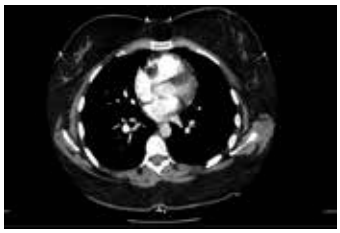

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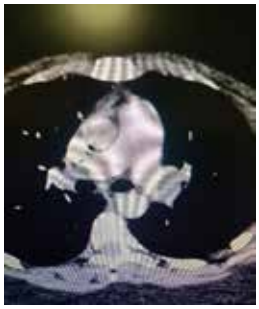

(Figure_5)

DISCUSSION

COVID-19 causes coagulation abnormalities in a proportion of patients, which can lead to thromboembolic events due to excessive inflammation, platelet activation, endothelial dysfunction, and stasis (4-5-6) We report the case of a patient with no significant past medical history who was Six weeks ago diagnosed for severe COVID-19 pneumonia. The combination of systemic activation of coagulation, extensive pulmonary endotheliopathy and thrombo-inflammatory process caused by SARS-CoV2 may result in diffuse pulmonary intravascular coagulopathy and pulmonary arterial thrombosis (6-7) .

CONCLUSION

In conclusion, emergency physicians should be alert about subsequent thrombo embolic complications of the novel corona virus disease.

This case highlights thrombotic complications in pediatric patients following with dyspnea and shortness of breath recently started. althougth her d dimer levels and physical examination were normal , the patient has been diagnosed with (bilateral pulmonary embolism).

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RESÜSİTASYONA YANIT VEREN PULMONER TROMBOEMBOLİ

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GİRİŞ: Pulmoner tromboemboli (PTE), pulmoner arter ya da dallarının vücudun herhangi bir yerinden kaynaklanan trombüs veya başka bir materyalle tıkanmasıdır. Akut PTE' de tipik olarak pulmoner arterlerin tıkanmasından hemen sonra semptom ve bulgular başlar. Masif PTE ise hipotansiyon, senkop, desatürasyon, kardiyovasküler kollaps veya ölüm ile sonuçlanan durumdur.

Bu olgu sunumunda acil servise başvuran akut başlangıçlı masif bir PTE' nin resüsitasyonu ve uygun tedavi ile sağ kalımına yapılan katkıdan bahsetmeyi amaçladık.

VAKA: 27 yaşında bilinen kronik hastalığı olmayan, sadece 8 gün önce kardiyoloji tarafından kendisine AVNRT ablasyonu yapılan hasta, sabah saatlerinde 2 saattir devam eden solunum sıkıntısı olarak 112 ekiplerince getirildi. Gelişinde takipneik (37/dk), taşikardik (148/dk), hipotansif (75/52 mmHg), hipoksik olan (%64), soğuk soğuk terleyen ve sadece nefes alamadığını söyleyebilen hasta, kardiyojenik/obstrüktif şok ön tanıları ile resüsitasyona alınmış, resüsitasyona ve sebebe yönelik araştırmaya başlanmıştır.

112 ekiplerince uygulanan oksijene rağmen desatüre olan, sıvı ve tedavisine rağmen hipotansif olan hasta hızlı ardışık entübasyonla entübe edildi, eş zamalı EKO planlandı. Devam eden sıvı resüsitasyonuna ve başlanan IV vazopressör tedavisine cevap vermeyen, hipotansif seyreden, mekanik ventilatörde fiO2 %100 iken hala desatüre olan hastanın yapılan EKO'sunda sağ atrium ve ventrikül dilate, orta TY, SPAP: 50 mmHg, ana pulmoner artreler görülebildiği kadarıyla patent idi, fakat D shape septumu da olan hasta masif akut PTE lehine değerlendirildi. Hastanın devam eden tansiyon ölçümlerinde bilateral TA ve nabızların alınamaması, yapılan kontrol EKO'da kardiyak kontraktilitenin azalması üzerine hastaya CPR başlandı. PTE ön tanısı ile değerlendirilmekte olan, obstrüktif şok nedeni ile kardiyovasküler kollaps gelişen hastaya trombolitik tedavi kararı verildi.

Resüsitasyon esnasında alteplaz IV infüze edilip eş zamanlı CPR yapılan hastanın tedavisi bittiği dakikalarda TA ölçülebilmiş, parmak ucu satürasyonları yükselmeye başlamıştır. CPR'a ara verilerek yapılan ritm kontrolünde nabızlar palpabl olup, yapılan kontrol EKO'da sağ atriyum ve ventrikül dilatasyonu gerilemiş, EF:%55-60, SPAP: 40 mmHg olarak ölçülmüştür. Takip eden dakikalarda vazopressör desteği azaltılarak kesilen, parmak ucu oksijen satürasyonları yükseldiği(%89) için fiO2'si kademeli olarak düşürülen hastanın stabil hale gelmesiyle çekilebilen toraks BT anjiyografisinde her iki pulmoner arterin her iki akciğer alt loblara giden segmental dallarında komplet-parsiyel trombüs dikkat çekmiştir. Bu hali ile 3. basamak yoğun bakım ünitesine devredilen hasta, 21 gün yoğun bakım yatışı sonrası ekstübe edilmiştir.

SONUÇ: Klinik olarak masif seyreden PTE'ler, ciddi hayati tehlike oluşturmakta, gelişen kardiyovasküler kollaps nedeni ile hastalar kaybedilebilmektedir. PTE ye karşı etkili bir silah olan trombolitik tedavi, uygun hastalarda sağ kalımı artırmaktadır. Klinik değerlendirmenin yanı sıra acil serviste yapılan hasta başı EKO, PTE tanısında klinisyene oldukça önemli bilgiler vermektedir.
Anahtar kelimeler: Masif PTE, trombolitik, EKO

AKUT PANKREATİTİN NADİR BİR SEBEBİ: AKREP SOKMASI

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ÖZET

Akut pankreatit, acil servislere karın ağrısı ile başvuran hastalarda sık karşılaşılan pankreasın inflamatuar hastalığıdır. Etiyolojide sıklıkla safra taşı ve alkol yer alırken, nadir olmakla birlikte toksik durumlar da akut pankreatite neden olabilir. Bu nadir sebeplerden birisi de akrep sokmasıdır. Bu yazımızda acil servise akrep sokması nedeniyle başvuran ve takiplerinde akut pankreatit tanısı alan bir vaka anlatılacaktır.

ANAHTAR KELİMELER: Akrep sokması, karın ağrısı, akut pankreatit, acil servis

GİRİŞ

Akut pankreatit (AP) tipik olarak karın ağrısı ile başlayan ve genellikle pankreasın inflamatuar hastalığı sonucu kan ve idrarda pankreas enzimlerinin yüksekliği ile birlikte seyreden akut bir klinik tablodur. İnsidansı yüz binde 5-35 arasındadır (1). Etiyolojide %60-90 safra taşı ve alkol yer alır. Pankreasın inflamatuar bir hastalığı olan AP etiyolojisinde yer alan ve nadir olarak görülen faktörlerden bazıları ise ilaçlar ve toksinlerdir.

Akrep sokması endemik olarak yaşadığı bölgelerde önemli bir sağlık sorunudur. Ülkemiz de zehirli akrep türleri için endemik bölgeler arasındadır. Akrep sokması ile vücuda giren venom özellikle sodyum, potasyum ve kalsiyum kanalları üzerinde etki gösterir (2). Venomun ağır klinik bulgulardan sorumlu olan en önemli kısmı α-toksindir (3). Sempatik ve parasempatik aktivasyon ile katekolamin düzeyi, nöropetpit-Y ve endotelin-1 düzeylerindeki artış envenomasyon sırasında görülen sistemik bulguların en önemli sebepleridir (4). Hastaların büyük bir kısmında ağrı, ödem, kızarıklık gibi lokal bulgular görülür. Hastaların daha az kısmında ise hipersalivasyon, bronkore, miyozis, kusma, erkekte priapizm gibi parasempatik bulgular ile taşikardi, hipertansiyon, periferik soğukluk, sistemik vasküler direnç artışı gibi sempatik sistem bulguları da görülmektedir. Kolinerjik etki ile kusma, ishal, karın ağrısı ve bazı olgularda akut pankreatit tabloya eşlik edebilir (5). Bu yazımızda acil servise akrep sokması nedeniyle başvuran ve takiplerinde akut pankreatit tanısı alan bir vaka anlatılacaktır.

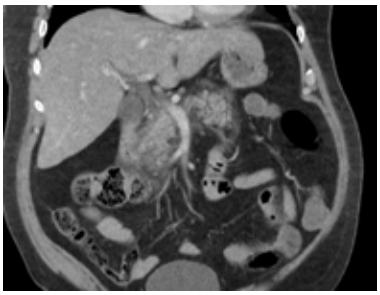
OLGU

64 yaş kadın hasta bulantı, kusma, karın ağrısı şikayetleri ile acil servise başvurdu. Bilinen diabetes mellitus (DM) ve hipertansiyon hastalıkları var. 1 yıl önce akut apandisit nedeniyle cerrahi operasyon öyküsü var. Alkol ve sigara kullanımı yok. Hastanın detaylı anamnezi alınırken, bir gün önce kolundan akrep soktuğunu ifade etti.

Yapılan fizik muayenede; vital bulguları stabil. Bilinç açık, oryante-koopere, GKS:15. Batın muayenesinde epigastrik hassasiyet saptandı. Defans ve rebaund yoktu.

Hastanın laboratuvar tetkiklerinde geniş biyokimya testinde amilaz:2210 U/l, CRP:5.4 mg/l saptandı. Tam kan sayımı ve diğer tetkik parametreleri olağandı.

Hastanın fizik muayenesinde epigastrik hassasiyet, tetkiklerinde amilaz yüksekliği saptandığından IV kontrastlı Abdomen Bilgisayarlı Tomografi (BT) görüntülemesi yapıldı. Abdomen BT'de pankreas baş ve boyun kesiminde peripankretik yağ planlarında çizgisel dansite artışları ve sıvama tarzında serbest mayi izlendi. İntrahepatik ve ekstrahepatik safra kanalları normal görünümde olup, safra kesesi ve kanallarında taş veya çamur saptanmadı. Akut pankreatit düşünülerek gastroenterolojiye danışıldı. Gastroenteroloji tarafından servis yatışı yapıldı. Serviste çekilen MRCP'de koledok kanalı normal görünümde olup, obstrüktif etki gözlenmemiştir. 12 gün takip edilen hasta tam iyilik hali ile taburcu edilmiştir.



Şekil 1 Pankreas baş ve boyun kesiminde peripankretik yağ planlarında çizgisel dansite artışları (kırmızı ok) ve sıvama tarzında serbest mayi (sarı ok)

TARTIŞMA-SONUÇ

Akut pankreatit, akrep zehirlenmesinin neden olduğu olağandışı bir klinik bulgudur. Akrep sokmasına bağlı pankreatit patogenezinin temeli, toksinlerinin neden olduğu kolinerjik akıntıdır. Akrep kaynaklı akut pankreatit genellikle geçicidir, kendi kendini sınırlar ve 48 saate kadar geçer. Bizim hastamızda da akut pankreatit kendini sınırlamış fakat 10 gün boyunca amilaz değerleri yüksek seyretmiştir.

Akut pankreatit yüksek morbidite ve mortalitesi olan bir hastalıktır. Toksik nedenlere bağlı AP nadir görülmekle birlikte, akrep sokması sonrasında gelişen karın ağrısı, bulantı ve kusma şikayetleri de AP tanısını akla getirmelidir.

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GİRİŞ: Vena cava superior sendromu (VCSS), superior vena cava yoluyla kan akışının tıkanmasına yol açan herhangi bir durumdan kaynaklanabilen, özellikle malignitesi olan hastalarda tümör basısı, kitle invazyonu sonucu ortaya çıkabilen, daha önce bilinmeyen bir tümörün ilk prezentasyon şekli de olabilen bir durumdur. Klinik olarak asemptomatik durumlardan hayatı tehdit eden laringeal ödem, senkop, hipotansiyon, kardiyovasküler kollapsa kadar geniş bir yelpazede karşımıza çıkabilmektedir.

Acil serviste seyrek olarak gördüğümüz bu prezentasyon şeklini, tanıyabilme yollarını acilimize başvuran bir olgu bağlamında tartışmaya çalıştık.

VAKA: AS'e solunum sıkıntısı şikayeti ile başvuran, altı ay öncesine kadar sağlıklı olup bilinen kronik hastalığı olmayan üç aydır devam eden, bir haftadır gittikçe artan nefes darlığı olan 66 yaş erkek hastanın gelişinde, parmak ucu spo2'si %60'lara kadar düşmekte, normotansif, hafif taşikardik bir kliniği mevcuttu. Yapılan fizik muayenesinde akciğer sesleri sol bazal sağ üst zonlarda azalmış, trakeası hafif sola deviye, sol memede ele gelen şişlik ve sertlik, sol aksillada ele gelen lenf nodları, bilateral juguler venöz dolgunluğu olan, sağ üst ekstremitesinde sıcaklık artışı olmaksızın hafif çap artışı olan hastanın dispnesine uygun tedavisine başlandı. Yaklaşık beş aydır kilo verme ve sol memede kitle/yara ile şikayetleri başlayan hastaya, çeşitli merkezlerde görüntülemeye yönelik tetkikler yapılmış, henüz malignitesi ile ilgili kesin tanı konulamamış. Geçmişinde yapılan tetkikler, akciğer grafileri, PET CT, toraks MR ve biyopsi raporları incelendiğinde sağ anterior mediastenden başlayarak sağ akciğer apeksi ve inferiorda paratrakeal alanı tamamen dolduran en geniş yerinde 10 cm'yi bulan septalı kitlesel görünüm, sol memede yağlı planlarda ekojenite artışı ve pektoral kaslarda artmış FDG tutulumu olup Teratom? Meme ca? Lenfoma? Timik kitle? olarak sonuçlanmış.

Solunum sıkıntısı, taşikardisi, aktif malignitesi olan hastanın, juguler venöz dolgunluğu, sağ akciğer apeksinde kitlesi, çekilen akciğer grafisinde sağda plavral effüzyonla uyumlu görünümü olması üzerine, hem torasentez açısından hem olası bir pulmoner tromboemboli (PTE) veya superior vena cava sendromu açısından toraks BT anjiyografisi planlandı. Aktif bir kemoterapi ya da radyoterapi almayan hastanın çekilen tomografisinde PTE saptanmamış olup, superior vena cava ve sağ subklavien vende kitle basısı, kalibrasyonlarında azalma ve kollaterallerde belirginleşme görülmüş, hasta VCSS ön tanısı ile takip ve tedavisi yapılması amacıyla onkoloji kliniğine interne edilmiştir.

Sonuç olarak; acil serviste hastalara multidisipliner yaklaşabilmek, nadir görülen, tanısı netleşmemiş hastalıklar için hastaların geçmiş tetkikleri incelemek, bu vakamızda olduğu gibi ilerlerse ölümcül seyredebilecek, fakat klinik olarak semptom ve bulguları silik olan VCSS gibi bir tablonun ayrıntılı, tekrarlayan fizik muayene ve klinik şüphe ile ön tanılar oluşturarak erken tanı ve tedavisini sağlayabilmek için görüntüleme planlanmalıdır.

ANAHTAR KELİMELER: dispne, meme ca, vena cava superior sendromu

İNSİZYONEL UMBLİKAL HERNİ İÇERİSİNDE SPONTAN İNCE BAĞIRSAK PERFORASYONU

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ÖZET

İnsizyonel herniler; batın ön duvarı hernileri arasında yer alan ve batında uygulanan cerrahi girişimlerden sonra sık karşılaşılan sorunlardan biridir. Bunlar arasında en fazla görülen umblikal herni, ilerleyen dönemde birçok komplikasyonla karşımıza çıkabilmektedir. Bu yazıda, 7 yıl önce batın operasyonu geçiren ve operasyon sonrası oluşan umblikal herni kesesi içerisindeki ince bağırsağın spontan perforasyonu anlatılacaktır.

ANAHTAR KELİMELER: insizyonel umblikal herni, ince bağırsak perforasyonu, spontan, acil

GİRİŞ

Abdominal insizyonel herniler, cerrahi bir kesi yoluyla gelişen ve batın ön duvar defektini temsil eden fıtıklardır. Bunlar laparotomilerde sık görülen komplikasyonlar olup, vakaların %15-25'inde rapor edilmiştir (1). İnsizyonel fıtıkların yaklaşık %50'si ilk ameliyattan sonraki 1 yıl içinde tespit edilir ve ameliyattan sonra her yıl risk %2 oranında artar (2,3). İnsizyonel fıtıklar, zamanla genişleyerek ağrıya, rahatsızlığa, bağırsak tıkanıklığına, inkarserasyon ve strangülasyona neden oldukları için onarım gerektirirler. Bağırsak perforasyonlarının çoğu travmatik olaylar (künt batın travması veya motorlu araç kazası), yutulan yabancı cisimler veya endoskopik prosedürler veya laparotomiler gibi iyatrojenik nedenlerden kaynaklanır (4,5). Perforasyonun sorunsuz bir ameliyattan 4 hafta sonra başlaması, iyatrojenikten ziyade spontan intestinal perforasyon etiyolojilerini düşündürür (6). Bu vakamızda, mevcut insizyonel umblikal herninin yedinci yılında karın ağrısı ile acil servise başvuran hastada saptanan kese içerisindeki spontan ince bağırsak perforasyonu anlatılacaktır.

OLGU

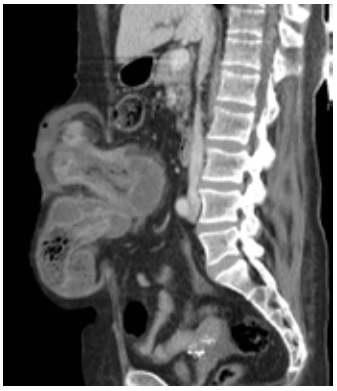
65 yaşında kadın hasta karın ağrısı, bulantı, kusma şikayetleri acil servise başvurdu. Bilinen diabetes mellitus (DM), hipertansiyon, kronik böbrek yetmezliği hastalıkları var. 5 yıldır rutin hemodiyalize uygulanıyor. 7 yıl önce diagnostik laparotomi uygulanan hastanın insizyonel umblikal hernisi mevcut.

Yapılan fizik muayenede; vital bulguları tansiyon arteriyel (TA):90/60 mmHg, nabız:112/dk, solunum sayısı:25/dk, saturasyon: %96, ateş:38.6°C. Bilinç açık, oryante-koopere, GKS:15. Batın muayenesinde yaygın hassasiyet, defans, rebaund mevcut ve umblikal hernisi redükte edilemiyor. Diğer sistem muayeneleri olağandı.

Hastanın laboratuvar tetkiklerinde kan gazında laktat:5.9 mmol/l; biyokimya testinde glukoz:213 mg/dl, üre:104 mg/dl, kreatinin:9,57 mg/dl, CRP:7.4 mg/l saptandı. Tam kan sayımı ve diğer tetkik parametreleri olağandı.

Hastanın fizik muayenesinde irredüktabl hernisi ve akut batın mevcut olduğundan IV kontrastlı Abdomen Bilgisayarlı Tomografi (BT) görüntülemesi yapıldı. Abdomen BT'de karın ön duvarında geniş defektten intestinal ansların cilt altına herniye olduğu izlemiş, herni kesesi içerisinde batın ön duvar komşuluğunda serbest sıvı saptanmıştır. Herni kesesinde bulunan ince bağırsak anslarında bazı seviyelerde ılımlı duvar kalınlığı ve mukozal kontrastlanma artışı görülmüştür. Ayrıca herni kesesi süperior kesiminde ekstraluminal milimetrik hava lüsensleri dikkati çekmiştir.

Fizik muayene ve görüntüleme bulguları insizyonel herni kesesi içerisinde bulunan ince bağırsaklarda spontan perforasyonu düşündürmüş ve genel cerrahi konsültasyonu istenmiştir. Genel cerrahi tarafından eski insizyon skarı üzerinden herni kesesi açılmış, ince bağırsak perforasyonu saptanmıştır. Ayrıca perforasyona sekonder batın içinde gaita bulaşı görülmüş, batın bol serum fizyolojik ile yıkanmış, ince bağırsak rezeksiyon anastomozu yapılmış. Dual mesh ile herni onarımı yapılarak operasyon sonlandırılmış. Takiplerinde sepsis gelişen hasta yoğun bakımda 12 gün takip edilmiş ve tam iyilik hali ile taburcu edilmiştir.



Şekil 1 Herni kesesi süperior kesiminde ekstraluminal milimetrik hava lüsensi (sarı çember), ince bağırsak anslarında bazı seviyelerde ılımlı duvar kalınlığı ve mukozal kontrastlanma artışı (mavi ok), herni kesesi içerisinde batın ön duvar komşuluğunda serbest sıvı (kırmızı ok)

TARTIŞMA-SONUÇ

Erişkinlerdeki çoğu bağırsak perforasyonu, travmatik etiyolojiyle ilişkilidir. İnsizyonel herni içerisindeki bağırsak perforasyonları ise, genellikle erken postoperatif komplikasyon olarak iatrojenik nedenlere bağlıdır. Olgumuzun batın operasyonu yedi yıl önce gerçekleştirilmiş ve bu süre zarfında oluşan insizyonel herninin herhangi bir komplikasyonu ile karşılaşılmamıştır. Bu yüzden vakamız en sık etiyolojilerden travma veya iatrojenik nedenlere bağlanamamış, idiyopatik etyopatogenez olarak varsaymamıza neden olmuştur. Kese içerisinde oluşan spontan bağırsak perforasyonlarının etiyolojik mekanizmaları hakkında daha fazla çalışma ve vaka serileri yapılmalıdır.

Batın ön duvar insizyonel hernileri kese boynu geniş olduğundan diğer hernilere nazaran daha az komplikasyon oluşturmaktadır fakat yine de insizyonel hernilerde ağrı, rahatsızlık, bağırsak tıkanıklığı, strangülasyon, inkarserasyon gibi komplikasyonlar karşımıza çıkmaktadır. Vakamızda olduğu gibi nadir de olsa spontan bağırsak perforasyonlarının olabileceği akılda tutulmalı, erken tanı ve tedavi ile morbidite ve mortalite oranlarının azaltılabileceği unutulmamalıdır.

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SUPERİOR MEZENTERİK VEN TROMBOZU

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GİRİŞ

Karın ağrısı, sık acil servis başvurularından biridir. Nonspesifik karın ağrısından, acil cerrahi gerektiren akut batın tablosuna kadar birçok sebebi olabilir. Mezenterik venöz tromboz, nadir görülen karın ağrısı nedenlerinden biri olmakla beraber superior ya da inferior mezenterik venin akut, subakut veya kronik trombozudur (1). Genellikle lokal veya sistemik bir sürecin parçası olarak hiperkoagülopati, endodel hasarı ve staza bağlı olarak oluşmaktadır(2). Trombozun meydana getirdiği venöz geri dönüşte bozulma iskemi ile sonuçlanır(3). Burada superior mezenterik ven trombozuna bağlı olarak gelişen karın ağrısı olgusu tartışılacaktır.

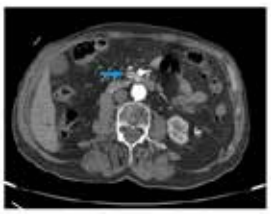
ANAHTAR KELİMELER: acil, süperior mezenterik ven trombozu, iskemi

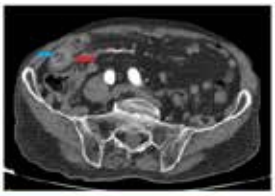
VAKA SUNUMU

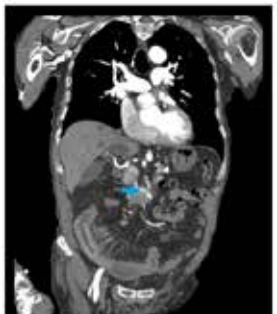
85 yaşında erkek hasta, yaklaşık 2 aydır karın ağrısı şikâyetiyle ilçe devlet hastanesi acil servisine mükerrer başvuruları mevcut. Karın ağrısının gün içerisinde değişkenlik gösterdiği, yemek yedikten sonra midesinde şişkinlik ve beraberinde ağrısının arttığını ifade etti. Hastanın son bir haftadır ağrısının şiddetinde ve sıklığında artış olması üzerine acil servisimize başvurdu. Hastanın özgeçmişi ve kullandığı ilaçları sorgulandığında; bilinen hipertansiyon(HT) ile atrial fibrilasyon(AF) tanılarının olduğu, 8 ay öncesinde idiyopatik pulmoner emboli nedeniyle göğüs hastalıkları uzman hekimi tarafından varfarin sodyum 5 mg tablet başlanıldığı öğrenildi. Dört ay önce gastro-intestinal kanama nedeniyle yatırılarak takip edilen hastanın varfarin ilacı kesilerek asetilsalisilikasit 100 mg tablet ile değiştirilmiş.

Fizik muayenesinde; vitalleri stabil idi. Batın muayenesinde derin palpasyonla tüm kadranlarda ağrı ve hassasiyet mevcuttu. Pozitif rebound bulgusu alındı. Diğer sistem muayeneleri doğaldı.

Laboratuar tetkiklerinde; d-dimer:4.02 µg/mL yüksekliği mevcuttu. Diğer laboratuar parametrelerinde patoloji saptanmadı. Hastanın anamnezi, akut batın fizik muayene bulguları, d-dimer yüksekliği olan hastada mezenter iskemi öntanısı ile kontrastlı abdominal bilgisayarlı tomografi tetkiki istendi. Superior mezenterik vende trombozu olan hasta genel cerrahi bölümüne konsülte edilerek servis yatışı yapıldı.







TARTIŞMA-SONUÇ

Karın ağrısıyla acil servislere mükerrer başvurusu olan, nonspesifik ağrı olarak değerlendirilmiş hastalarda dikkatli olunmalıdır. Hastanın laboratuar tetkiklerinde anlamlı bir patoloji saptanılmamış olsa bile, iyi sorgulanmış anamnez ve eksiksiz yapılan fizik muayene ile tanıya yaklaşmak mümkündür. Aynı şikâyet ile mükerrer acil servis başvurularında ileri inceleme olarak görüntüleme yöntemleri akıllarda tutulmalıdır. Yaklaşık 2 aydır acil servise karın ağrısıyla başvuran, semptomatik tedaviyle ağrısı dindirildikten sonra çeşitli antispazmodikler reçete edilerek taburcu edilen hastamızda superior mezenterik ven trombozu saptanmıştır.

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A CAUSE OF STROKE : SYSTEMİC LUPUS ERYTHEMATOSUS

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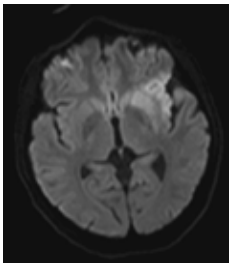
INTRODUCTION

Systemic Lupus Erythematosus (SLE) is s an autoimmune systemic disease. Symptoms of SLE are fever, arthralgias, malar rash, hematuria, and oral ulceration. SLE affects females more than males in all age groups.(1)SLE have a higher risk of cerebrovascular events than the general population especially in young individuals.(2) Several mechanisms have been hypothesised; in this context, inflammation and endothelial cell activation and damage play a crucial role.

CASE

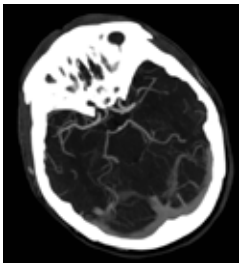
In our case, a 30-year-old female patient was diagnosed with acute ischemic stroke(figure 1) in the emergency department, and IV TPA was administered to the patient. In the history of the patient, it was learned that she was being followed up for SLE. After IV thrombolytic therapy CT angiography were performed. CT angiography showed occlusion of left MCA(figure 2). The patient was referred to our interventional radiology clinic for mechanical thrombectomy. On the patient's brain DSA before mechanical thrombectomy, left MCA was occluded(Figure 3). Left MCA opened after mechanical thrombectomy(Figure4).

Figure 1:



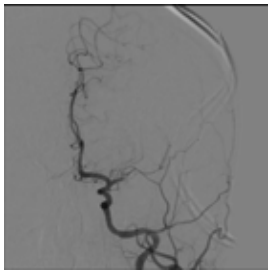
Acute infarction in the left MCA territory on diffusion MR

Figures 2:



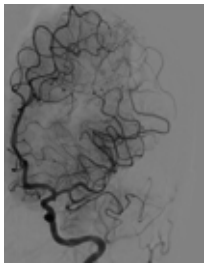
Left MCA oclision on CT angiography

Figure 3



Left MCA oclision on brain DSA

Figure 4



After mechanical thrombectomy

DISCUSSION

Acute ischemic stroke is one of the most important causes of mortality and morbidity for SLE patients. Principal factors implicated in the higher stroke incidence in systemic lupus erythematosus patients are higher burden of cerebral small vessel disease, Accelerated atherosclerosis, antiphospholipid syndrome and arterial and venous thrombosis, cerebral vasculitis, vessel dissection(3).

CONCLUSION

Ischemic strokes in patients with SLE may be resistant to tPA. Sometimes these patients require mechanical thrombectomy.

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ACUTE ISCHEMİC STROKE

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INTRODUCTION

Acute ischemic stroke is caused by abrupt cessation of focal cerebral blood flow [1,2]. Angiographically visible embolic or thrombotic occlusions have been identified as the cause of stroke in 70 to 80 percent of patients with symptoms severe as much as require early arteriography[3,4,5]. The apparent occlusion rate is probably lower in all stroke patients, such as those with mild stroke or classic lacunar syndromes. Other causes of decreased cerebral blood flow include sudden occlusion of small penetrating arteries and arterioles, single or multiple high-grade arterial stenosis with poor blood flow from the collaterals [6,7].

CASE PRESENTATION

A 52-year-old male patient presented to the emergency department with complaints of sudden onset of weakness in the legs, slurring of speech, and numbness in the right hand, which started approximately 10 hours ago. The vital parameters of the patient were spo2:97, pulse:90/min, respiratory rate:20/min:120/70 mmHg fever:36.5. He had coronary artery disease, diabetes mellitus and hypertension co-morbidities in his history. The patient was constantly taking medications such as bisoprolol, atorvastatin, clopidogrel, insulin as part and insulin glargine. In the physical examination, he was conscious, cooperative, oriented, GCS 15, pupillary isochoric, IR ++/++, dysarthric speech, motor strength 4/5 in the right side lower and upper extremities, hemihypoesthesia including the right face, other system examinations were normal. In blood tests, Glucose: 357mg/dl, Ldh:288 U/L, Alp:197 U/L, other tests were within normal limits. In the brain CT of the patient, chronic ischemic and atrophic changes consistent with his age were detected. Diffusion MR imaging performed on the patient showed diffusion restriction consistent with acute ischemia at the pons level. In advanced imaging, a thrombosed severe stenosis was observed in the v4 segment of the vertebral artery in the Carotid Angio CT. Dual antiaggregant therapy was started and the patient was consulted to a neurologist. He was hospitalized to the neurology intensive care unit for digital subtraction angiography (DSA) and close consciousness monitoring.

CONCLUSION

The underlying cause of stroke should be investigated in detail in patients who present to the emergency department with a stroke clinic and have multiple comorbid diseases and risk factors. Ischemic stroke should not be excluded in patients with regular antiaggregant use, and thrombo-embolic events should also be considered. Contrast-enhanced CT Angiography has now become routine imaging in patients diagnosed with ischemic stroke in order to find the thrombotic focus for possible interventional radiological procedures or to detect any vascular stenosis.

KEYWORDS: Ischemic Stroke, Interventional Radiology, BT Angiography

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POSTCOVID SPONTANEUSLY PNEUMOTHORAX

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INTRODUCTION

Pneumothorax can occurs spontaneously as a primary spontaneous pneumothorax or a secondary spontaneous pneumothorax because of a pulmonary disorder. Pneumothorax can occur by chest trauma or iatrogenic as a complication of central venous catheter. (1) Risk factors for a spontaneous pneumothorax is cigarette and cannabis smoking, male gender, tall stature, thin body habitus, chronic obstructive pulmonary disease, alpha-1 antitrypsin deficiency, cystic fibrosis, other cystic lung disorders, malignancy, pulmonary infections or architectural abnormalities such as Marfan syndrome, Ehlers-Danlos syndrome or homocystinuria (2)

CASE REPORT

A 54 years old female applied to our emergency medicine with complaint dyspnea, feeling palpitation and chest pain. The patient have that complaints while 3 days. The patient had covid-19 history 9 days ago. In vital parameters; Ta:145/85 Pulse:150 bpm saturation:86 percent. She had pulmonary embolism history 3 years ago. In her physical exam her lung sounds were not hear. The patient had subcutaneous emphysema. Patient's blood gas assesment; pH:7,39, pCO2:35mmHg, HCO3:24mmol/L, lac:2,2 mmol/L. Patient's ddimer:>10.000 mcg/L. Other blood tests are normal. In this case's computed tomography scan we detected diffuse pneumonic infiltration and pneumothorax. We consult the patient with thoracic surgery specialist and we hospitalized the patient

CONCLUSION

Covid-19 have variable system complications and pneumothorax is one of them (3). We should not forget covid-19 is multisystem disorder which can affect different organ systems, including after the disease.

KEYWORDS: COVID, Pneumothorax, Pneumonia

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A CASE WITH FAMILIAL MEDITERRANEAN FEVER

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INTRODUCTION

Familial Mediterranean Fever (FMF) is the most frequent hereditary inflammatory disease characterized by self-limited recurrent attacks of fever and serositis. It is transmitted in an autosomal recessive pattern and affects certain ethnic groups mainly Jews, Turks, Arabs, and Armenians[1]. FMF is caused by mutations in MEFV gene, which consist of 10 exon and encodes pyrin[2,3]. This protein is expressed mainly in myeloid/monocytic cells and modulates IL-1β processing, NF-κB activation, and apoptosis. A mutated pyrin probably results in uncontrolled inflammation. The most devastating complication of FMF is amyloidosis, leading to chronic renal failure. M694V homozygocity, male gender and the α/α genotype of serum amyloid A1 gene are the currently established risk factors for development of amyloidosis. Daily colchicine is the mainstay of the therapy. It is also effective in preventing and arresting renal amyloidosis.

CASE

A 7-year-old male patient presented to the emergency department with complaints of abdominal and chest pain. GKS: 15 on arrival, his general condition is good. Vital signs; spo2:98, TA:110/70 mmHg, Fever:37.8. In his anamnesis, the patient had attacks of abdominal pain every 3 days since the age of 3, regularly used 0.5 mg of Colchicine, but did not respond to treatment. There was no history of appendectomy. It was detected that the patient carried F479L, E167D variation in MEFV gene. In his family history, his brother and cousin also had history of FMF. In his physical examination, the abdomen was distended, there was widespread tenderness, defense-rebound-, heart sounds were normal, no natural pathological murmur was heard in the lung sounds, polyarthritis and erythema were present in the extremities, other system examinations were normal. In blood tests; hgb:8.3, hct:26, sedimentation:20, tibc:469, uibc:456, iron:12.40, ferritin:3.09, fibrinogen:384, other blood tests were within the normal range. Abdominal USG was reported within normal limits. The patient was treated symptomatically and was kept under observation. In the follow-up, the vitals were stable, the general condition was good, the symptoms improved, and the abdomen examination was normal. The patient was informed about the emergency situations and was discharged with the recommendation of outpatient control.

CONCLUSION

Familial Mediterranean fever should be kept in mind as a differential diagnosis in pediatric patients presenting with abdominal pain, even if it has not been diagnosed before. It is equally important that patients with a previous diagnosis of FMF and complaints of abdominal pain should not consider other differential diagnoses and focus only on FMF.

KEYWORDS: Abdominal Pain, Fever, Arthritis

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A GENETIC DISORDER WITH COMPLAINT ABDOMINAL PAIN TOGETHER DIFFERENT MUATATIONS: FAMILIAL MEDITERRANEAN FEVER

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INTRODUCTION

Familial Mediterranean Fever (FMF) is an autosomal recessive genetic disorder characterized by recurrent attacks with some symptoms for example: peritonitis, pleuritis, and arthritis. FMF is more common among Turkish, Armenian, Jewish, and Arabic populations (1). This disorder together with *MEFV* gene mutation generally, which codes the protein called pyrin, causes FMF. The M694V, M694I, M680I, V726A, and E148Q mutations generally seen in *MEFV gene* of FMF cases in Mediterranean populations (2) In Japan, M694I and E148Q are most frequently detected. Arthritis attacks are present in 50 to 70% of FMF cases, and they occur commonly as non-deforming acute monoarthritis affecting large joints of lower extremities such as the hip and knee. Arthritis generally lasts for 1 month (3). But in some cases, prolonged attacks of arthritis of hip and knee can see and cause permanent joint injury (4).

CASE

A 26-year-old male patient admitted to our clinic with complaint fever diagnosed with FMF for 4 years applied to our clinic. His first attacks of illness started at the age of 3 and he was diagnosed with FMF when he was 3 years old. There is no other feature in his history. It was learned that his cousin and sister had a history of FMF in his family history. In his FMF attacks were accompanied by symptoms such as chest pain, abdominal pain, joint pain, and fever. He uses colchicine for 3 years. In his complete blood count; wbc:8.8x10^3/uL, hb:17 g/dL,MCV:79,4 fL, MCH:26 pg, PLT:217.000/uL. His biochemical blood analysis; glucose:73 g/dL, ALT:24.8, AST:26.4, Urea:24 and other results are normal. The patient referred with medical genetic department for to research genetic mutation. After genetic analysis of MEFV gene, the M694V, E148Q, R202Q variations were detected in the patient.

CONCLUSION

Because of the risk of amyloidosis in FMF patients with pathogenic mutation carriers, these patients should be followed up regularly.

KEYWORDS: FMF, Abdominal pain, Fever, MEFV gene

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A PATIENT WITH FAMILIAL MEDITERRANEAN FEVER WHO HAD M694V, E148Q AND R202Q VARIATION

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INTRODUCTION

Familial Mediterranean fever (FMF) is a genetic disease which together recurrent attacks of abdominal pain, arthritis, fever and serosal inflammation. Attacks are usually of not long duration about 24-72 hours, and associated with acute serositis.(1)

CASE

A 54 years old male patient applies our clinic with abdominal pain during 2 days. His vital signs; TA: 138/75 mmHg, Pulse:76 per minute, oxygen saturation: 98 percent, temperature:37.2 0C. In his complete blood count; wbc: 5.19x10^3/mm3, hgb: 11,8g/dL, PLT: 219.000. According to his biochemical parameters; glucose: 85,8mg/dl, ALT:14.10, AST:16.2, Creatinin:1,23 ng/dL, CRP:0.03U. Any pathologic findings were not detected in Bt scan. He had this complaint in every 3 months. On his physical examination, there was defense and rebound on all abdominal area. Other physical examination findings are normal. In his medical history, he has FMF disorder since when he is 18 years old. He had no history of use any drug. We gave analgesia for his symptoms and be relieved. Because the any genetic analyses were not performed, we referred the patient to the medical genetics department for genetic research. According to the genetic analysis results, the M694V, E148Q and R202Q variations were detected in the case. Based on this result, it was planned to administer colchicine to the patient.

CONCLUSION

The exact understanding of the contribution of the specific variant to clinical findings of FMF is important (3). Because the cases with FMF have increased risk for renal amyloidosis risk, the patients with a pathogenic variant of the MEFV gene should be regularly followed for kidney failure. Also because the FMF patients with chest pain and at least one MEFV gene variant have increased risk for cardiac problems, These patients should be routinely followed up for cardiac problems.

KEYWORDS: MEFV, FMF, NGS

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SPONTANEOUS PNEUMODIASTINUM IN A YOUNG PATIENT

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INTRODUCTION

Pneumomediastinum is defined as the presence of air or another gas in the mediastinum and is also known as mediastinal emphysema [1]. Pneumomediastinum can be categorized as spontaneous (SPM) or traumatic. Traumatic pneumomediastinum is caused by blunt or penetrating trauma to the chest or iatrogenic injuries such as thoracic surgery. Mechanical ventilation is a common cause of barotrauma and pneumomediastinum. Pneumomediastinum caused by mechanical ventilation is generally considered a type of traumatic pneumomediastinum rather than spontan pneumomediastinum. Some authors distinguish between primary spontan pnömomediastinum (where there is no underlying lung disease that would predispose the person to air leak) and secondary spontan pneeumomediastinum (where there is an underlying airway disease such as cystic fibrosis or asthma). The patient's prognosis and management is guided by the underlying lung disease, if present, rather than the spontan pneumomediastinum itself.

CASE PRESENTATION

A 27-year-old female patient came with chest pain that was independent of effort, started suddenly 1 hour ago, and continued uninterrupted. The patient did not have any additional disease and drug use, cardiac history and history of sudden cardiac death in her family. The patient's vital parameters were within the normal range. On physical examination, Glascow Coma Scale was 15, general condition was good, lung sounds were normal, heart sounds were normal, S1+ S2+, no additional sounds and murmurs were heard. Other system examinations were also normal. Air densities were observed in the mediastinum in uncontrasted Chest CT of the patient. The patient who had no history of trauma or surgery, was consulted to a Thoracic Surgeon with a preliminary diagnosis: Spontaneous Pneumomediastinum. Operation and hospitalization were not considered by the Thoracic Surgeon for the patient whose vitals were stable and general condition was good, and Polyclinic control was recommended by the Thoracic Surgeon after 6 hours of observation. Emergency situations were explained to the patient whose complaints did not increase after the observation, and he was discharged with recommendation of the Thoracic Surgery outpatient clinic control.

CONCLUSION

This case demonstrates the importance of lung imaging along with cardiac markers in every patient who came to the emergency department with chest pain and has also stable vitals and does not have any pulmonary or cardiac listening findings. In patients who come to the emergency department with chest pain, it is essential to consider other differential diagnoses, even if it is rare.

Keywords; Emergency Medicine, Pneumomediastinum, Chest Pain

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CARBON MONOXIDE POISONING FROM HOOKAH

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INTRODUCTION:

CO is a colorless, odorless, tasteless, flammable poisonous gas. CO poisoning occurs as a result of poor combustion of carbon-based fuels and can cause acute and chronic poisoning. The main sources are geyser, gas leaking from the stove, automobile exhausts. In addition to these, hookah smoke can cause CO poisoning due to the incompletely burned carbon content. Weakness in acute poisoning, symptoms of upper respiratory tract infections, exercise dyspnea, chest pain, palpitation, lethargy, confusion, depression, hallucination, agitation, vomiting, diarrhea, abdominal pain, headache, dizziness, confusion, visual disturbance, syncope, seizure, and urinary incontinence, memory and gait disturbance, neurological symptoms and coma may be seen. In addition to acute symptoms, neuropsychiatric symptoms and cognitive dysfunction may develop in chronic poisonings. we wanted to present 2 patients who were poisoned by hookah, which we encountered as a rare source of co.

CASE:

A 20-year-old female patient presented to the emergency department with complaints of headache and dizziness. He had no known history of disease. When the patient was admitted, he was conscious. GCS: 15 Blood Pressure: 110/70 Pulse: 82 Fever: 36.3 ECG: There was no acute change. Respiratory and neurological examination of the patient were normal. Initially, the COHb level in blood gas was found to be 25. In the patient's history, there was no exposure to any stove, water heater or automobile gas. It was learned that they smoked hookah at home with their friends. The patient was given 100 percent O2 therapy. No abnormal finding was observed in other blood tests (Troponin<1.5 Glucose:100 Creatinine:0.8 AST:14 ALT:13 Na:139 K:4.27 Ca:8.6 Hemoglobin:14.5 WBC :10.0). After treatment, COHb level was found to be 4 in the control blood gas. . The patient was discharged with a normal CO level and regression of his complaints. The patient's friend, a 24-year-old male, applied to the hospital with similar complaints, and the COHb level was found to be 28. Other blood tests and vitals were normal. GCS:15 physical examination was normal. The patient was given 100% oxygen therapy, control COHb: 4.5, and he was discharged when his complaints regressed

DISCUSSION:

It is observed that the use of hookah has increased in recent years, especially among young people. Because the smell and taste of hookah is more attractive than cigarettes, it is thought to be less harmful by young people. The history of not only stove, automobile exhaust, water heater, but also hookah should be kept in mind in patients with nonspecific symptoms of CO poisoning due to its widespread use in homes and cafes. At the same time, it should be questioned if the people around the patient have similar symptoms and they should be admitted to the hospital.

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VARFANİZE EDİLDİKTEN 1 AY SONRA BAŞLAYAN YAN AĞRISI: RENAL PELVİSTE HEMATOM

ÖZET

Atriyal fibrilasyon (AF) en sık tedavi edilen kardiyak aritmidir. AF komplikasyonları arasında tromboembolizm (inme dahil) riski ve kalp yetmezliği yer alır [1] Hastaları CHA2DS2-VASC skoruna göre değerlendirip tromboembolik komplikasyonlardan korumak için antikoagülan başlarız. Yazımızda bir gece önce başlayan yan ağrısıyla başvuran hastada rastlanan renal pelvik hematomu tartışacağız.

ANAHTAR KELİMELER: AF, hematom, yan ağrısı

GİRİŞ

Atriyal fibrilasyon (AF) en sık tedavi edilen kardiyak aritmidir. AF komplikasyonları arasında tromboembolizm (inme dahil) riski ve kalp yetmezliği yer alır [1]

AF prevalansı yaşla birlikte artar ve 60 yaşın üzerindeki nüfusun yüzde 4'ünden fazlasını etkilediği tahmin edilmektedir. Gelişmiş ülkelerde hipertansif kalp hastalığı ve koroner kalp hastalığı, AF'li hastalarda en sık görülen altta yatan hastalıklardır [2].

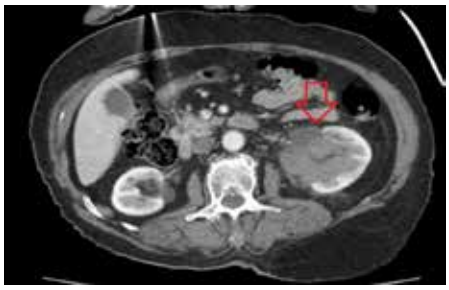
Riskli hastayı tromboemboliden korumak için sıklıkla K vitamini antagonistleri kullanılır. Oral doz aşımları veya ilaç etkileşimiyle birlikte kanama diyatezi oluşur ve hemorajik komplikasyonlar gelişebilir [3].

Renal pelviste hematom tipik olarak üst genito-üriner sistemin künt travması sonrası hemodinamisi stabil olan hastada çekilen IV kontrastlı Batın bigisayarlı tomografisinde görülmesi beklenir [4].

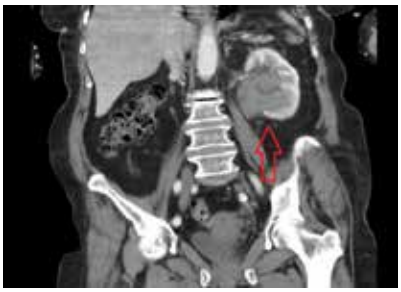
Spontan kanama vakaları renal pelvisteki subendotelyel dokudan kaynaklanır. Patolojik olarak Antopol-Goldman lezyonu adı verilmiştir [5].

OLGU

Yetmiş yedi yaşında kadın hasta, bir gece önce başlayan sol yan ağrısı ile acil servise başvurdu. Bilinen hipertansiyonu, ve AF'si var. Bir ay önce varfarin 5 mg kullanmaya başlamış. Fizik muayenesinde; genel durumu iyi oryante koopere, dinlemekle her iki akciğer sesleri normal, batında defans, rebaund yok, sol kostavertebral açıda hassasiyet mevcuttu. Tansiyon arteriyel 110/65 mmHg, nabız: 85 atım/dk, solunum sayısı: 15 /dk, oksijen satürasyonu: %96, ateş: 36.4 °C ölçüldü. EKG bulguları normal ventrikül yanıtlı AF idi. Laboratuvar bulguları: HGB: 11.3 g/dL, HCT: %34.3, WBC: 9.29 10^3/uL, üre: 53 mg/dL, kreatinin: 0.88 mg/dL, APTT:46.8, PT:96.8, INR:7.54, TİT'de 328 eritrosit olarak geldi. Diğer rutin Biyokimya değerleri normal sınırlar içindeydi. Abdominal ultrasonografi (USG) incelemesinde; sol böbrek renal pelvisinde en geniş yerinde 50x55x35 mm ölçüsünde hipoekoik lezyon izlendi (kitle, hematom?). İntravenöz kontrast madde verilerek yapılan abdominal bilgisayarlı tomografi (BT) incelemesinde Sol böbrekte heterojen yaklaşık olarak 52x51 mm ulaşan kitlesel lezyon görünümü izlenmektedir (Komplike kistik lezyon olabilir, malignite olabilir) (Resim 1,2).



Resim 1. Sol renal pelvisi dolduran hematom



Resim 2. Sol renal pelvisi dolduran hematom

Eldeki bulgularla birlikte değerlendirildiğinde tanımlanan lezyonun hematom olduğuna karar verildi.

Takibinde idrar sondasında makroskobik hematüri izlenen hastaya Protrombin Faktör Konsantresi (PCC) uygulandıktan sonra INR 1.38'e geriledi. İdrar rengi açıldı. Konservatif takibi verilen hasta üroloji servisine yatırıldı. 3 gün sonra rivoraksaban 20 mg 1x1 başlanarak şifa ile taburcu edildi.

TARTIŞMA-SONUÇ

Renal pelvik hematom travma sonrası görmeyi beklediğimiz bir lezyon olmasına rağmen nadiren neoplazma sekonder de görüldüğü raporlanmıştır. Patolojik olarak Antopol-Goldman lezyonu olarak tanımlanır [5].

AF kardiyo-embolik komplikasyonlar hususunda bizi endişelendirse de özellikle varfarin tedavisi için INR hedefi 2-3 arasındadır hastaların 3 hafta aralıklı INR kontrolleri ve doz ayarlamaları yapılması kanama ilişkili komplikasyonlar için elzemdir. Buna karşın yeni nesil antikoagülanlar için (YOAK) maliyet etkinliği her ne kadar tartışmalı olsa da mortalite, inme veya sistemik embolik olay ve hemorajik inme olasılığı K vitamini antagonistlerine karşı ciddi oranda düşüktür. Kullanımları Grade 1A önerilmektedir [6].

K vitamini antagonisti doz aşımı olan vakalarda beklenmedik komplikasyonlar gelişebileceği akılda tutulmalıdır.

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PİTOZİSTEN KAROTİS ARTER DİSEKSİYONUNA ;

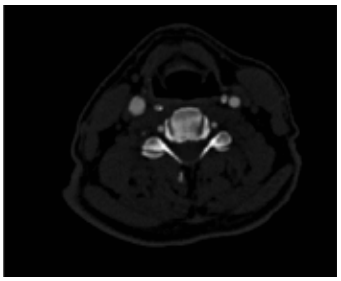
Orhan Enes TUNÇEZ ,Mustafa NARİN, Sultan Tuna AKGÖL GÜR

GİRİŞ: Karotis arter diseksiyonları 50 yaşın altındaki hastalarda iskemik strokun en önemli sebebi olarak kabul edilmektedir. Karotis arter diseksiyonları spontan veya travmatik olabilirler. Spontan diseksiyonlar olguların %60 kadarını oluştururken, geri kalan kısmı travmatik sebeplidir. Spontan diseksiyonlar idiopatik olabildiği gibi altta yatan bir arteriyel sistem hastalığına bağlı olabilir. Fibromusküler displazi, Ehler-Danlos sendromu ve Marfan Sendromu gibi hastalıkların karotis diseksiyonları ile birlikte görüldüğü bildirilmiştir. Diğer muhtemel önemli risk faktörleri ise yüksek tansiyon, ailede diseksiyon öyküsü bulunması, tütün alışkanlığı ve oral kontraseptif kullanımı olarak sayılabilir.

VAKA: 55 yaşında erkek hasta acil servise sağ göz kapağında düşüklük ve vücutta , yüzde olan döküntü şikayeti ile başvurdu. Hastanın alınan anamnezinde göz kapağındaki düşüklük 1 gün önce başlamış , döküntü şikayetleri ile ise yaklaşık 1 aydır varmış. Hastanın bilinen sistemik hastalığı olmayıp , 15 gün öncesinde baş dönmesi sebebiyle dış merkeze başvurusu olmuş. Hastanın fizik muayenesinde sağ gözde pitozisi olup , sağ gözde miyozisi yok idi. Hastanın vital bulguları tansiyon arteriyel 132/68 mm Hg , nabız 68 atım/dk, Spo2:96, vücut sıcaklığı 36,8 °C. Hastanın laboratuvar parametreleri normal aralıkta idi. Hastanın yapılan görüntülemesinde beyin bt ve diffüzyon mr görüntülemeleri normaldi. Bu görüntüleme ve laboratuar sonuçları neticesinde hastanın patolojisi açıklanamadığı için hastadan nöroloji konsültasyonu istendi ve karotis arter diseksiyonuna yönelik ileri görüntüleme planlandı. Hastanın karotis arter bt anjiografisi ve boyun usg'si neticesinde ''Sağ arteria carotis communis bulbusta , bulbustan başlayarak internal carotis arter proksimaline uzanan flep görünümü mevcut idi (Görsel 1). Hasta bu haliyle karotis arter diseksiyonu tanısı ile nöroloji kliniğine yatırıldı.

SONUÇ: Değişken bir semptomatolojiye sahip olan karotis arter diseksiyonlarında asemptomatik bir klinik seyirden inatçı bir baş ağrısına, geçici bir iskemik ataktan ölümcül bir stroke (inme) gelişimine kadar görülebilir. Acil servise baş ağrısı veya miyozis olmadan yalnızca pitozis şikayeti ile başvuran hastada ayırıcı tanı olarak karotis arter diseksiyonu akılda bulundurulmalıdır.

Görsel 1: Sağ arteria carotis communis bulbusta , bulbustan başlayarak internal carotis arter proksimaline uzanan flep görünümü



ILEUS WITHOUT RISK FACTOR

İNTRODUCTİON

Ileus is a condition that occurs due to disruption of intestinal peristalsis or obstruction of passagefor a mechanical reason.While congenital anomalies are the most common causes of ileus in the neonatal period, postoperative adhesions, hernias and malignancies are the main causes of ileus as age increases. The main symptoms of ileus are abdominal pain, delayed passage of or inability to pass flatus, nausea, vomiting, anorexia and abdominal distension.

CASE-1: 52-year-old female patient presented with the complaint of abdominal swelling for 2 days. She has a known history of kidney stones and double j stent. His vitals were normal. The abdomen appeared distended and there was tenderness in the abdomen but there was no defense or rebound.(Figure-1)

CASE-2: 32 years old male patient. He was operated by general surgery 5 days ago with the diagnosis of retroperitoneal cyst. He applied with the complaints of abdominal pain since yesterday and constipation for 5 days. Thepatient has no known disease and no history of drug use. There is tenderness in all quadrants of the abdomen, there is no defense and rebound. (Figure-2)

CASE-3: 44-year-old male patient presented with the complaint of abdominal pain and nausea for a week. He has no known disease and no history of drug use. There is no history of operation. The patient said that he has not been able to inability to pass flatus and defecate since yesterday. There was tenderness in the abdomen, there was no defense and rebound. (Figure-3)

CASE-4: 42-year-old female patient. She applied with stomach pain and vomiting for a few days. No additional disease or drug use. There is tenderness in the upper quadrants of the abdomen, no defense and no rebound.(Figure-4)

CASE-5: 76 years old male patient. She applied with complaints of brown vomiting and abdominal pain that started this morning. The patient with a known history of hypertension is using combination of ACE inhibitor and thiazide-like diuretic. There is no known history of surgery. Abdominal examination was normal, gastric contents were found in the inserted nasogastrictube, and rectal examination was normal stool. Brown vomit was considered as intestinal dilatation fluid. The patient whose air-fluid level was detected in the direct X-ray, was consulted to the general surgery with abdominal CT and then hospitalized. (Figure-5)

CONCLUSION

Although there is an underlying cause in the etiology of ileus cases, ileus can develop in most patients without risk factors. Although this rate is statistically very low, the diagnosis of ileus should be kept in mind in patients presenting with abdominal pain, nausea and vomiting. Only one of these five cases presenting during the emergency shift had a history of surgery.

KEYWORD: ileus, vomiting , abdominal pain

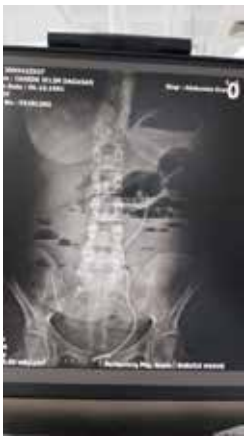


Figure-1

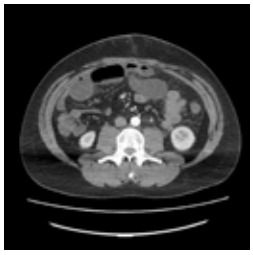


Figure-2

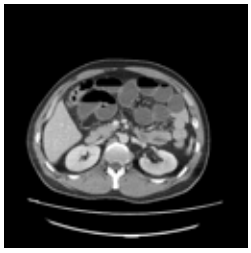


Figure-3

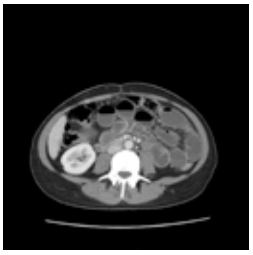


Figure-4

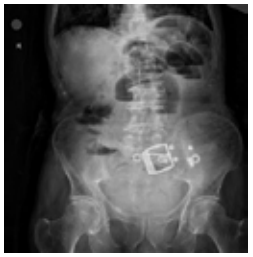


Figure-5

TEMPORAL BONE FRACTURE IN A PATIENT COMING WITH THROAT PAIN

Merve BULUT, Hatice Kübra TAŞCI, Fatma TORTUM

INTRODUCTION: Fractures can occur due to many mechanisms. It may be easy to detect the fracture in patients with a history of trauma. In other patient groups, anamnesis should be questioned in detail and physical examination should be done thoroughly.

CASE: A 26-year-old male patient. He presents to the emergency department with complaints of sore throat, headache and weakness for a few days. The patient's blood pressure: 114/68 mmHg, pulse: 98, saturation: 98%, fever: 36.8 C. The patient has a known diagnosis of epilepsy and is using levatiracetam. On physical examination, the oropharynx was hyperemic and tonsillar hypertrophic. Hearing lung sounds was normal bilaterally. Neurological examination was normal. Scalp examination revealed a 1 cm superficial dermabrasion in the left temporal region and tenderness in that region. When the patient's anamnesis was detailed, it was learned that he had a seizure 1 week ago. When he had a seizure, no one was with him and no one saw his seizure. Headache started in the patient after the seizure. The patient's physical examination was done in detail from the beginning and no additional findings were found. In the requested brain CT (computerized tomography), a longitudinal fracture was observed in the temporal region, and there was no bleeding. The patient was consulted to the neurosurgery department and was hospitalized for follow-up.

CONCLUSION: Patients often do not give detailed anamnesis. General physical examination should be performed in patients with comorbidities and risk factors, regardless of their complaints. The anamnesis should be questioned in detail. As seen in this case, it was learned that the patient who presented with symptoms of upper respiratory tract infection had a head trauma with a simple and quick general physical examination and a detailed anamnesis.

KEYWORDS: epilepsy, temporal bone fracture, throat pain

BAŞ DÖNMESİYLE BAŞVURAN GENÇ HASTADA SEREBELLAR ENFARKT :

Orhan Enes TUNÇEZ , Ertan BENZER, Sultan Tuna AKGÖL GÜR

GİRİŞ:

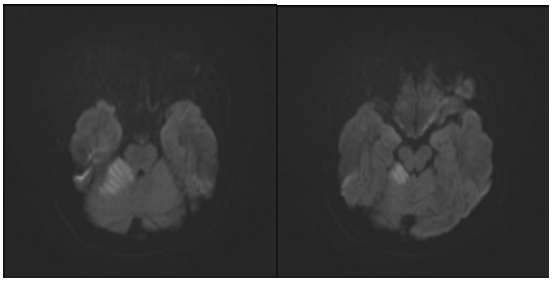
Serebellar infarkt , beyin infarktları arasında % 1.5 - 4.2, posterior dolaşım infarktları arasında ise % 47 oranında görülür .Sıklıkla ileri yaşlarda görülmekle birlikte , erkeklerde 2-3 kat daha sık görülür. Serebellar infarktlar posterior fossada gelişen ödemin etkisi ile beyin sapına bası oluşturarak, obstrüktif hidrosefali ve akut intrakranial basınç artışına yol açarak ölümcül seyredebilmektedir. Serebellar infarkt topografik olarak en sık superior serebellar arter (SSA) ve posterior inferior serebellar arter (PİSA) sulama alanlarında görülür. Anterior inferior serebellar arter (AİSA) alanında infarkta nadir rastlanır.

VAKA:

19 yaşında erkek hasta hastaneye dünden beri olan baş dönmesi ve bulantı şikayeti ile başvurdu. Hastanın tıbbi geçmişinde herhangi bir hastalığı bulunmayıp , sigara kullanımı mevcut idi. Hastanın detaylandırılan anamnezinde daha önce buna benzer bir baş dönmesi yaşamadığı ; kulağında ağrı , çınlama , işitme kaybı vs yok. Hastanın vitallerinde ta:132/68 mm Hg , nabız:73 atım/dk , Spo2:98, vücut sıcaklığı:36,3 °C olmak üzere normal aralıkta idi. Hastanın fizik muayenesinde ataksisi mevcut olup haricinde patolojik muayene bulgusu saptanmadı. Hastanın EKG ve laboratuar sonuçları normal idi. Fizik muayenesinde ataksisi olan hasta için santral görüntüleme planlandı. Hastanın beyin bilgisayarlı tomografi'si normal idi. Diffüzyon Manyetik rezonans görüntülemesi yapılan hastanın görüntülemesinde sağ serebellar enfarktı (Görsel 1 ve Görsel 2) mevcut idi. Hasta bu sebeple nöroloji kliniğine konsülte edildi ve nöroloji kliniğine yatırıldı.

SONUÇ:

Baş dönmesi acil servislere sık başvuru sebepleri arasında yer alır. Baş dönmesi ile tarafımıza başvuran hastaların nörolojik muayenesi eksiksiz olarak yapılmalı ve hastanın yaşı genç olsa bile fizik muayenesinde patolojik muayene bulgusu olan hastalar için ileri tetkik yapılmalıdır.



Görsel 1 ve Görsel 2: Sağ tarafta serebellar enfarkt

NONTRAVMATİK BİR AKUT SUBDURAL HEMATOM VAKASI ;

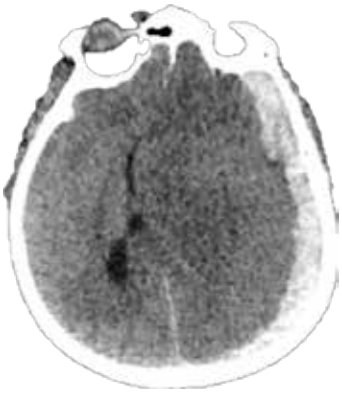
Orhan Enes TUNÇEZ ,Mustafa NARİN , Sultan Tuna AKGÖL GÜR

GİRİŞ: Subdural hematom genellikle dura sinüsleri ile beynin yüzeyel venleri arasında bağlantı sağlayan köprü venlerinin yırtılması sonucu meydana gelir. Arteriyel kaynaklı kanama sonucu da oluşabilmektedir . Yaşlılarda, alkoliklerde, beyin atrofisi olanlarda, intrakranial anevrizması olanlarda, antikoagülan ilaç kullananlarda ve travma geçirenlerde subdural hematom daha sık görülmektedir . Subdural hematom travmadan itibaren hematomun ortaya çıkma süresine göre akut, subakut ve kronik olarak sınıflandırılmaktadır. Spontan subdural hematom ise daha nadir görülmektedir. Biz burada acil servise ani başlayan baş ağrısı ve sonrasında gelişen bilinç kaybı şikayeti ile başvuran ve travma hikayesi olmayan bir hastadan bahsedeceğiz.

VAKA: 56 yaş kadın hasta baş ağrısı ve bilinç bulanıklığı şikayeti ile acil servise başvurmuş. Dış merkezde Glaskow koma skalası (GKS) geri olması (6) üzerine entübe edilerek tarafımıza sevk edilmiş. Entübe halde değerlendirilen hastanın yakınlarından alınan detaylı anamneze göre hasta sabah saatlerinde ani başlangıçlı bir baş ağrısı ile uykudan uyanmış , sonrasında bilinci kapanmış ve bu şekilde hastaneye götürülmüş. Hastanın tıbbi geçmişinde hipertansiyonu ve kalp kapak replasmanı öyküsü mevcut. Hasta kalp kapak replasmanı sebebiyle warfarin kulanıyormuş. Hastanın resüsitasyon odasında yapılan muayenesinde vitalleri entübe halde tansiyon arteriyel 142/66 mm Hg , nabız 73 atım/dk, Spo2:96 , vücut sıcaklığı 36,3 °C olmak üzere normal aralıkta idi. Fizik muayenesinde gözler kapalı -1 puan – , ağrı ile dekortike postür -3 puan-, ses yok -1 puan- olmak üzere gks 5 , pupiller fikse-dilate, bilateral babinski refleksi pozitif. Hastanın bu haliyle kan ve görüntüleme tetkikleri planlandı. Hastanın görüntülemesinde sol tarafta akut subdural hematom (Görsel 1) ile uyumlu görüntüsü ve buna bağlı gelişen şift görünümü mevcut idi. Hasta beyin cerrahisi kliniğine konsülte edildi ve beyin cerrahi kliniğince direkt ameliyata alınmak üzere beyin cerrahi kliniğine yatırıldı.

SONUÇ: Acil servise ani başlayan baş ağrısı şikayeti ile başvuran hastalarda antikoagülan ilaç kullanımı mutlaka sorgulanmalı ve travma olmaksızın gelişebilecek akut subdural hematom tanısı ayırıcı tanı olarak aklımızın bir kenarında bulunmalıdır.

Görsel 1: Sol tarafta akut subdural hematom



PRIMARY EPIPLOIC APPENDAGITIS: AN UNUSUAL CAUSE OF ACUTE ABDOMEN

INTRODUCTION: Epiploic appendages are peritoneum-lined protrusions of subserosal fat that arise from the surface of the large bowel. Primary epiploic eppendicitis is inflammation caused by spontaneous thrombosis or torsion of the vein draining the epiploic appendix. It is important to diagnose primary epiploic appendicitis because it causes acute abdomen and does not require surgical treatment.

CASE: A 31-year-old male patient was admitted to the emergency department with complaints of sudden onset of abdominal pain, nausea and vomiting, evident for the last two days. Her pain was located in the lower left abdominal quadrant. He had rebound tenderness on the lower left quadrant. Vitals at presentation were temperature 36.8 OC, heart rate 88 beats per min, respiratory rate 21 per min, blood pressure 115/74mm of Hg, and pulse oximetry 97%. Laboratory investigations revealed total leukocyte count 12.5□10^{0}9/μL, hemoglobin: 16.1 g/dL, hematocrit: 43.6%, and platelet: 286□10^{0}9/L. The abdominal CT scan (with contrast) revealed presence of inflammatory adipose tissue consistent with epiploic appendicitis located in the descending colon. The patient was admitted to the hospital for observation with a computed tomography-based diagnosis of epiploic appendicitis. The patient received medical treatment.

CONCLUSION: Primary epiploic eppendicitis is a disease that should be kept in mind especially in patients presenting with left and right lower quadrant abdominal pain and acute abdomen in which physical examination and laboratory findings are suspicious. Use of contrast-enhanced abdominal CT on patients presenting with acute abdomen may prevent unnecessary surgery.

KEYWORDS: Epiploic appendagitis, acute abdomen, medical treatment

TORSION OF GRANULOSA CELL TUMOR OF THE OVARY: A RARE CAUSE OF ACUTE ABDOMEN

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INTRODUCTION: Granulosa cell tumors (GCT) are rare ovarian malignancies that account for approximately 1.5-3% of all ovarian malignancies . GCT arise from sex cord-stromal tumors of the ovary and approximately 40% of patients with GCT present during the first decade of life. However, GCT can be diagnosed in patients ranging from infants to postmenopausal women. Despite the different clinical presentations of GCT depending on patient's age, abnormal uterine bleeding and intermittent abdominal pain are among the common symptoms. Less than 10% of patients present with acute abdomen due to ovarian torsion. Here we present a case of 30-year-old women with a rare acute presentation of GCT as anovarian torsion.

CASE: A nulliparous 30-year-old women presented with acute onset sharp right lower abdominal pain with nausea. Physical examination revealed right lower quadrant abdominal tenderness with a large, palpable mass in the right lower abdomen. Ultrasonography and colored doppler showed a heterogeneous cystic mass approximately 19x12 cm in the right adnexial region with no arterial flow. The hemoglobin, hematocrit, leukocyte count, and tumor markers CA-125, CA 19-9, AFP, and CEA were all within the normal limits. The patient underwent emergency laparatomy as she was suspected of having ovarian torsion on the right ovary. During the laparotomy enlarged right ovary was found to be twisted twice around its pedicle. Since the intra-operative frozen-section examination of the cyst indicated GCT, in addition to cyst excision right after the detorsion, wedge resection of the right ovary and biopsy of the contrlateral ovary were also performed. Final histopathological examination revealed GCT Stage 1a for right ovarian tumor and the contlateral ovarian biopsy was benign. According to final pathologic diagnosis, the patient was informed about conservative surgery and follow up was scheduled.

DISCUSSION: The clinical manifestation of GCT as acute abdomen due to ovarian torsion, as in the case reported, is very rare in reproductive-aged women In a comprehensive study including patients with ovarian torsion, only 1.8% had a malignant tumor. Malignancy risk should be included in differential diagnosis when a young woman presents with torsion and imaging findings suggestive of an ovarian mass. Regardless of the malignancy suspicion, frozen section examination may be required to avoid re-laparotomy. There is no consensus regarding the optimal surgical approach. Altough detorsion and preservation of the ovarian tissue is recommended with the goal of fertility preservation, this recommendation does not apply if there is evidence of a malignant tumor.

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POSTERİOR EKG ÖNEMİ: POSTERİOR MIYOKARD ENFARKTÜSÜ

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ÖZET

Acil serviste karşılaşılan göğüs ağrılarında önemli ve gözden kaçırılması kolay olabilen tanılardan biri de Posterior Miyokard Enfarktüsü'dür. Bu vakalara tanı koyabilmek için yapılması gereken en önemli tetkik posterior EKG çekilmesidir. Göğüs ağrısı şikayeti ile başvuran hastalarda mutlaka akla gelmelidir.

GİRİŞ

Miyokard enfarktüsü(MI), miyokard iskemisine bağlı miyokard hasarı kanıtının olduğu klinik veya patolojik bir olay olarak tanımlanır. Troponin artışı ve/veya düşüşü ile birlikte tipik semptomlar, elektrokardiyografik (EKG) değişiklikleri veya canlı miyokardda yeni bölgesel duvar hareketi anormalliği ile tanı konur [1.2].

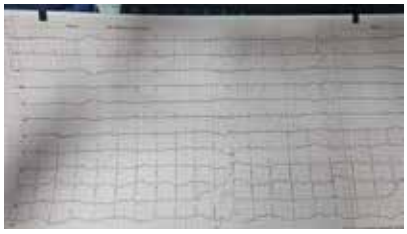
Sizlerle, MI türlerinden biri olan Posterior MI tanısı alan bir vakamızı paylaşıyoruz.

VAKA

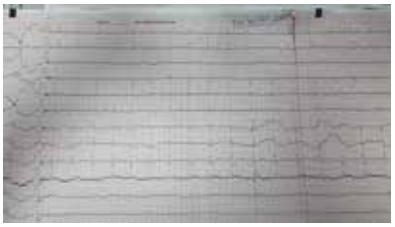
44 yaş erkek hasta göğüs ağrısı şikayeti ile acil servise başvurdu. Anemnezinde göğüs ağrısının yaklaşık iki saat önce başladığını ve sıkıştırır tarzda olduğunu ifade etti. Özgeçmişinde diabetes mellitus tip 2 ve erken dönem pnömokonyoz tanısı olduğu önerildi. Hasta 25 yıldır günde bir paket sigara içtiğini ifade etti.

Hastanın fizik muayenesinde her iki akciğerinde solunum sesleri olağan duyuldu. Kalp sesleri olağan duyuldu. Patolojik üfürüm duyulmadı. Hastanın başvuru vitalleri; kan basıncı:130/75 mmHg, nabız 80 atım/dakika, kan şekeri:141 mg/dl, SPO_2:96 olarak ölçüldü.

Hastaya EKG çekildi. V2-V3 anteroseptal derivasyonlarında ST segment depresyonu tespit edildi (Şekil 2). Hastaya V7-8-9 derivasyonlarını gösterecek olan posterior EKG çekildi. V7-8-9 derivasyonlarında ST segment elevasyonu tespit edildi (Şekil 3). Hasta posterior MI ön tanısı ile kardiyoloji uzmanına konsülte edildi.



Şekil 1



Şekil 2

Hastanın başvuru sırasında alınan kan örneklerinin sonuçlarında Troponin:0.2 ng/ml idi. Hastadan 72 dakika sonra alınan troponin değeri 12800.3 ng/ml olarak sonuçlandı. Hasta akut koroner sendrom tanısıyla koroner yoğun bakım ünitesine yatırıldı.

Koroner anjiografi yapıldı. Left Anterior Descending Arter (LAD)'de %30-40 darlıklar, Right Coronary Arter(RCA) normal, Circumflex Arter(CX) %100 tıkalı görüldü. Lezyon 2x15 mm balonla predilate edildi. Stent implante edildi. Komplikasyon gözlemlenmedi. Takibinde angina tariflemedi ve EKG değişikliği olmadı. Ek şikayeti olmayan hasta medikal tedavi düzenlenerek bir gün sonra taburcu edildi. Bir ay sonra kontrole çağırıldı.

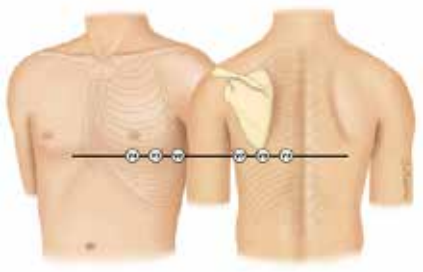
TARTIŞMA

Elektrokardiyogram, olası veya yerleşik miyokard iskemisi, yaralanması veya enfarktüsü olan hastalar için önemli bir tanı testidir. Anormallikler ST segmentinde, T dalgasında ve QRS kompleksinde kendini gösterir. Ancak bu hastalarda EKG normal veya nonspesifik olabilir.

Akut arka duvar MI, kalbin arkasına yerleştirilen V7-V9 derivasyonlarda ST yükselmelerine neden olur. Bu genellikle V1, V2, V3 ve V4 derivasyonlarında karşılıklı ST segment çökmesi ile ilişkilidir. Göreceli olarak uzun R dalgaları V1 ile V3 devirasyonlarında görülebilir. Bu posterior derivasyonlarda patolojik Q dalgalarının görünümüne karşılık gelir [3,4,5] Bizim vakamızda da anterior derivasyonlarda buna benzer ST segment değişiklikleri mevcuttu. Buna istinaden Posterior EKG ile değerlendirmeye karar verdik.

Posterior EKG çekiminde elektrotlar kalbin arkasına gelecek şekilde yerleştiriler ve bu derivasyonlar V7-9 olarak adlandırılır (Şekil 3). Çektiğimiz Posterior EKG'de posterior derivasyonlarda ST segment elevasyonu tespit ettik. STEMI olarak değerlendirdiğimiz hastayı ileri tetkik ve tedavi için kardiyoloji hekimine konsülte ettik.

Primer perkütan koroner girişim (PCI) ile koroner reperfüzyon, akut ST yükselmeli miyokard enfarktüsü (STEMI), yeni veya muhtemelen yeni bir sol dal bloğu olan bir MI veya zamanında yapıldığında gerçek bir posterior MI olan hastalarda sonuçları iyileştirir. Bizim olgumuzda da hasta PCI ile koroner reperfüzyon sağlandı.



Şekil 3

SONUÇ

Posterior miyokart enfarktı acil koroner reperfüzyon endikasyonudur. Posterior STEMI standart EKG'de göze çarpan ST segment yükselmesi yapmadığı için acil serviste gözden kaçabilir. İskemik semptomları olan hastalarda EKG'de anteroseptal V1-3 derivasyonlarındaki ST segment depresyonları akla posterior MI getirmelidir. Posterior STEMI V7-9 derivasyonlarındaki ST segment yükselmesi ve Q dalgaları ile doğrulanmalıdır.

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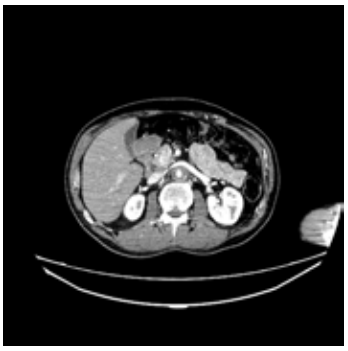
BACAK AĞRISI İLE GELEN TOTAL AORT TROMBÜSÜ OLGUSU

GİRİŞ: Abdominal aortun tamamen kapanması olağandışı bir durumdur. İlerlemiş aterosklerotik tıkayıcı hastalığı olan hastalarda ortaya çıkar ve tıkanma yerine bağlı olarak ciddi iskemik belirtilere neden olabilir.

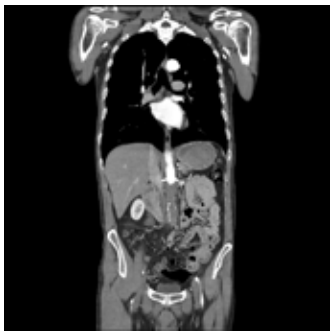
VAKA: 72 yaş erkek hasta acile yeni başlayan sol bacağında uyuşma şikayeti ile başvurdu. Vitallerinde TA:169/99 mmHg idi. Sol ayağında dorsalis pedis nabzı alınamıyordu. Sağ dorsalis pedis nabzı zayıf ve her iki ayağı soğuk idi. Sağ ve sol kol tansiyon farkı yaklaşık 30 mmHg idi. Diğer sistem muayenelerinde ek patoloji yoktu. Hastanın alınan laboratuvar parametrelerinde (Hemogram, INR) özellik yoktu. Çekilen Batın BT ve BT Anjiografisinde bilateral Renal Arterlerden itibaren Abdominal Aortada total oklüzyon-trombüs görüldü (Resim 1). Kalp damar cerrahisi kliniğine konsulte edilen hastaya yatış verildi.

SONUÇ: Abdominal aortun akut veya kronik total oklüzyonu çok farklı klinik belirtiler ile kendini gösterebilir. Akut abdominal aort oklüzyonu nadir görülmekle birlikte, çok hızlı ve yerinde cerrahi müdahale edilmez ise kaçınılmaz olarak ölümle sonuçlanır. Kronik abdominal aort oklüzyonu oldukça benign seyirli olup olgularda visseral organ iskemisi görülmeyebilir.

ANAHTAR KELİMELER: Abdominal Aort Trombüsü, bacak ağrısı, bacakta uyuşma



Resim 1 : Renal Arterlerden itibaren Abdominal Aortada total oklüzyon-trombüs(aksiyal kesit)



Resim 2 : Renal Arterlerden itibaren Abdominal Aortada total oklüzyon-trombüs(koronal kesit)

IMPORTANCE OF LOCALIZATION IN THE DEVELOPMENT OF ACUTE APPENDICITIS: EVALUATION WITH CT FINDINGS

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INTRODUCTION

The appendix vermiformis, a long, narrow tube-like structure, emerges from the posteromedial wall of the cecum 2 cm below the ileocecal opening (1). Its length and location are variable. Appendicitis is one of the most common causes of acute abdomen (2). The clinical appearance of appendicitis and its susceptibility to acute inflammation may be affected by the length and position of the appendix (3, 4). However, some studies show that the position does not change the clinical picture (5, 6). The aim of our study was to evaluate the abdominal computer tomography (CT) findings of acute appendicitis and to determine the relationship between acute appendicitis and appendix localization.

MATERIALS AND METHODS

The reports of abdominal CT examinations of patients who applied to the emergency department of our hospital between April 2019 and December 2020 with the complaint of abdominal pain were reviewed retrospectively. A total of 62 cases of acute appendicitis from 3028 abdominal CT examinations were included in the study. In this retrospective case-control study, the acute appendicitis group and the control group without signs of acute appendicitis on abdominal CT were formed by matching age and gender. Abdominal CT images of 62 patients with appendicitis and 62 control groups without appendicitis were evaluated in terms of appendix vermiformis location, length, single wall thickness, diameter, presence of appendicolith, periappendicular inflammation, presence of free fluid, presence of localized lymphadenopathy.

RESULTS

Since the control group was formed by matching the participants in the appendicitis group with age and gender, no statistically significant difference was found between the groups between age (mean age; 35) and gender (female; 51.5%) ($p = 1.0$). While the appendix was most commonly located retrocecal (33.8%) in the appendicitis group, it was found in the subcecal (41.9%) localization in the control group. Appendix vermiformis length was measured as 59.4±15.1 mm in the appendicitis group and 38.3±10.4 mm in the control group, and there was a statistically significant difference between the groups ($p<0.001$). Appendix vermiformis diameter was measured as 11.5±3.3 mm in the appendicitis group and 4.8±0.66 mm in the control group, and there was a statistically significant difference between the groups ($p<0.001$). Appendix vermiformis single wall thickness was 4.5±1.1 mm in the appendicitis group and 1.5±0.3 mm in the control group, and there was a statistically significant difference between the groups ($p<0.001$). The presence of appendicolith was found to be significantly higher in the appendicitis group (21.7%) compared to the control group (1.7%) ($p<0.001$). Periappendicular inflammation was found to be significantly higher in the appendicitis group (90%) compared to the control group (0%) ($p<0.001$). The presence of free fluid was significantly higher in the appendicitis group (15%) compared to the control group (0%) ($p<0.001$). (Table 1). LAP was found to be significantly higher in the appendicitis group (63.3%) compared to the control group (0%) ($p<0.001$).

DISCUSSION

The length and position of the vermiform appendix are inconsistent in humans. It is an organ that can move and change its position in various situations (7). In the literature, it has been shown that the appendix is mostly located in the retrocecal region, followed by the pelvic position (8-10). However, some researchers found that the most common position of the appendix is the pelvic position (11-13). It has been hypothesized from previous studies that the placement of the appendix in front of the cecum or in the pelvic position prevents kink and supports the early diagnosis of appendicitis, whereas the retrocecal position may cause kink and thus endanger the blood flow of the appendix (11, 14). Our study showed that the most common position of the appendix in cases with appendicitis was retrocecal, followed by subcecal, pelvic, post-ileal, and paracecal. In the control group, it was found that it was mostly in the subcecal, 2. most often in the retrocecal, then pelvic, post ileal and paraceacal positions.

CONCLUSION

The most common position of the appendix in patients with appendicitis is the retrocecal position. More research with large populations is needed to understand the relationship between the specific location of the appendix and the occurrence of appendicitis.

Keywords: Acute Appendicitis, Abdomen CT, Emergency Medicine.

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Tablo 1. Appendix vermiformis localizations and compare the control group datas

		Appendicitis Group		Control Group		
Localizations		n	%	n	%	
	Subcecal	16	25.8	26	41.9	
	Retrocecal	21	33.9	16	25.8	
	Paracecal	4	6.5	3	4.8	
	Pelvic	13	21.0	12	19.4	
	Postileal	8	12.9	5	8.1	
		Yes	No	Yes	No	p value
Appendicolith		15	57	3	59	0.001
Periappendicular inflammation		55	7	0	62	0.001
Free fluid		12	50	0	62	0.001
LAP		32	30	2	60	0.001

HASHIMOTO TIROIDITINE SEKONDER GELIŞEN RABDOMIYOLIZ

GİRİŞ

Rabdomiyoliz kas yıkımı ile karakterize; kreatin kinaz, aspartat transaminaz, laktat dehidrojenaz, miyoglobin, elektrolitlerin ve çeşitli hücre içi içeriklerin dolaşıma salındığı hayatı tehdit edebilecek bir durumdur. Serum kas enzimlerinde asemptomatik yükselmeden hayatı tehdit edici elektrolit dengesizlikleri, böbrek yetmezliğine kadar değişebilen aralıktadır (1).

OLGU

41 yaşında Hashimoto Tiroiditi tanılı erkek hasta halsizlik ve yaygın vücut ağrısı şikayetleriyle Acil Servise başvurdu. Nabzı 66 atım/dk, ateş 36.4 °C, kan basıncı 118/80 mmHg, SpO2 %99 olarak ölçüldü. Elektrokardiyografisi sinüs ritmindeydi. Hastanın ağır işte çalışmadığı, beslenme ile ilgili rutin dışı birşey almadığı öğrenildi. Laboratuvarda Kreatinin 1,42 mg/dL(0.72-1.25), Kan üre azotu 15 mg/dL(6-20), SGPT 85 U/L(0-55), SGOT 115 U/L(5-34), Kreatin Kinaz 3693 U/L(30-200), Potasyum 4.7 mmol/l(3.5-5.1), Sodyum 140 mmol/L(136-145) olarak ölçüldü. Hasta aynı gün Dahiliye polikliniğinde muayene olmuş, orada yapılan laboratuvar tetkiklerinde Anti Tiroid Peroksidaz 902.19 IU/mL(0.5.61), Anti Tiroglobulin 81.35 g/L(0-4.11) olarak ölçülmüştü.

Hasta Hashimato tiroiditine bağlı rabdomiyoliz olarak değerlendirildi. Dahiliye servisine yatırılıp IV sıvı ve tiroid hormon replasman tedavisi başlandı. Takibinde laboratuvar değerleri düzeldi ve şikayetleri geçti, hasta önerilerle ve tiroid replasman tedavisi ile taburcu edildi.

TARTIŞMA

Hipotiroidi, tiroid bezi fonksiyonlarının azalmasıdır. Hipotiroidizm semptomları birçok sistemde görülebilir (2). Yorgunluk, kilo alımı, soğuk intoleransı, kabızlık, depresyon, halsizlik ve kas ağrıları görülebilir. Rabdomiyoliz ise hipotiroidinin nadir görülen tehlikeli bir komplikasyonudur (3)

Rabdomiyolizin travmatik ve travmatik olmayan birçok sebebi vardır (3-4). Hücresel hasar, hücre içi kalsiyum salınımıyla sonuçlanır, proteazların ve proteolitik enzimlerin hiperaktivitesine, radikallerin oluşumuna neden olarak myofilament hasarı ve membran hasarıyla sonuçlanır. Membran hasarı da, hücre içi içeriğin dolaşıma salınmasına yol açar (5). Ancak hipotiroidizme bağlı gelişen rabdomiyolizin mekanizması tam olarak bulunamamıştır (3).

Rabdomiyoliz belirtileri her zaman olmasa da kas ağrısı, güçsüzlük ve miyoglobinüriyi içerir.

Bu tür semptomların yokluğu, rabdomiyoliz nedeni olarak hipotiroidizmi dışlamak için yeterli değildir (6). İlaçlar, toksinler, enfeksiyonlar ve egzersiz risk faktörleridir ancak hastaların herhangi bir risk faktörü olmayabilir (7). Hipotiroidiye bağlı rabdomiyolizin ciddi komplikasyonlarından kaçınabilmek için hızlıca IV sıvı ve tiroid hormon replasman tedavisine başlamak gereklidir (8).

ANAHTAR KELİMELER: hashimato tiroiditi, rabdomyoliz

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HALSİZLİK İLE BAŞVURAN NABIZLI VT OLGUSU

GİRİŞ: Ventriküler taşikardi, dakikada 100 atımdan daha yüksek bir kalp hızında geniş bir kompleks (120 milisaniyeden uzun QRS süresi) taşiaritmi olarak karakterize edilir. VT nin en yaygın nedeni iskemik kalp hastalığıdır. VT erkeklerde kadınlara göre daha yaygındır. Hastalarda hipotansiyon, değişen mental durum, terleme ve solukluk görülebilir.

VAKA: 62 yaş erkek hasta bilinen kardiak anjio-stent öyküsü mevcut olup acile yorgunluk şikayeti ile başvurdu. Hasta sabah günlük kullandığı ilaçlarını almadan yürüyüşe çıkıp sıcak havada efor sarfetmişti. Eve dönünce ani başlayan halsizlik ve evde olan minimal göğüs ağrısı olması üzerine 112 ile acil getirildi. Hastanın vitallerinde TA:106/70 mmHg, nabız:160-180 arasında idi. Monitorizasyonunda ve EKG sinde Ventriküler Taşikardi tespit edilen hasta Nabızlı VT olarak değerlendirildi. Bilincinin gerilemesi ve vitallerinin stabil olmaması nedeniyle Elektriksel Kardiyoversiyon yapılan hastanın kardiyoloji konsültasyonu yapılıp kardiyoloji kliniğine yatışı yapıldı.

SONUÇ: VT gelişen hastalarda hemodinamik yetmezlik gelişebilir ve tedavi edilmezse mortalite %30 u geçebilir.

ANAHTAR KELİMELER: Nabızlı VT, Yorgunluk, Halsizlik

KOLTUK DEĞNEĞİ DEĞİL BAHÇE DEMİRİ !!!

GİRİŞ: Bir nesne cildi deldiğinde ve vücudun bir dokusuna girerek açık bir yara oluşturduğunda ortaya çıkan durum penetran yaralanmadır.Penetran travmalar içerisinde yer alan delici yaralanmalarda klinik şiddet, yaranın yüzeysel veya penetran yönüne, konumuna ve hasarlı organlara bağlıdır.

VAKA: 11 yaş erkek hasta bahçede oynarken bahçe duvarına çıkıp ayağının kayması sonucu koltuk altına bahçe demiri saplanması ile acil servisine başvurdu. Hastanın şuuru açık, oryante koopere, GKS:15 idi. Vitallerinde Tansiyonu 90/70 mmHg dışında anormal bulgusu yoktu. Demir koltuk altına kıyafetle saplandığı için tampon görevi görüp kanamayı sınırlandırmıştı (Resim 1). Periferik nabızlar açık, parmak duyu ve motor muayenesi ağrılı ve kısıtlıydı. Hastanın stabilizasyonuna acil serviste başlandı. Hipotansiyonu ve yabancı cisim büyüklüğü nedeni ile görüntüleme yapılmadan hasta ortopedi kliniğine konsulte edildi. Hasta ortopedi tarafından acil ameliyata alındı.

SONUÇ: Penetran yaralarda hayati risk söz konusu olduğundan tıbbi tedavisi derhal yapılmalıdır. Hemodinamik olarak stabil olmayan hastalar, gecikmeden ameliyat edilmelidir.

ANAHTAR KELİMELER: Yabancı Cisim, Çocuk Hasta,Delici Alet

Resim 1: Koltuk altında yabancı cisim

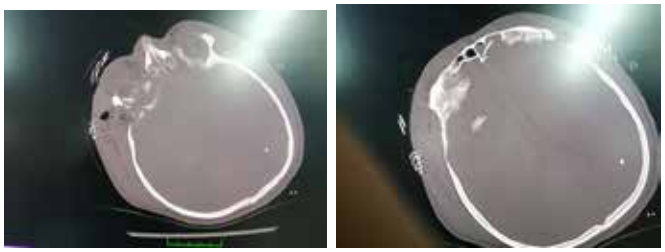
MAKSİLLOFASİAL VE KRANİAL FRAKTÜR BİRLİKTELİĞİ OLGUSU

GİRİŞ: Trafik kazalarında baş ve boyun yaralanmaları çoğu gelişmiş ve gelişmekte olan ülkelerde özellikle genç hasta popülasyonunda en yaygın morbidite ve mortalite nedenlerinden biridir ve ayrıca geçici veya kalıcı sakatlık ile sonuçlanabilir.

VAKA: 22 yaş erkek hasta trafik kazası olarak entübe halde acile getirildi. Fizik muayenesinde bilateral periorbital şişlik ve ekimoz mevcuttu. Her iki pupil midriyatik ve ışık refleksleri alınamıyordu. Kafatasında çok sayıda ve çeşitli büyüklüklerde kesi ve dermal abrazyonlar mevcut olan hastanın TA:66/54 mmHg, nabız:130/dk idi. Çekilen Beyin BT ve maksillofasial BT sinde bilateral orbita duvarlarında, ethmoid kemikte, frontal-parietal ve temporal kemiklerde multiple sayıda fraktür izlendi (Resim 1). Göz ve beyin cerrahi kliniklerine konsulte edilen hastanın göz muayenesinde Retina Dekolmanı ve Hemorajik Kemozis tespit edildi(Resim 2). Hastaya beyin cerrahi yoğun bakım yatışı verildi.

SONUÇ: Travmatik kranial kırıklarda travmanın büyüklüğüne ve mekanizmasına bağlı olarak maksillofasial kırıkların eşlik etmesi görülebilir.Travmatik kraniomaxillofasial kırıklarda yaş, cinsiyet ve yaralanma mekanizması büyük klinik öneme sahiptir.Bu vakalarda göz içi muayenesi unutulmamalıdır. Genellikle yaş ortalaması 20-45 olmakla beraber erkek / kadın oranı daha yüksektir. Mortalite oranı, yaralanmanın şiddetine bağlı olarak kranial yaralanmanın da eşlik ettiği multitravmalı hastalarda daha yüksek seyretmektedir.

ANAHTAR KELİMELER: Trafik Kazası, Hemorajik Kemozis, Retina Dekolmanı



RESİM-1: Orbita,Frontal,Temporal Kemiklerdeki Multiple Fraktürler
RESİM-2:Hemorajik Kemozis

A DIAGNOSIS THAT SHOULD BE CONSIDERED IN SUDDEN SHORTNESS OF BREATH: RUPTURE OF HYDATID CYST

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ABSTRACT

Hydatid cyst rupture is a life-threatening emergency pathology. It is a diagnosis that should be considered in sudden onset chest pain and shortness of breath. Care should be taken as the fluid inside the cyst has antigenic properties responsible for the development of anaphylaxis.

INTRODUCTION

Hydatid cyst disease is an important parasitic disease that is frequently seen in societies where animal husbandry is common. (1) According to the World Health Organization data, there are more than one million people living with cystic echinococcosis and alveolar echinococcosis in the world, and approximately 19,300 deaths occur annually due to these infections.(2) The causative agent is often Echinococcus granulosus. Hydatid infestation of the lung can be primary or secondary. The most common symptoms of pulmonary cystic echinococcosis (CE) described in the literature include cough (53 to 62 percent), chest pain (49 to 91 percent), dyspnea (10 to 70 percent), and hemoptysis (12 to 21 percent). Less frequent symptoms include malaise, nausea and vomiting, and thoracic deformations. (3) Bronchial tree involvement can lead to cough, chest pain, hemoptysis, or emesis; pleural cavity involvement can cause pneumothorax, pleural effusion or empyema.(5)

CASE REPORT

A 32 years old male patient applied to the emergency departmant with sudden shortness of breath and left chest pain that started 30 minutes ago. After the sudden onset of cough while the patient was eating, bitter water and blood came from the mouth. There is no known disease and no medication used.Electrocardiography (ECG) was sinus rhythm. In respiratory system examination, respiratory sounds were decreased in the left lower zone. Other system examinations were normal.In the pulmonary computed tomography angiography report taken in the emergency room, there is a cystic mass lesion in the lower lobe of the left lung, starting from the superior segment and extending to include the mediobasal and posterobasal segments, with a size of approximately 150*78*81 mm in the widest part of the bronchus.

CONCLUSION

Hydatid cyst rupture is one of the life-threatening chest emergencies that the emergency physician should consider in patients presenting to the emergency department with symptoms such as chest pain, shortness of breath and tachypnea. The fluid in the cyst carries the antigenic feature responsible for the development of anaphylaxis. It can cause systemic hypersensitivity reactions that can result in death by causing sudden and rapid onset respiratory and circulatory problems. Close vital hemodynamic monitoring should be performed in patients with hydatid cyst rupture. Hydatid cyst rupture should be considered as a differential diagnosis in patients presenting with chest pain and sudden shortness of breath. It should be kept in mind that anaphylaxis may develop due to the materials in the sac in hydatid cyst rupture.

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COVİD 19 SEPSİSİ VE FOURNİER GANGRENİ BİRLİKTELİĞİ

Meliha FINDIK, Seçil AYDIN, Şule AKTAŞ, Hayrullah yurdakul

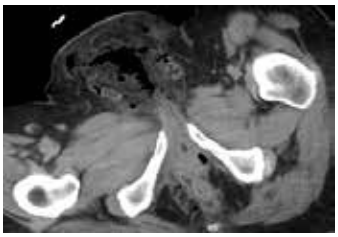
GİRİŞ

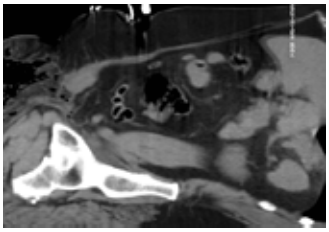
Fournier Gangreni gerçek bir ürolojik acildir. Genital organların nekrotizan enfeksiyonu olup son derece yüksek mortalite oranlarına sahiptir. Erkeklerde kadınlardan on kat daha sık görülmektedir[1]. Çalışmalar incelendiğinde % 24 olguda genitoüriner, % 24 olguda anorektal, % 10 olguda intra-abdominal, 52 olguda travmatik ve % 38 olguda saptanamayan nedenlerle geliştiği ileri sürülmektedirErken tanı ve etkin tedavi hayat kurtarıcıdır.

Bu olgumuzda ;multidisipliner yaklaşım gerektiren Covid 19 sepsise ile birlikteliği olan fournier gangrenini sunmayı amaçladık.

OLGU

75 yaşında erkek hasta, üç gündür olan ve giderek artan genel durum bozukluğu ile 112 tarafından acil servisimize yönlendirildi. Hasta yakınlarından alınan bilgide testis üzerinde yeni fark edilen kırmızı renkli döküntü tariflemekteydi. Hastaya 1 hafta önce idrar çıkışında azalma ve akut böbrek yetmezliği nedeniyle başka bir merkezde mesane sondası takılmış, sondalı takip edilmekteydi. Özgeçmişinde hipertansiyon, astım ve 30 paket yıl sigara içme öyküsü mevcut. Fizik muayene GKS:6 puan, inpeksiyonda her iki testisi kaplayan 6*6 cm nekrotize doku mevcuttu(şekil-1). Geliş vitalleri TA: 157/69 mmHg, Nabız 165/dk, Ateş 36,8 C, solunum sayısı 32 soluk/dk ve SpO2:%90, kan şekeri 169 olarak saptandı. Hasta entübe edildi Yapılan kan tetkitlerinde kreatinin değeri 1 hafta öncesine göre 2 kat artış mevcuttu, venöz kan gazında ph: 7.27, Pco2: 30.7 , sa02: 92.1 P02: 72.9, cHCO3 :15.6, K: 4.5, Laktat: 4.8, glukoz: 258 ve Covid PCR pozitif saptandı. Radyolojik incelemelerde, beyin ve toraks bilgisayarlı tomografis (BT)'i normaldi.. Batın BT'sinde ise pelviste ve perinenin izlenebilen kesimlerinde, cilt-cilt altı dokularda inflamasyon ile uyumlu kirlenme, hava dansiteleri görüldü. Bulgular ön planda Fournier gangreni ile uyumlu idi. Mesane çevresinde de yağ planlarında kirlenme ve hava dansiteleri görüldü(şekil-2,3). Hastaya geniş spekturumlu antibiyoterapi başlandı. Üroloji, Anestezi, Enfeksiyon hastalıkları, Genel Cerrahi ve Plastik Cerrahisi konsültasyonları istendi. Üroloji tarafından acil operasyon planan ve Fournier Gangren Şiddet İndexi (FGSİ) 12 olan hasta; yüksek mortalite oranı nedeniyle yoğun bakım ünitesi (YBÜ) transferi sağlandı.





TARTIŞMA

Fournier Gangreni gerçek ve çok önemli bir ürolojik acil olarak kabul edilmektedir. Literatürde bildirilen mortalite oranları %0-45 arasında değişmekte [3-4] olup; ölüm nedeni olarak ağır sepsis, koagülopati, akut böbrek yetmezliği, diyabetik ketoasidoz ve çoklu organ yetmezliği gösterilmektedir. Erken hemodinamik destek ve acil cerrahi debridman Fournier kangreninin tedavisinde en önemli basamaklardır. Kliniğe başvuru anında hastada bilinç bulanıklığının bulunması ve ilerlemiş hasta yaşı mortaliteyi etkileyen en önemli etkenlerdir.

Sonuç olarak hastalığın tedavisinde mültidisipliner bir yaklaşımın önemi açıktır agresif hemodinamik stabilizasyon, parenteral geniş spektrumlu antibiyotikler ve acil agresif cerrahi debridman uygulanmalıdır [7]. Bunlara rağmen Fournier gang reni, agresif cerrahi debridman ve antibiyotiklere rağmen halen yüksek mortalite oranları ile birliktedir.

SONUÇ

Fournier Gangreni ile başvuran hastalar yüksek mortalite riski ile karşı karşıyadır ve multidipliner yaklaşım gerekliliği unutulmamalıdır.

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GENÇ BİR ERKEKTE DİLATE KARDİYOMİYOPATİ VE MİTRAL YETMEZLİK

GİRİŞ: Mitral kapak prolapsusu; mitral kapakçıkların sistolde tam olarak kapanmamasıdır. Toplumda sıkça görülen kalp kapak anormalliklerinden biridir. Birçok çalışmaya göre sıklığı %4-15'tir. Kadınlarda erkeklere oranla görülme sıklığı fazladır. Genelde atipik semptomlar ile başvuru olur; efor dispnesi, çarpıntı, yorgunluk. Ekokardiyografi hastalık tanısında ve takibinde yardımcı olur. Genelde hastalar iyi prognoza sahiptir ancak infektif endokardit, mitral yetmezlik ve kapak kalınlaşması olgularında ani kardiyak ölüm riski artar. Hastalarda çoğunlukla infektif endokardit profilaksisi yeterlidir. Semptomatik taşikardi varlığında beta blokerler veya antiaritmik ilaçlar tedavide eklenebilir. Ciddi mitral yetersizliği olan hastalarda cerrahi girişim gereklidir ancak kapak replasmanından ziyade kapak onarımı önceliklidir.

OLGU: Bilinen bir hastalığı olmayan 20 yaşında bir erkek hasta 10 gündür halsizlik, nefes darlığı, batında şişkinlik, bacaklarda ödem olması üzerine servisimize başvurmuş. Yapılan fizik muayenede; bilinç açık koopere, oryante olup ateş:36,3 ºC, TA:130/80 mmHg, saturasyon %95, nabız 114/dk, kan şekeri 57 mg/dl idi.

Periferik iskemik bulguları mevcut (alt üst ekstremiteler soğuk ve mor) takipneik, her iki hemitoraks solunuma eşit katılıyor akciğer sesleri doğal, mitral odakta üfürüm mevcuttu. Batın muayenesinde epigastrik şişlik, sertlik, perküsyonda pitotik karaciğer; pretibial +2 ödem mevcut. Alınan kanlarında ve idrar tetkikinde; AST:4113, ALT:3187, Total Bilirubin:7.23, Direkt Bilirubin:1.69, BUN:32, Kreatinin:1.31, Potasyum:5.4, Sodyum: 129, Troponin:100.5, Pro-BNP:4888.3, Kan Gazı Değerleri: ph:7.23, Laktat:7.4, PCO2:42.4, HCO3:15, İdrarda proteinüri mevcut.

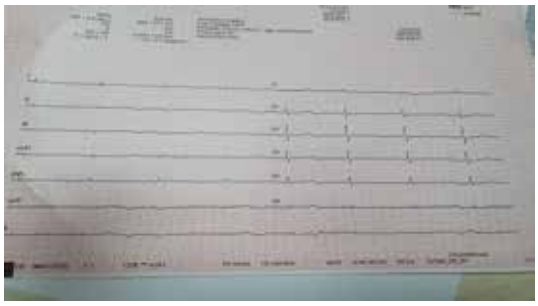
EKG'de: Bradikardik, her P dalgasına karşılık QRS kompleksi yok, voltaj düşüklüğü mevcut QT mesafesi normalden uzundur.

Çekilen PA-AC Grafide: Cardiothoracic index artmış,kalp boyutları normalden büyüktür.

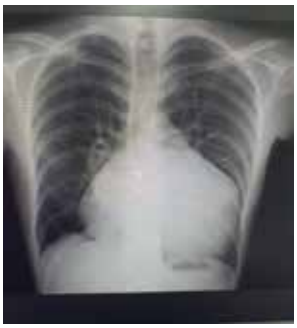
Ekokardiyografide tüm kalp boşlukları genişlemiş olup yeni tanı dilate kardiyomyopati olarak değerlendirildi. Ejeksiyon fraksiyonu %35-40 olarak tespit edilmiştir. Yatışı yapılan hastaya trans özofageal ekokardiyografi yapıldı: Mitral valv prolapsusu, anterior leaflet korda rüptürü saptandı. Hasta ileri tetkik ve tedavi amacıyla başka bir hastaneye sevk edilmiştir.

SONUÇ: Genç hastalarda nadir görülen dilate kardiyomiyopati ve buna bağlı mitral valv prolapsusu tanısı erken konulup takibi yapılmazsa mitral yetmezliğe ve korda rüptürüne doğru ilerleyip dekompanse kalp yetmezliğine ve ani kardiyak ölüme sebep olabilir. Acil servislerde bu hastalar için daha dikkatli bir değerlendirme yapılmalıdır.

ANAHTAR KELİMELER: dilate, kardiyomiyopati, mitral yetmezlik,



Şekil 1: Hastanın EKG'si



Şekil 2: Hastanın PA Akciğer grafisi

PRİMER DİSMENORE TEDAVİSİNDE KULLANILAN DİKLOFENAK SODYUMA BAĞLI BİFAZİZM

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GİRİŞ:

Bifazik anafilaksi reaksiyonu acil servislerde nadir görülebilen bir komplikasyondur. Genel bağlamda anafilakside önerilen takip süresi 4-6 saattir [1]. İkincil anafilaksi atağı görülebilmesi ortalama 8-10 saat iken 24-72 saate kadar görülebilmektedir [2,3].

OLGU:

24 yaş bayan hasta acil servise adetinin ilk günü başlayan karın ağrısı ile başvurdu. Ağrısı her adet döneminde benzer şekilde olduğunu tarif etti. Medikal öyküsünde tip 1 diyabet tanılı hasta bilinen alerji öyküsü olmadığını her ay diklofenak sodyum iğnesini yaptırdığını belirtti.

Fizik muayenesinde vitaller olağan, batın rahat, defans ve rebaund bulgusu rastlanmadı. Diğer sistem muayenelerinde herhangi bir patolojiye rastlanmadı

Hastanın hikâye ve fizik muayenesine göre primer dismenore düşünülen hastaya analjezik amaçlı diklofenak sodyum intramüsküler uygulandı. Uygulamanın 5. dakikasında ürtiker gelişen hasta yakın takibe alındı. Tansiyon 80/50 mmHg, satürasyon %97, solunum sayısı 22/dk uvula ödemi görülmeyen hasta anafilaksi düşünülerek 0,5 mg adrenalin intramüsküler verildi. 1000 cc serum fizyolojik 60 mg metilprednisolon uygulanan hasta acil serviste takibi yapıldı. Ürtikeri gerileyen, vital değerleri normal aralıkta seyreden hasta takibinin 7. saatinde tekrardan acil serviste yüzde şişme şikâyeti gelişti. Vitalleri tansiyon 70/50 mmHg, solunum sayısı 18/dk, satürasyon %98, uvula ödemi görülen hasta intramüsküler 0,5 mg adrenalin ve intravenöz salin ile takip edildi. Uvula ödemi gerileyen, tansiyon 120/80 mmHg olan hasta acil servis gözlemi sonrasında takip için hastane yatışı yapıldı.

TARTIŞMA:

Kadınlarda dismenore önemli bir sağlık sorunudur. Dismenore sık görülen bir hastalık olup, hayat kalitesinde düşme yaratır. Semptomların ciddiyetine bağlı olarak çalışma hayatından, okul ve günlük hayattan alıkoyabilmektedir [4].

Pelvik patoloji saptanmayan hastalarda, adetle birlikte ya da menstrüasyondan hemen önce başlayan 12 ile 72 saat arasında süren, tekrarlayabilen suprapubik pelvik ağrı olarak tanımlanmaktadır [5].

Primer dismenorenin medikal tedavisinde başlıca non steroid anti inflamatuar ilaçlar ve hormonal konraseptifler kullanılır [4].

Anaflaksi alerjene maruziyet sonrası gelişen, şiddetli, ölümcül olabilen, sistemik alerjik reaksiyondur [1]. Bifazik anafilaksi görülme insidansı yetişkinlerde yüzde 0,4 ile 2,2 arasında değişmektedir. Bu oran çocuklarda yüzde 14 gibi daha yüksek oranlarda görülebilmektedir [1-3].

Bifazik anaflaktik reaksiyonun tedavisi anafilaksiden farklı değildir. Tedavide epinefrin standart medikasyondur. Kortikosteroidler ise alerjinin semptomatik tedavisinde etkili olsa bile bifazik anafilaktik reaksiyonun önleyici etkisi yoktur. Keza antihistaminik ilaçlarda semptomatik olarak kullanılsa da bifazik anafilaktik reaksiyonun önlenmesinde etkili olmadığı bulunmuştur [6].

Tüm hastalar bifazik reaksiyon riski konusunda eğitilmeli ve kendine uygulayabileceği epinefrin oto-enjektörlerinin reçete edilmesi gerekmektedir. Bifazik anafilaktik reaksiyon yaşayan hastaların yüzde 50 kadarında adrenalin ihtiyacı gelişebilmekte ve bir kısmında ise hayatı tehdit edici reaksiyona sebep olabilmektedir. Bunun için yukarıda belirtildiği üzere hastaların bifazik anaflaktik reaksiyon ile ilgili bilgilendirilmesi önemlidir [7].

SONUÇ:

Anaflaksi hayatı tehdit eden çok ciddi bir komplikasyondur ve anaflaksinin ikinci dalgasına karşı hazırlıklı olunmalıdır. Eve taburculuk düşünülen hastalarda mutlaka acil durumlar öğretilmeli, epinefrin oto-enjektör kullanımı anlatılmalıdır. Gerekirse hastane yatışı düşünülmelidir.

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KOKAİN İNTOKSİKASYONU: WELLEN SENDROMU

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GİRİŞ:

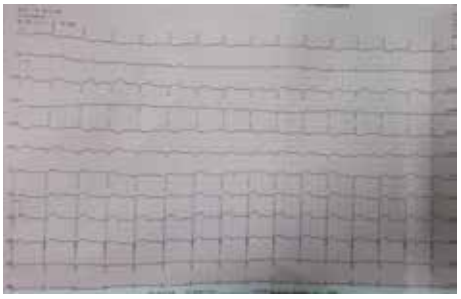
Genç yaşlarda madde kullanımı ülkemizde giderek artmaktadır. Diğer ülkelere göre kokain kullanımı ise %0,2 gibi bir oranla görece daha düşüktür [1]. Kokain kullanımına bağlı akut koroner sendromların oranı ise %0,7-6 olabilmektedir [2].

OLGU:

32 yaş erkek hasta acil servise birkaç saattir devam eden bulantı, kusma, göğüste batma ile başvurdu. Önemli tek medikal hikayesi inhale kokain sonrası şikâyetlerinin başlanmış olmasıydı.

Fizik muayenede vitalleri kan basıncı 170/80 mmHg, nabız 80/dk, ateş: 36°C, solunum sayısı 21/dk, satürasyon %97. Diğer sistem muayenelerinde patolojik bulgu saptanmadı.

12 derivasyonlu elektrokardiyogramda Wellen sendromu ile uyumlu bifazik T dalgaları (tip A) görülmekteydi (Resim 1). Hasta kardiyoloji bölümüne konsülte edildi. Acil koroner anjiografi planlanan hasta koroner yoğun bakıma yatışı yapıldı.



Resim 1: Wellen Sendoromu ile uyumlu prekordiyal derivasyonlarda bifazik T dalgaları

TARTIŞMA:

Koka bitkisinden elde edilen doğal bir alkaloid olan kokain, en çok suistimal edilen yasadışı uyuşturuculardan biridir. Kokain genellikle inhalasyon, nazal ve intravenöz enjeksiyon yoluyla kötüye kullanılır. Lokal anestezik, vazokonsriktif, sempatomimetik, psikoaktif ve protrombotik mekanizmalardan kaynaklanan birçok olumsuz etkisi bulunmaktadır. Kokain tüm vücut sistemlerini etkileyebilir ve klinik tablo öncelikle organ toksisitesinden kaynaklanabilir. En ciddi komplikasyonlar arasında nöbetler, hemorajik ve iskemik inmeler, miyokard infarktüsü, aort diseksiyonu, rabdomiyoliz, mezenterik iskemi, akut böbrek hasarı ve multiorgan yetmezliği sayılabilir [3].

Kokain ABD ikinci en sık kullanılan yasaklı maddedir. Yasaklı maddeler arasında kokaine bağlı acil servise başvuru sayısı ilk sırada yer almaktadır [4]. Türkiye'de ise kokain kullanımı diğer yasaklı maddelere göre daha az kullanılmaktadır [1]. Kokain kullanımı sonrası acil servise başvuranların yüzde 40 kadarında göğüs ağrısı şikâyeti bulunmaktadır [2].

Kokainin miyokard infarktüs gelişimine katkıda bulunan birçok kardiyovasküler ve hematolojik etkisi vardır. Kokain, presinaptik adrenerjik sinir uçlarından norepinefrin ve dopamin geri alımını bloke ederek postsinaptik reseptörlerde katekolamin birikimine neden olur ve böylece güçlü bir sempatomimetik ajan olarak etki eder. Bu etkileriyle kalp hızında artış, tansiyonda yükselme ve miyokardiyal kontraktitede artış ile oksijen ihtiyacında artmasına sebep olur. Ayrıca koroner vazospazm, vazokonstrüksiyon ve platelet agregasyonunda artma ile oksijen iletimini azaltarak iskemiye sebep olur. Tüm bunların sonucu infarktüs gelişimi ile sol ventrikül fonksiyonunda bozulma, aritmiler, QRS uzaması, QT uzaması gibi ölümcül sonuçlar oluşur [5].

Kokain kullanımı sonrası miyokard infarktüsü görülme oranları yüzde 0,4 ile yüzde 6 arasında değişmektedir. Kokain ilişkili göğüs ağrısını çoğunlukla baskı tarzı olarak algılanır. Diğer sık görülen semptomlar ise dispne, anksiyete, çarpıntı, baş dönmesi ve bulantıdır. Kokaine bağlı göğüs ağrısı sadece akut koroner sendromla sınırlı değildir, aort diseksiyonu da ayırıcı tanılar arasında bulunması gereklidir [2].

Kokaine bağlı miyokard infarktüsü tanı ve tedavisi diğer akut koroner sendromlardan neredeyse farksızdır. AHA kılavuzunda önemle belirtilen önemli bir konu ise β blokör kullanımıdır. Kokaine bağlı STEMI hastalarında β blokörler koroner spazmı arttırarak koroner spazmı alevlendirebilirler. Bu sebepler β blokörlerden tedavide uzak durulması önerilmektedir [6].

Wellen sendromu proksimal sol anterior inen arter stenozunda görülen elektrokardiyografik T dalga değişiklikleridir. Bu sendromda T dalga değişiklikleri ve serum markır anormallikleri olmadan anjinal göğüs ağrısı bulunur. Klinisyenlerin bu sendromun LAD tıkanıklarına ve anterior duvar miyokard infarktüsü riskine sahip olduğunu bilmesi önem arz etmektedir [7].

SONUÇ:

Kokain kullanımı miyokard infarktüsü gibi birçok kardiyovasküler olaya sebebiyet verebilir. Kokain kullanım öyküsü olan göğüs ağrısı ile başvuran hastalarda 12 derivasyonlu EKG ilk değerlendirilmesi tetkikler arasındadır. Kokaine bağlı gelişen akut koroner sendromların tanı ve tedavisi ile kokain dışı yaklaşım arasında fark yoktur.

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VAKA:AHMET ARIKAN- SENKOP VE DİSPNE İLE PREZENTE OLAN AORT ANEVRİZMA RÜPTÜRÜ.

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GİRİŞ: Aort anevrizmaları yaşlı popülasyonda daha sık rastlanan önemli bir klinik tablodur. Rüptür durumunda mortalite oranları çok yüksektir. Oldukça sinsi ve tehlikeli bir hastalıktır. Çoğu zaman semptomatik olmadığı için ciddi komplikasyonlar oluşturabilecekleri seviyeye kadar tanı almadan ilerleyebilirler. Akut aort diseksiyon veya rüptürü durumunda hastaların %21'i tıbbi yardıma ulaşamadan ölmektedir. [1,2,3]

VAKA: Hastanın bilinen multiple myeloma, diyabet mellitus, hipertansiyon hastalıkları ve kalp pili varmış. Hasta başvurusundan yarım saat kadar önce ahırda çalışırken senkop geçirip düştüğünü beyan ediyor. Kendine geldikten sonra nefes darlığı olmuş. Başvuru esnasında arteriyal tansiyonu:170/100 mmHg, nabız:88 atım/dk, satürasyon: oda havasında %70 ölçüldü. GKS 14. Genel durum orta.Nörolojik muayenesinde lateralizan bulgusu yoktu. Ense sertliği yoktu. Kas gücü tüm ekstremitelerde 5/5 ölçüldü. Kardiyak oskültasyonda S1-S2 sesleri ritmikti, ek ses üfürüm duyulmadı. Hasta başvuru sırasında takipneikti. Akciğer sesleri solda azalmış şekilde alındı. Bilateral ral duyuldu. Batın muayenesinde defans ve rebound yoktu. Periferik nabızları palpable idi. Vertebralar ve kotlar üzerinde hassasiyet izlenmedi. Oksipital bölgede cilt ile sınırlı 2x2 cm alanda abrazyon izlendi. Labaratuvar tetkiklerinde Hemoglobin:14 g/dL, WBC:8,3 10^9/L, Platelet:128 10^9/L, TroponinI: 8.3 pg/mL İNR:0.98, Kreatinin:1.2 mg/dL CRP:197 mg/L, Potasyum:4.4 mmol/L Sodyum:133 mmol/L 2 saatteki kontrol hemoglobin 13,1 g/dL olarak sonuçlandı. Görüntülemelerinde asendan aort 42mm saptandı. Desendan aort düzeyinde duvarı tromboze anevrizmatik genişleme izlendi (çap 71mm). Akciğer parankim yapılarının değerlendirilmesinde; Her iki akciğer parankiminde aktif infiltrasyon, kitle Sol hemitoraksta belirgin yerinde solda tek taraflı 5 cm kalınlığa ulaşan effüzyon (ödem bulguları? Hemotoraks?) komşuluğunda atelektatik görünümler izlendi (ŞEKİL 1). Hasta yakın takip amaçlı kırmızı alana çekildi. Abdominal anevirma rüptürü ve buna bağlı hemotoraks düşünülen hasta kalp damar cerrahi uzmanına danışıldı. Hasta kalp damar cerrahi uzmanının önerisiyle Torasik Endovasküler Aort Tamiri yapılan bir üst merkeze sevkedildi.

SONUÇ: Aort anevrizma rüptürü acil servislerde çok nadir karşılaşılan bir tablo olmakla birlikte görülmesi durumunda mortalite yüksektir. Anevrizmanın rüptüre olduğu yere bağlı olarak değişik semptomlarla gelebilir. Tanılı aort anevrizması olduğu bilinen hastalıklarda senkop ve tek taraflı efüzyon varlığında anevrizma rüptürü ayırıcı tanılar içinde yer almalıdır.

ANAHTAR KELİMELER: Aort anevrizması, Senkop, Plevral efüzyon.

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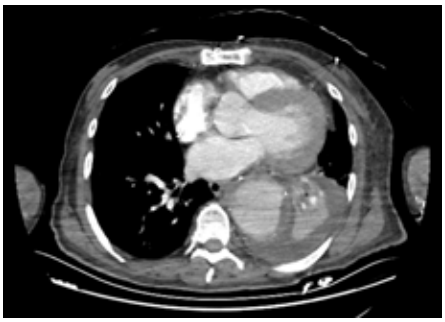

ŞEKİL 1(Aort anevrizma rüptürü)

EXAMINATION OF CONSULTATIONS IN A PRIVATE HOSPITAL EMERGENCY DEPARTMENT

Uzm. Dr. Fatma ÇAKMAK

INTRODUCTION AND PURPOSE: In the emergency department, the invitation of the emergency physician who examines and treats the patient to the physicians from other specialties to contribute to the management of the patient followed is called consultation.

Material-method: This study was conducted by retrospectively examining the consultations made in a private hospital. The information was accessed through the electronic hospital information management system.

RESULTS: A total of 12479 patients applied to Erzurum Private Buhara Hospital Emergency Service in April-May-June 2022. The patients who applied applied with upper respiratory tract symptoms. In this process, a total of 62 (0.49%) consultations were requested from the emergency department. The first five departments for which consultation were requested the most were orthopedics (13, 0.1%), pediatrics (12, 0.09%), general surgery (9, 0.07%), cardiology (7, 0.05%) and otolaryngology (6, 0.04%). Of the total, 53 (85.4%) consultations were held outside of working hours. Thirteen (20.9%) of the consulted patients were hospitalized and the others were discharged. Orthopedics is the department that receives the most hospitalizations (32.5%), followed by pediatrics, neurosurgery and internal diseases (25%). Pulmonary diseases, neurology and urology clinics have never been hospitalized. Consultations were requested by a total of 4 different emergency physicians working in the emergency department. While the number of consultation requests per emergency medicine specialist is 16 (25.8%), this number is 15.3 (24.6%) per general practitioner.

TABLE. Number of patients and inpatients according to the departments for which consultation is requested

DEPARTMENT REQUESTING CONSULTATION	NUMBER OF PATIENTS	NUMBER OF PATIENTS ON ADMISSION
Ear Nose Throat	6	1
Neurosurgery	4	1
Pediatrics	12	3
Chest Diseases	2	0
Orthopedics	13	4
Neurology	2	0
General Surgery	9	2
Internal Medicine	4	1
Urology	3	0
Cardiology	7	1
TOTAL	62	13

DISCUSSION: In our study, unlike previous studies in the literature, orthopedics, pediatrics, general surgery, cardiology, and otolaryngology were the departments where consultation was requested the most. The reason why our ranking is different and the consultation and hospitalization rates are different may be that severe patients choose hospitals with tertiary care because we conducted the study in a private hospital. Since the child is not an emergency in the relevant hospital, pediatric patients are cared for in the emergency department. For this reason, we have many pediatric consultations. Patients with mild symptoms such as upper respiratory tract infection symptoms usually come to the emergency department. Generally, the patients we consult with are those who have had surgery in the hospital and have increased pain outside of working hours. These patients constitute the majority of our hospitalized patients. Consultation rate per emergency medicine specialist is higher than general practitioners. This may be due to the fact that emergency medicine specialists evaluate patients who are more critical and require immediate diagnosis and treatment. It is particularly striking in this study that the number of consultations made to the orthopedic clinic was high. The fact that the months of April-May-June, in which the study was conducted, coincide with the spring-summer month, and the increase in activities that may cause trauma in this period may cause.

ACİL SERVİSE HİPERTANSİF ATAK ŞİKÂYETİ İLE BAŞVURAN HASTALARIN ANTİHİPERTANSİF TEDAVİYE UYUMU VE BAŞVURU SIKLIĞINI ETKİLEYEN FAKTÖRLER

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ÖZET

GİRİŞ VE AMAÇ: Acil servise hipertansif atak nedeniyle başvuran hastalar sık görülmektedir. Çalışmamız hipertansif atak ile başvuran hastaların tansiyon tedavisine uyumunu ve tansiyon değerlerinin birbirleriyle ve diğer faktörlerle olan ilişkisini incelemeyi amaçlamaktadır.

GEREÇ VE YÖNTEM: Bu çalışmaya hastanemize hipertansif atak şikâyeti ile başvuran ve daha önce hipertansiyon tanısı almış olan 267 hastadan oluşmaktadır. Araştırmanın veri toplama aşamasında hastaların sosyodemografik özelliklerini, hipertansiyon ile ilgili özelliklerini ve diyet alışkanlıklarını içeren anket formu ve Hill-Bone Hipertansiyon Tedavisine Uyum Ölçeği (HBHTUÖ) hastalar ile yüz yüze görüşme suretiyle doldurulmuştur.

BULGULAR: Hastaların acil servise başvurduklarında sistolik tansiyon ortalaması 168,77±26,83; diyastolik tansiyon ortalaması 98,03±10,44'dur. Katılımcıların ortalama HBHTUÖ puan ortalaması 4,78±1,79'dur. HBHTUÖ total puan ortalamaları eğitim seviyesi arttıkça anlamlı olarak daha düşük bulunmuştur. Diyet haricinde tuz kısıtlaması yapan hastalarda HBHTUÖ puanları ortalaması daha düşük bulunmuştur ve gruplar arasındaki fark anlamlıdır. HBHTUÖ ile, hastaların ortalama sistolik ve diyastolik tansiyonları korelasyon açısından karşılaştırıldığında HBHTUÖ puanları ortalaması ile sistolik tansiyon ortalaması arasında orta düşük düzeyde korelasyon saptanmıştır.

SONUÇ: Eğitim durumları ilköğretim ve altı düzeyinde hastaların tedaviye uyumu daha düşük bulunmuştur. Hastaların diyet yapıp/yapmama açısından HBHTUÖ puanları karşılaştırıldığında diyet yapan hastaların puan ortalamasının daha düşük olduğu görülmüştür. Tedaviye uyumu yüksek olan hastaların sistolik ve diyastolik tansiyonu daha düşük bulunmuştur.

ANAHTAR KELİMELER: Hipertansif atak, tedavi uyumu, yaşam tarzı değişikliği

CASE REPORT: HIGH ENERGY TRAFFIC ACCIDENT, PARAPLEGIA

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INTRODUCTION: The spine is the main stabilizer and load carrier of the axial skeleton. It is also important for the protection of neural structures such as the spinal cord, nerve roots and cauda equina. In the healthy skeleton, most injuries are the result of high-energy trauma and can lead to serious dysfunctions such as tetraplegia or paraplegia. The lumbar segment is the region most frequently affected by trauma, followed by the thoracic and cervical spine [1,2,3]. There is some controversy in the literature regarding the most common mechanism of injury. Some sources point to falls [1, 2, 4], while others point to motor vehicle accidents [5].

CASE: A 28-year-old male patient was brought to the trauma area after an in-vehicle traffic accident. While cruising at over 100km/h, a dog hit him in front of the car. The car made 3 flip-flap. They found the vehicle upside down, half of the patient inside the vehicle and half out of the vehicle. Seat belt not fastened. He said he couldn't feel and move his lower back. He described severe pain in his lower back. On arrival, TA: 119/61 mmHg saturation: %96 in room air, Heart rate: 93 bpm. He was conscious, cooperative and oriented. A 2 cm skin incision on the left eyebrow, a 4 cm subcutaneous incision on the left hand 2nd finger, and a 20 cm wide abrasion area on the right leg were observed. In the dorsal view performed by turning the patient in the form of a log, there was deformity at the T10-T11 level, which was noticed by inspection, and sensitivity on the vertebrae. There was no sensitivity in the cervical vertebrae. Peripheral pulses were open and equal. Muscle strength in the upper extremities was taken as 5/5. Muscle strength was taken as 1/5 in the lower extremities and there was sensory deficit. There was no obvious abnormality in the abdominal examination and respiratory sounds examination. PAN CT and Thoracolumbar MR were taken from the patient. Displaced compression fracture in the T11 vertebral corpus and fracture lines in the spinous processes were observed in the images. It was noticed that the T10-T11 vertebral corpus axis was disrupted and caused spinal cord compression (FIGURE 1). Communication with the neurosurgeon was made immediately. The patient with a fracture of the left hand 2nd finger and minimal lung contusion was evaluated by the physicians of the relevant branch. The patient was taken to emergency surgery by a neurosurgeon.

CONCLUSION: Paraplegia due to acute spinal cord injury is a condition that requires urgent surgical intervention after diagnosis. Although it is not a common situation in in-vehicle traffic accidents, the risk is higher after the vehicle rollover, which is considered as high-energy trauma, the driver or passenger ejected from the vehicle, or after accidents above 100 km/h. Not wearing the seat belt had a serious impact on the morbidity of the patient in the case.

KEYWORDS: Paraplegia, spinal cord injury, traffic accident.

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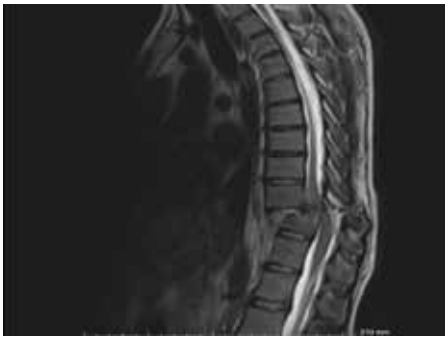

FIGURE 1(Spine Injury)

CASE REPORT : AORTIC DISSECTION, HEMOPTYSIS

Dr.Muhammet ÖZDEMİR,Prof.Dr.Mehmet GÜL,Dr.Çağrı TÜRKÜCÜ
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INTRODUCTION: Thoracic aortic dissection is the most common and disastrous event affecting the aorta. It is approximately 3 times more common than rupture of abdominal aortic aneurysms in the United States.(1) A very high percentage of patients with acute aortic dissection experience sudden death, with or without symptoms, after a short period of symptoms. Some researchers report that sudden mortality is as high as 40%. Mortality arises from acute myocardial ischemia in case of aortic rupture, pericardial tamponade leading to cardiogenic shock, acute aortic valve insufficiency and coronary ostium involvement.(2)

CASE: The patient came with hemoptysis and back pain two times. He declared that the blood from his mucus was about 100 ml. He said there was no chest pain, no shortness of breath. Arterial blood pressure was measured in the left arm: 210/150 mm/Hg in the right arm, 200/140 mm/Hg in the right arm, Saturation: %94 in room air, Pulse: 91 bpm. Peripheral pulses were palpable and equal. S1-S2 rhythmic. No additional sound murmur was heard. AC sounds were taken equal. No ral rhonkus was heard. Defensive rebound sensitivity was not detected in the abdominal examination. The strength in all extremities was 5/5. ECG: it was in normal sinus rhythm. The patient was drawn into the red area. It was monitored. In their imaging, an appearance compatible with dissection was observed in the sections continuing from the aortic arch through the descending aorta. The ascending aorta was measured 4 cm. The AP diameter of the proximal section of the descending aorta was measured as 6.5 cm in diameter (FIGURE 1). No filling defect compatible with pulmonary embolism was detected. The patient with type 3 aortic dissection was consulted to a cardiovascular surgeon. Bedside ECO was performed. EF: 65% calculated. He was referred to a center where Thoracic endovascular aortic repair was performed upon the recommendation of a cardiovascular surgeon.

Laboratory: Troponine:8.0 pg/mL, INR: 1.109, Hb:16.7 g/dL Leucocide: 9,07 10^9/L Platelet: 217 10^9/L, Creatinin:0.76 mg/dL Na:141 mmol/L K: 5.0 mmol/L Glukose:115 mg/dL CRP:28.6 mg/L

CONCLUSION: Although aortic dissection is not a frequently diagnosed disease in the emergency department, it is important because of its high mortality and morbidity rates. It usually presents with complaints of severe back pain or chest pain. However, as in our case, in cases where the dissection opens into the bronchus, it can be diagnosed with atypical symptoms such as hemoptysis. Although the treatment varies according to the type of dissection, it may require emergency surgery.

KEYWORDS: Hemoptyses, Aortic dissection, Sudden death

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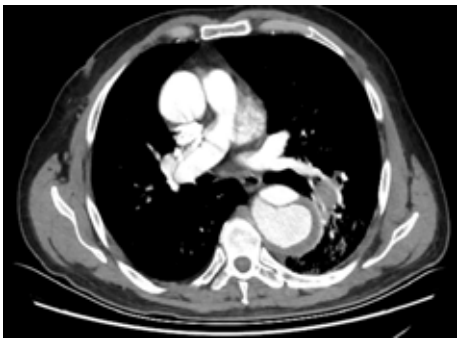

FIGURE 1(Aortic dissection with bronchial invasion)

TAŞIKARDI ILE GELEN HASTALARDA UNUTULMAMASI GEREKEN WOLFF PARKINSON WHITE (WPW) SENDROMU

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GİRİŞ

Wolff Parkinson White (Wpw) Sendromu aksesuar yollar aracılığıyla, anormal kardiyak elektriksel iletimle seyreden, bir konjenital preeksitasyon sendromudur. Çoğu WPW hastası aritmi geliştirmez ve asemptomatik kalır. WPW, VF veya AF ve Ani kardiyak ölüme sebep olabilir. Özellikle dirençli AF tedavilerinde Amiadorone gibi Av node bloklayıcı etkenlerin kullanılmasında VT, VF ve ani kardiyak ölüm olabilir. Bu vakamızla bu ajanların kullanımına dikkat edilmesini vurgulamak istedik (1).

VAKA TAKDİMİ

43 yaş kadın hasta çarpıntı ve nefes darlığı şikayeti ile acil servisimize başvurdu. Eşlik eden göğüs ağrısı mevcuttu. Geliş Vitalleri A:36,5, Nb:169, Ta:70/40, Spo2:95, Gks:15,Fizik Muayene Doğal İdi. Hasta Değerlendirildi. Ekgde eşlik eden af mevcuttu. Hasta monitörize edildi. Tetkikleri alındı. Bilinen hipotiroidi hastalığı ve L-Tiroksin kullanımı mevcut. Eşlik eden başka hastalık yok. Biyokimyada Glukoz:153 Mg/Dl Üre:36,5 Mg/dl, Kreatinin:0,96 Mg/dl, Ast:10 U/L, Alt:9 U/L, Amilaz:15 U/L, Kalsiyum:8,46 Mg/dl, Total Bilirubin:0,2 Mg/dl, Direkt Bilirubin:0,04 Mg/dl, İndirekt Bilirubin:0,16 Mg/Dl, Ck:60 U/L, Ck-Mb:14,2 U/L , Crp:1,4 Mg/L, Ggt:9,5 U/L , Sodyum:142 Mmol/L, Potasyum:4,12 mmol/L, Klor:112,3 mmol/L, Inr:6,07, Aptt:93,9 Sec , Pt:61,6 Sec , Troponin:160,87 ng/L . Hemogramda Wbc:8,40 K/Ul , Hgb:10,0 G/Dl , Hct:32,8 % , Mcv:73,3 fl ,Plt:360 K/Ul, Mpv:10,3 Fl, olarak geldi. Hastaya tedavi olarak metoprolol 2 defa uygulandı. Tedaviye rağmen düzelmeyen AF si devam etti. Vitalleri unstabil olan ve kliniği düzelmeyen hasta kardiyolojiye danışıldı. Hastaya 200 Joule ile 2 mg dormicum ve 1 mg fentanyl sonrası kardiyoversiyon yapıldı. Sinüs ritmi sağlandıktan sonra yoğun bakıma yatırıldı. Yoğun bakım takipleri sinüste seyreden hasta WPW ablasyon açısından ileri merkeze sevk edildi (Resim 1.)

Resim 1.Hastaya ait kardiyoversiyon öncesi ve sonrası EKG Görüntüsü

TARTIŞMA

Iv Amiodarone, İbutilide Ve Procainamide Olmadığı Durumlarda Uygulanabilir. Ancak Amiodarone AV Node üzerine etki edeceğinden dolayı bu hastalar VF'ye girebilir(2). Biz de bu vakamızda daha önceden tanısı olmadığı için Amiodarone uygulamaktan kaçınarak hastayı Kardiyoversiyon ile sinüs ritmine döndürmeyi tercih ettik.

SONUÇ

Sonuç olarak, özellikle daha önceden tanısı olmayan, genç supraventriküler taşiaritmilerde amiodarone kullanımında çok dikkatli olunmalıdır.

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İS HS TROPONIN EVALUATION EXCEEDING 30 MINUTES AFFECT SHORT-TERM MORTALITY İN PATIENTS ADMITTED TO THE EMERGENCY DEPARTMENT WITH CHEST PAIN?

More than one million patients are admitted to hospital with acute coronary syndrome (ACS) every year in Europe. ACS is diagnosed by evaluating clinical, laboratory and electrocardiography (ECG) together[1]. Hs Troponin begins to rise immediately after the onset of ischemia[2]. The first troponin test should be done at the time of admission. It should be repeated at 1 and 3 hours[3]. In our study, we investigated the effect of laboratory or clinician-induced late troponin intake on 1 and 6-month mortality in patients who presented to the emergency department with chest pain.

This study was conducted retrospectively in the emergency department of Ümraniye training and research hospital between June 2021 and June 2022. Patients over the age of 18 who and complaints similar to acute coronary syndrome were included in the study. Patients were two groups according to troponin evaluation at the time of admission and 30 minutes after admission. A definitive diagnosis of not ACS were excluded from the study.

During the study period, 498 patients were enrolled. 283 patients were excluded from the study. As a result, 215 patients were included in the study. 151 (70%) patients were male. ECG of 69 patients was unremarkable. Forty-four patients had ST elevation or newly developed bundle branch block. 101 patients had ST depression, transient ST elevation or t negativity. The hs troponin values of 14 patients were evaluated over 30 minutes. 14 of these patients died within 1 month. 23 of them died within 6 months. None of the patients who died were in the late troponin group. There was no statistically significant difference between the groups. (p=0.346, 0.216 respectively).

In this study, we evaluated 215 patients diagnosed with acute coronary syndrome. We found that Hs Troponin evaluation for 30 minutes or more after admission did not affect the 1-month and 6-month mortality of the patients. The explanation for this result may be as follows. Clinicians are careful in the clinical, laboratory and ECG evaluation required to diagnose ACS. ECG and clinical findings in ST elevation myocardial infarction are sufficient for early intervention. Early or late analysis of troponin values in this patient group does not contribute to the treatment[1,4]. The fact that mortality is not affected in patients with normal ECG or non-STEMI ECG changes may be due to the clinicians' ability to direct patients early and correctly, regardless of laboratory tests in clinical suspicion

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GÖĞÜS AĞRISI İLE ACİL SERVİSE BAŞVURAN HASTALARDA 30 DAKİKAYI GEÇEN HS TROPONİN DEĞERLENDİRMESİ KISA DÖNEM MORTALİTEYİ ETKİLER Mİ?

Avrupa'da her yıl bir milyondan fazla hastaya akut koroner sendrom (AKS) ile hastaneye başvuruyor. AKS'nin Disritmi, ventriküller fibrilasyon veya ani ölüm gibi birçok sonucu vardır. Klinik, laboratuvar ve elektrokardiyografinin beraber değerlendirilmesi ile AKS tanısı konulur[1]. AKS esnasında kalp hücrelerinde iskemi oluşur. Nekrotik miyokardiyal hücrelerden çeşitli maddeler salgılanır. Bu biyo belirteçlerden en önemlisi ve spesifiği troponinindir. troponin iskeminin başlamasından hemen sonra yükselmeye başlar[2]non-ST-segment elevation myocardial infarction (NSTEMI. Başvuru anından ilk troponin test yapılmalıdır. 1 ve 3 saatlerde tekrarlanmalıdır[3]. Değerlerin yüksekliği ve aradaki farkın büyüklüğü önemlidir. Çalışmamızda Acil servise göğüs ağrısı ile başvuran hastalarda Labaratuar yada klinisyen sebepli geç troponin alımının hastaların 1 ve 6 aylık mortalitesine etkisini araştırdık.

Bu çalışma retrospektif olarak Ümraniye eğitim araştırma hastanesi acil servisinde Haziran 2021 ve Haziran 2022 arsında yapıldı. Hasta verileri için hastane elektronik kayıt sistemi kullanıldı. 18 yaş üzeri Akut koroner sendrom benzeri şikayetler ile acil servise başvuran hastalar çalışmaya alındı. Başvuru anında ve başvurudan 30 dk sonra troponin alınmasına göre hastalar iki gruba ayrıldı. Kesin tanısı AKS olmayan veya akut kroner servis ya da yoğun bakım ünitesine alınmayan hastalar çalışmadan dışlandı. Open-source software (Jamovi, Sidney, Australia, https://www.jamovi.org, v. 1.6.21) was used for the statistical analyses of the data. A p-value of <0.05 was considered statistically significant.

Çalışma sürecinde 498 hasta kaydedildi. 283 hasta çalışmadan dışlandı. Sonuçta 215 hasta çalışmaya dahil edildi. 151 (70%) hasta erkekti. En çok komorbit hastalık kronik obstrüktif akciğer hastalığı idi 207 (96.3%). 69 hastanın ECG sinde özellik yoktu. 44 hastada ST elevasyonu ya da yeni gelişen dal bloğu vardı. 101 hastada ise ST depresyonu, geçici ST elevasyonu ya da t negatifliği vardı. 14 hastanın hs troponin değerleri 30 dk üzerinde değerlendirdi. Bu hastalardan 14 tanesi 1 ay içinde öldü. 23 tanesi ise 6 aylık içinde öldü. Ölen hastalardan hiçbirisi geç troponin alınan grupta değildi. İstatistiksel olarak gruplar arasında anlamlı fark oluşmadı. (p=0.346, 0,216 respectively).

Bu çalışmada Akut koroner sendrom tanısı almış 215 hastayı değerlendirdik. Hs Troponin'nin başvurudan 30 dk ve üzerinde alınmasının hastaların 1 aylık ve 6 aylık mortalitesin etkilemediğini bulduk. Bu sonucun izahı şu olabilir. Klinisyenler AKS tanısı koymak için gerekli olan klinik, laboratuar ve EKG değerlendirmesinde dikkatlidirler. ST eleve Miyokart enfarktüsünde EKG ve klinik bulgular hastalara erken müdahale için yeterlidir. Bu hasta grubunda troponin değerlerinin analizi erken veya geç olması tedaviye katkı sağlamamaktadır[1,4]. Ekg normal veya STEMI dışı ekg değişikliği olan hastalarda mortalitenin etkilenmemesi ise, klinisyenlerin, klinik şüphede laboratuar tetkiklerinden bağımsız olarak hastaları erken ve doğru yönlendirme yeterli olmalarından kaynaklanabilir.

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PEDİATRİK HASTA GRUPLARINA ÖZEL GÖZ VE KULAK BURUN BOĞAZ ACİLLERİ, YARALANMALAR VE YABANCI CİSİMLER

Kulak burun boğaz (KBB) ve göz hastalıkları acilleri sık karşılaşılan, bir kısmının erken tanı ve uygun tedavi yapılmadığı takdirde morbidite ve mortaliteye sahip olabilen ciddi patolojilerdir. Çocuklarda gözlenen acil hastalıklar erişkin hasta grubundan farklıdır ve tanı-tedavi yaklaşımları da farklılık göstermektedir.

Kaplan ve arkadaşlarının Haziran 2017- Ocak 2018 tarihleri arasındaki yaptıkları çalışmaya göre çocukluk çağında oluşan göz yaralanmaları, tüm travmaların %8-14'ünü oluşturmaktadır. Yine bu çalışmaya göre, hastaların göz muayenelerinde en sık konjonktivit (%39.7) tespit edilirken bunu sırasıyla, göz kapağı ödemi ve ekimozu (%14.3), konjonktival hemoraji (%12.6), kornea epitel defekti (%8.9), hordeolum ve şalazyon (%7.3), preseptal selülit (%3.3), korneal yabancı cisim (%3,2), konjonktival laserasyon (%2.9), blefarit (%2.8) oluşturmuştur. Hastalarda uygulanan tedavi yöntemleri değerlendirildiğinde; olguların %90.1'i basit tıbbi müdahale ile tedavi edilebilirken, % 7.2'si ileri tıbbi tedavi ile, %2.4'ü basit cerrahi müdahale ve %0.3 'ü ise ileri cerrahi müdahale ile tedavi edilmiştir. Basit tıbbi müdahale; konjonktivit, blefarit, hordeolum, şalazyon, epitel defekti gibi tanılarda, medikal tedavi, göz kapama tedavisi, sıcak-soğuk pansuman şeklinde uygulanırken, ileri tıbbi müdahale, preseptal selülit, üveit, santral retinal arter tıkanıklığı, hifema, papilödem gibi tanılarda hasta yatırılarak uygulanmış.

Büyükatalay ve arkadaşlarının 2018'de yayınladıkları çalışmaya göre çocukluk çağında oluşan KBB hastalıklarının başvuru şikayetleri incelendiğinde; rinolojik(%48,8), otolojik(%36,9), oral kavite(%5,9) ve baş boyun bölgesi(%3,5) olarak başvuru nedenleri saptanmıştır. Hastaların 355'i (%51,67) travma (künt travma, penetran travma), 290'ı (%43,21) enfeksiyon (üst solunum yolu enfeksiyonu (ÜSYE), akut otitis media, akut tonsillit, derin boyun enfeksiyonu) ve 230'u (%33,47) yabancı cisim (aspirasyon, yutma) oluşturduğu saptanmış. Travma ile başvuran hastaların %87,60 analjezik ve soğuk uygulama ile tedavi edilmiş ,%6,76 müdahele yapılmış. Müdahele yapılan hastaların %91,66 kesi sütürasyonu, %4,16 nazal fraktür redüksiyonu ve %4,16 maksillofasiyal fraktür onarımı yapılmış.

Awad ve El-Taher yaptıkları çalışmada KBB'ye danışılan hastaların %30'unu yabancı cisim oluşturduğu gözlenmiş. Aynı çalışmaya göre oral kavite yabancı cisimleri ile danışılan hastaların %86,4'ü lokal anestezi ile, %13,6'sı genel anestezi ile çıkarılırken, 27 hastada yabancı cisim alt solunum yoluna aspire edilmesi üzerine ve göğüs cerrahisi kliniği ile genel anestezi altında çıkarılmış.

Pediatrik acil servis başvurularından KBB ve göz hastalıklarını ilgilendiren ve bu nedenle konsülte edilen birçok durum acil servis şartlarında muayene ve tetkik ile tedavi olabilmektedir. Konsülte edilen hastaların birçoğu basit travma, müdahale gerektirmeyen burun kanamaları veya basit enfeksiyonlar gibi başvuru şikayetlerinin oluşturduğu görülmektedir. Ancak ciddi travma veya aspirasyona yol açabilen yabancı cisim ile başvuran hastalar en kısa zamanda değerlendirilip uygun tedavisi yapılmalıdır.

POLYARTERİTİS NODOSA DSA IMAGİNG

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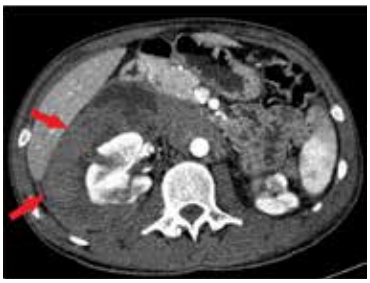
INTRODUCTION

Polyarteritis nodosa (PAN) is a necrotizing vasculitis.Characterized by the presence of inflammatory reactions of blood vessels of medium or small caliber that lead to necrosis and destruction of the walls of vessels. (1) The diagnosis is ideally made by means of biopsy of involved tissue in a patient with the appropriate clinical symptoms and laboratory data, but an angiogram provides the proof in some cases. Most of the patients with PAN have positive angiographic evidence of their disease, predominantly in the visceral arteries but also in arteries of the extremities and in small branches of the aorta. The angiographic feature of PAN is microaneurysms in medium or small arteries.(2)

CASE REPORT

An 20-year-old male patient was admitted to the emergency department with extensive abdominal pain. There was right perirenal hematoma in the abdominal CT tomography(Figure 1). There is no trauma in the patient's history. The patient was referred to our interventional radiology clinic for DSA and embolization. Angiography showed multiple aneurysms in small and medium arteries(Figure 2). These aneurysms suggested PAN.

Figures 1:



Right perirenal hematoma (red arrows)

Figures 2:

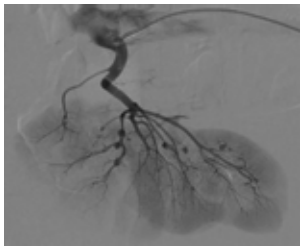


Figure 2A: Right kidney artery branches multiple aneurysms

Figure 2B: Left kidney artery branches multiple aneurysms

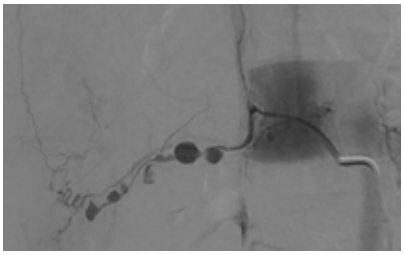


Figure 2C: Right lumbal artery multiple aneurysm

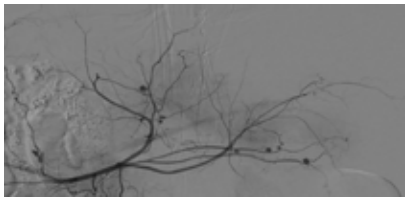


Figure 2D: Left internal iliac artery branches multiple aneurysms

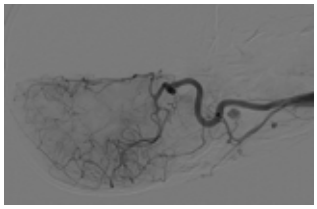


Figure 2E: Right ECA branches multiple aneurysms

DISCUSSION

PAN is a systemic necrotizing vasculitis that primarily affects medium-small sized arteries . Patients frequently present with systemic symptoms such as fever and weight loss.The most common clinical presentations include mononeuritis multiplex, peripheral neuropathy, cutaneous manifestations such as nodules and livedo reticularis, renal manifestations such as hypertension, abdominal pain (2). Diagnosis is generally confirmed by tissue biopsy of an affected organ or angiography if tissue biopsy cannot be obtained. (3) Findings on angiography include saccular or fusiform aneurysms and stenotic lesions in the visceral arteries such as mesenteric, hepatic, and renal arteries and their subsequent branches. Sometimes these aneurysms can cause hemorrhage.

CONCLUSION

PAN patients may come to the emergency room because of the pain caused by bleeding. Aneurysms in small arteries on angiography can be diagnosed.

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A THIN LONG APPENDIX

Acute appendicitis is a clinical picture that may require urgent surgical intervention, which is frequently encountered in both adult and pediatric groups.[1] Clinical and radiological imaging of the patient have an important place in the diagnosis.[1] As a clinical finding, they initially describe colic-like pain in the midline periumbilical region of the abdomen.[2] The pain persists for at least 24 hours and may be accompanied by symptoms such as nausea, vomiting and loss of appetite.[2] Approximately 3.5% of acute appendicitis is accompanied by deep pain with compression of the right iliac fossa, also called Rowsing's sign.[3] CT is frequently used in radiological imaging.[1] An appendix diameter of more than 6 mm in CT is diagnostic.[4]two patients with appendixes measuring 6 mm in diameter and multiple appendicoliths had surgically confirmed acute appendicitis. Of 84 patients with visible appendixes measuring greater than 6 mm in maximal diameter, 78 had surgically confirmed acute appendicitis. In the remaining six, symptoms resolved spontaneously, and no surgery was required. In the absence of compelling clinical findings or an appendicolith, adult patients with maximal appendiceal diameters of 6 mm or less should undergo a period of close observation rather than immediate surgery. A diagnosis of appendicitis can be made in adult patients with persistent right lower quadrant pain and a visualized appendix greater than 6 mm in diameter.","container-title":"Radiology","DOI":"10.1148/radiology.167.2.3282253","ISSN":"0033-8419","issue":"2","journalAbbreviation":"Radiology","language":"eng","note":"PMID: 3282253","page":"327-329","source":"PubMed","title":"Acute appendicitis: sonographic criteria based on 250 cases","title-short":"Acute appendicitis","volume":"167","author":[{"family":"Jeffrey","given":"R. B."},{"family":"Laing","given":"F. C."},{"family":"Townsend","given":"R. R."}],"issued":{"date-parts":[["1988",5]]}}],"schema":"https://github.com/citation-style-language/schema/raw/master/csl-citation.json"} Surgical intervention is the golden standard in the treatment of acute appendicitis.[1] Recently, procedures such as antibiotherapy and endoscopic retrograde appendicitis therapy (ERAT) have also been the focus of attention to avoid surgery.[1] The appendix, which is generally located retrocecal, in some cases the location of the appendix can be in atypical places; inside the pelvis (30%), extraperitoneal (5%), left iliac fossa (rare).[1,5]

A 35-year-old male patient comes to our clinic with the complaint of suprapubic pain. The general condition of the patient is good, vitals are stable, oriented and cooperative. In the physical examination of the patient, signs of suprapubic tenderness and minimal tenderness in the right lower quadrant were found. In the blood tests, urea: 32, creatinine: 0.97, WBC: 14.61, CRP: 21.7. The appendix tissue could not be visualized in the USG of the patient. Pelvic acute appendicitis was observed as a result of abdominal CT. The patient was transferred to general surgery and operated laparoscopically.

As a result; In the diagnosis of acute appendicitis, it is important not to focus only on right lower quadrant pain. As in our case, patients may also present with isolated suprapubic pain due to appendix location.

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A PATIENT TOGETHER WITH PROLACTINOMA AND KLINEFELTER SYNDROME

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INTRODUCTION

Klinefelter syndrome is a genetic disorder that occurs only in males and results from the presence of an extra X chromosome (XXY).

CASE PRESENTATION

A 41-year-old male patient who came to the emergency department due to acute scrotal pain was referred to the Urology outpatient clinic for further diagnosis and treatment because of decreased testicular size.

In the examination of the patient; Scrotal CDUS: Right Testicle 12*8*16 mm Left Testicle 14*8*18 mm. It was learned that the patient was infertile, decreased sexual desire and erectile dysfunction. On FM, bilateral testicles were small and firm. The physical features of the patient were also asthenic. Thereupon, spermiogram and hormone profile were requested from the patient. According to the results of the patient's hormone profile; Testosterone: 7.44, Prolactin: 199 132.3, FSH: 13.39 (0-12.4) 36.36, Estradiol: 86.62 17.54, LH: 22.71 22.89, TSH: 2.21 1.67

Pituitary MRI was requested for high prolactin and Karyotype Analysis was requested because it was azoospermic in spermiogram. According to Pituitary MRI: 9*5.5mm microadenoma in the left inferior part of the pituitary gland. Peripheral blood sample was taken for chromosome analysis in heparin tube and karyotype analysis was performed. According to the results of the karyotype analysis (47, XXY), it was determined that the patient was Klinefelter.

CONCLUSION

In the literature review, no case of prolactinoma with Klinefelter syndrome was found, and our case is the first case in the literature. For this reason, we think that our current case will make an important contribution to the literature.

KEYWORDS: Chromosome, XXY, Scrotal Pain

ÜST EKSTREMİTE İSKEMİSİ

Dr. Ömer Turalioğlu, Dr. Nabi Bayramoğlu, Dr. İbrahim Özlü

GİRİŞ: Ekstremite arterlerinde tromboz gelişimi bir çok nedenle olabilir. Hastanın kullandığı ilaçlara ,hastalıklarına , yaşam şekline, çevresel etkenlere göre değişen boyutlarda tromboza yatkınlık sonucu iskemik olaylar gelişebilir. Risk faktörü olmayan hastalarda da trombotik olaylar görülebilir.

Bu çalışmada ekstremite arter iskemisi düşünülen bir vakadan bahsedilecektir.

VAKA: Kırk yedi yaşında erkek hasta acil servise sol elinde şişlik kızarıklık ağrı şikayetiyle başvurdu. Hastanın bilinen kronik hastalığı yada düzenli ilaç kullanımı yoktu. Hasta 26 yıl önce ateşli silah yaralanması sonucu sol elinden operasyon geçirmişti. Hastanın vital bulguları normal sınırlardaydı. Hastanın sol elinde bilek seviyesinden başlayan el parmaklarına kadar uzanan bir kızarıklık izlendi. Nabızlar palpe edildiğinde radiyal nabız palpe edildi. Ancak ulnar nabız palpe edilemedi. Hastada vasküler trombüs düşünüldü ve arteriyal venöz doppler görüntüleme yapıldı. Sol kol, ön- kol ve el bileğine yapılan yapılan usg de cilt altı ödemli sol kol proksimal kesimde lenf nodlarında boyut ve sayıca artış mevcuttu. Sol aksillar brakial radial ve ulnar arterde düşük dirençli akım mevcut. Alınan tetkiklerde crp yüksekliği mevcuttu. Hastada ön planda yumuşak doku enfeksiyonu ve arteriyal trombüs düşünüldü. Kalp damar cerrahisi kliniğine konsülte edildi. Hasta kalp damar cerrahisi kliniği tarafından yatırıldı.

SONUÇ: Hastaların ekstremite muayenesi yapılırken nabazanlar dikkatlice muayene edilmelidir. Arteriyel embolilerde genellikle soğuk, soluk bir ekstremite ile karşıkarşıya kalınsa da el gibi iki arter ile beslenen bölgelerde tek arterin tıkanması klasik soluk ve soğuk ekstremite bulgusunu maskeleyebilir. Bu nedenle her bir arter tek tek palpe edilmelidir.

Anahtar kelime: arter iskemisi, ekstremite iskemisi, tromboz,

MASSIVE PULMONARY EMBOLISM WITH ATYPIC PRESENTATION

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INTRODUCTION

Pulmonary thromboembolism has a wide spectrum from asymptomatic cases to sudden death. Massive pulmonary embolism is a disease with a high mortality and morbidity rate in general. Early diagnosis and treatment are lifesaving. For the suspicion and diagnosis of pulmonary embolism, predisposing factors should be considered first. Risk scoring systems like Wells raise our clinical suspicion. Bedside transthoracic echocardiography and contrast-enhanced thoracic tomography allow us to make an early diagnosis of the patient. Massive pulmonary embolisms may present atypically in the emergency department. In massive pulmonary embolisms that require urgent diagnosis and treatment, differential diagnosis and risk factors should be evaluated quickly. Our case also presented to the emergency department with left hip pain as a result of falling. The patient was first evaluated as a trauma patient, but the instability in his vital functions caused us to include pulmonary embolism among the preliminary diagnoses.

CASE

A 94-year-old male patient was admitted to our emergency department with left hip pain due to a fall. Vital signs of the patient; Fever: 36.5°C, Pulse: 120/min, Blood Pressure: 80/60mmHg, Respiration Rate: 30/min, oxygen saturation: 70%. Our patient was conscious, oriented, cooperative, GCS: 15, and in his systemic examination, rales were detected in both lung bases on thorax auscultation. On pelvic examination, there was pain and tenderness in the left hip. In our patient, there was a 3 cm diameter difference between the two legs. No other pathology was detected in the systemic examination. The patient's hemogram and biochemical parameters were requested. ECG; was normal sinus rhythm. No ST-T change and right bundle branch block or S1Q3T3 finding were detected. Fingertip blood sugar was 90 mg/dl. Pelvis and left femur radiographs were requested. The patient; Urea: 68 mg/dL, Creatinine: 1.61mg/dL, and D-Dimer 32.059 mcg/mL. Radiological radiographs were evaluated as normal. Other blood parameters were within normal limits. The patient's normal radiological radiographs, high D-Dimer value, hypoxia and hypotension suggested that syncope may develop due to massive pulmonary embolism and subsequent fall. The patient's Wells risk score was in the intermediate risk group. Transthoracic echocardiography of the patient revealed dilated right structures and a pulmonary artery pressure of 60 mmHg. Contrast-enhanced thorax CT was performed for definitive diagnosis, since transthoracic echocardiography was suboptimal. CT examination revealed massive thromboembolism and bilateral pleural effusion. Controlled hydration was applied to the patient. Chest diseases were consulted. The patient, for whom thrombolytic therapy was initiated in our emergency department, was admitted to the intensive care unit. It was learned that the patient was discharged a week later.

CONCLUSION

It should be kept in mind that patients with massive pulmonary embolism may rarely present as trauma patients. It should not be forgotten that especially elderly patients can always apply to emergency services with atypical symptoms. We thought that systemic examination is very important and that early diagnosis and treatment will reduce mortality in patients with unstable vital values.

A RARE CASE: PULMONARY AIR EMBOLISM DUE TO TRAUMA

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INTRODUCTION

Air Embolism; It is defined as the entry of air into the venous or arterial system through direct conduction and pressure differential. Venous air intake; blunt or penetrating trauma, central venous catheter intervention, intravenous contrast injections, and surgeries (eg. ophthalmologic interventions, neurosurgery, dental procedures, and cesarean delivery). Venous air enters the pulmonary system from the right heart, passes through the arteriolar wall, and diffuses into the alveolar space. When air is >50 mL, it may obstruct the right ventricular outflow tract. Large bubbles reduce flow from the right heart. Smaller bubbles are trapped in pulmonary arterioles, microcirculation and coronary vessels, preventing forward flow and causing vasoconstriction and myocardial ischemia. This diagnosis should be considered in patients who worsen after trauma and central catheter placement. In treatment; should focus on supportive care, mechanical removal of air embolism, if possible, hyperbaric therapy, and early consultation for cardiopulmonary bypass.

CASE

A 49-year-old male patient. The patient, who was brought to the emergency department with in-vehicle traffic accident, had multiple glass, skin/subcutaneous cuts on his head and active bleeding. GCS: 15, conscious, substernal chest pain, vertebral tenderness and dizziness. His vitals were normal (oxygen-free SpO2: 99, fever: 36.6, pulse: 84/min, respiratory rate: 18/min, arterial blood pressure: 100/60). Other systemic examinations were normal. Brain and thorax tomography was requested. A nondisplaced fracture was observed in the anterior of the 5th rib on the left. A hypodense area suggesting a nondisplaced fracture was observed in the anterosuperior part of the T5 vertebra. A collapse fracture was detected in the anterior of the C7 vertebral corpus, which did not compress the spinal cord. Significant air density was observed in the pulmonary artery. The patient was consulted to cardiovascular surgery. He was taken to the intensive care unit. No definitive reason has been found for how trauma might cause an embolism.

CONCLUSION

Air embolism is a fatal condition that rarely occurs due to trauma. Recognizing an air embolism can be difficult at first, as the signs and symptoms are not specific. Therefore, air embolism should be kept in mind when evaluating the thoracic tomography of patients penetrating the chest or with severe multi trauma.

A CASE OF PERICARDIAL EFUSION WITH ABDOMINALE PAIN

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INTRODUCTION

Pericardial effusion; It is defined as the accumulation of fluid in the pericardial cavity for various reasons. Cardiac tamponade is mentioned if the accumulated fluid increases intrapericardial pressure and prevents cardiac filling and thus causes hemodynamic impairment. The amount of fluid that will cause tamponade is related to the accumulation time as well as its volume. In our case, although the amount of fluid was high, there were no clinical signs and symptoms. If there are no clinical symptoms of cardiac tamponade, massive pericardial effusion is mentioned. No mention of Cardiac Tamponade. Dyspnea, chest pain or jugular venous fullness, and deep heart sounds are expected in patients who develop tamponade. In addition, peripheral edema and tiredness may accompany, although not frequently. Patients with clinically suspected tamponade or pericardial effusion should be diagnosed early in the emergency department with bedside transthoracic echocardiography. Since our patient who presented with atypical complaints described chest pain, we detected massive pericardial effusion without tamponade symptoms and clinical findings. However, although the etiopathogenesis was not fully determined, it was interpreted as possible chronic heart failure.

CASE

A 92-year-old female patient applied to the emergency service because she had no gas and stool discharge for 2 days. He was describing pain squeezing from his abdomen to his chest. He had no known additional disease. Our patient's SpO2: 90, Fever: 36.5 Pulse: 95 beats/min. Respiration Rate: 28/min. Blood Pressure was determined as 110/70 mmHg. There was widespread tenderness on abdominal examination, but there was no defense or rebound. respiratory examination; Especially in the left lung, the respiratory sounds were decreased in the basals and the place could not be located. Heart sounds were weak and deep. There was no jugular venous filling. T wave changes were present in many leads in the ECG. Bedside transthoracic echocardiography revealed massive effusion. We detected pericardial effusion reaching up to 5 cm at its widest point and bilateral pleural effusion. Ejection Fraction: It was like 30-40. Since D-Dimer was within normal limits, we did not want Thorax Tomography. Troponin and Brain Natriuretic Peptide levels were within the normal reference range. Abdominal Ultrasound was normal and our patient's complaints continued, so we requested a contrast-enhanced abdomen from our patient, but the result was considered normal. Our patient was admitted to the cardiology intensive care unit for pericardiocentesis.

CONCLUSION

As in this patient, if pericardial fluid accumulation occurs for a long time, it can be diagnosed incidentally without the symptoms and signs of classical tamponade, even if it is a massive effusion. It may present with atypical complaints without classical tamponade findings. Transthoracic echocardiography may contribute to early diagnosis and differential diagnosis.

DİSPNE NEDENİYLE GELEN GEÇ TANILI HEMOTORAX; VAKA TAKDİMİ

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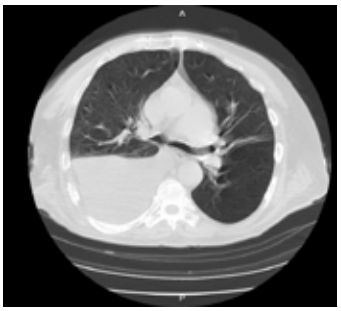
GİRİŞ

Hemotoraks, plevral boşlukta, visseral ve parietal plevra arasında kan birikmesidir(1).Hemotoraks, künt travma sonrası ya da delici kesici aletlerle travma sonrası olabilir.travma, doku bütünlüğünü bozmadan organ ve yapılara zarar verebilir(2).Genelde travma sonrası ilk başvurularda, kot fraktürleri ve hemotoraks saptansa da, bazen sonraki 1-2 gün içerisinde de pulmoner komplikasyonlar gelişebilir(3-5). Biz bu vakamızda travmayı takiben 21. günde, derinleştirilmiş bir anamnez ve gecikmiş komplikasyon olabileceğini düşünerek, yanlış tanının önüne geçilebileceğini vurgulamak istedik.

VAKA TAKDİMİ

71 yaş erkek hasta nefes darlığı şikayeti ile acil servise başvurdu. bilinen koah, astım ve koroner arter hastalığı mevcuttu. Eşlik eden göğüs ağrısı yoktu. Fizik muayenede her 2 bacakta 1+ gode bırakan ödem, oskültasyonda her 2 akciğerde yaygın raller mevcuttu. Geliş vitalleri A:36,4 Nb: 120 Atım/Dk Ta: 110/80 Mmhg Spo2: Oksijensiz %66 Oksijenli %84 Gks:15 İdi. EKG si nsr olarak değerlendirildi. Hemogram, Biyokimya, Troponin, Kan Gazı Tetkikleri Alındı. Hastaya 3 doz Ventolin 2 doz Pulmicort 20şer Dakika Arayla Başlandı. Hastaya mesane sonda takıldı. Diüretik tedavi başlandı. Tetkiklerinde Biyokimyada Glukoz:132 Mg/Dl Üre: 56 Mg/Dl Egfr:77,25 Kreatinin: 0,98 Mg/Dl , Ast:64 U/L, Alt:138 U/L, AMİLAZ: 68U/L, KALSİYUM: 8,95 MG/DL, TOTAL BİLİRUBİN: 0,76 MG/DL, DİREKT BİLİRUBİN: 0,22 MG/DL, İNDİREKT BİLİRUBİN: 0,54 MG/DL, CK:128 U/L, CK-MB: 25,2 U/L , , CRP: 32,4 MG/L, GGT: 76,6 U/L , SODYUM:132,9 MMOL/L, POTASYUM: 4,77 MMOL/L, KLOR: 93,7 MMOL/L, , TROPONİN: 52,69 NG/L . HEMOGRAMDA WBC: 12.85 K/Ul , HGB: 15,8G/DL , HCT: 50,4% , MCV: 70,5fL , MCH: 22,1PG , MCHC: 31,4G/DL, PLT:311 K/uL, MPV:10,4 fL. Kan Gazında BE(VT):3,4, CA++: 1,13 MMOL/L , COHB:0,4, HCO3:27,0 MMOL/L , HCT:46, HHB:8,6, K+: 4,94MMOL/L , 4 , METHB:0,7 , NA+:131,8MMOL/L , PCO2: 62,4 MMHG, PH:7,321, PO2:15,7 mmhg, 3.saat kontrol Troponinde Troponin I Değeri 58,26 Ng/L İdi.

Hastanın anamnezi derinleştirildiğinde 3 hafta önce sağ tarafına doğru düşme öyküsü olduğu ve dispne şikayetinin o günden sonra giderek arttığı öğrenildi. Hasta düştüğünde acil servise getirilmiş. sağ ön ve üst kol görüntülemeleri yapılmış ancak göğüs kafesinde şikayet ve muayene bulgusu olmadığı için akciğere dair herhangi bir görüntüleme yapılmamıştı. Hastaya Toraks Bilgisayarlı Tomografisi çekildi. Sağ akciğerde sıvı olduğu gözlendi. Göğüs cerrahiye konsülte edilen hastaya, acil serviste göğüs cerrahı tarafından tanısal torasentez uygulandı. 1500 Cc defibrine hemorajik sıvı drenajı oldu. Hasta göğüs cerrahi servisine yatırıldı(Resim 1).



Resim 1. Hastaya ait Bilgisyarlı Tomografi Görüntüsü

TARTIŞMA

Künt Travmalar, göğüs travmalarının %70ini Oluşturur(2-,,7).Travma hastalarındaki hemo-pnömotoraks vakalarının %6'sı, Kot fraktürü olmaksızın oluşmaktadır(2,8). Bizim vakamızda, kot fraktürü yoktu. Başlangıçta muayene bulgusu ve semptomları da eşlik etmiyordu. Bundan dolayı, ilk başvurusunda görüntüleme olmaması sebebiyle, hemotoraks erken komplikasyon mu geç komplikasyon mu bilemiyoruz. Özellikle yaşlı hastalarda, toraks bölgesi ve üst vücut yarısında oluşan künt travmalardan sonra, erken veya geç komplikasyon olarak hemotoraks oluşma ihtimali sebebiyle, hasta bilgilendirilmelidir. Biz hekimler de özellikle yaşlı travma hastalarında kendilerini çok iyi ifade edemeyeceğini düşünerek ayırıcı tanıda hemotoraksı mutlaka düşünmeliyiz.

SONUÇ

Özellikle ileri yaş hasta grubunda, anamnezin derinleştirilmesi ve muayene bulgusu olmasa bile tetkiklerin geniş tutulması erken tanı ve tedavi açısından önemlidir.

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BE CAREFUL FOR DIZZINESS, COULD BE BOTULISM: CASE REPORTS

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INTRODUCTION

In these case reports; we aimed to present the cases caused by botulism who applied to the emergency service with the complaint of dizziness after canned food consumption.

CASES

CASE 1

A 23-year-old male patient presented to the emergency department with complaints of nausea, vomiting, dizziness, diplopia, and weakness for 2 days. The patient also stated that he had difficulty in swallowing and speaking. When the patient's story was deepened, it was learned that he ate 1 bowl of canned food 3 days ago and another person who had consumed the same food had the same symptoms and was followed up in another hospital as intubated. The patient had no known disease. Patient's vital signs are blood pressure 140/80 mmHg, fever 36.2°C, heart rate 81/min, respiratory rate 18/min and oxygen saturation 97%. On physical examination, the muscle strength in the lower and upper extremities was 4/5 in the neurological examination. Other system examinations were normal. While the patient was being followed in the emergency room, he could not speak and swallow completely. The patient, whose muscle strength decreased more and his Glaskow Coma Score(GCS) decreased to 8 points, was intubated after his condition became critical. No abnormal values were detected in the laboratory tests and radiological evaluations requested by the patient. Neurology department consultation was requested for the patient, but the neurologist stated that the patient has no neurological problems. Consultation of infectious diseases department was requested for the patient, considering the information obtained from the patient's history to be an infective condition. The patient was admitted to the intensive care unit by the infectious diseases department, considering botulizm. Infectious diseases department applied botulinum antitoxin for the patient. Botulizm was confirmed by the test sent from the sample taken from the canned food consumed by the patient. The patient was intubated for 18 days in the intensive care unit and was followed in the service for 2 days. After treatment, the patient was discharged in good health.

CASE 2

A sixty-year-old female patient was admitted to the emergency department with complaints of dizziness, nausea, vomiting, and double vision. In the patient's story, it was learned that her complaints started 2 days ago, some treatments were given in another center but her complaints did not go away. When the patient's story was deepened, it was learned that these complaints of the patient started 3 days ago after consuming 2 spoons of canned food. The patient had no previously known disease in her history. She did not have a history of regular drug use. Patient's vital signs are blood pressure 125/85 mmHg, fever 36°C, heart rate 76/min, respiratory rate 16/min and oxygen saturation 96%. The patient's physical examination was normal. No abnormal values were detected in the laboratory tests requested by the patient. Consultation of infectious diseases department was requested for the patient, considering the information obtained from the patient's history to be an infective condition. The patient was admitted to the intensive care unit by the infectious diseases department, considering botulizm. Infectious diseases department applied botulinum antitoxin for the patient. Botulizm was confirmed by the test sent from the sample taken from the canned food consumed by the patient. The patient was followed in the intensive care unit for 1 day. The patient was followed up in the infectious diseases service for 13 days. After treatment, the patient was discharged in good health

CASE 3

A twenty-four-year-old female patient applied to the emergency department with the complaint of occasional dizziness for 2 days. It was learned that these complaints of the patient started with nausea and vomiting after consuming less than 1 spoon of canned food 3 days ago. The patient had no previously known disease in her history. She did not have a history of regular drug use. Patient's vital signs are blood pressure 138/97 mmHg, fever 36°C, heart rate 88/min, respiratory rate 18/min and oxygen saturation 97%. The patient's physical examination was normal. No abnormal values were detected in the laboratory tests requested by the patient. Consultation of infectious diseases department was requested for the patient, considering the information obtained from the patient's history to be an infective condition. The patient was admitted to the intensive care unit by the infectious diseases department, considering botulizm. Infectious diseases department applied botulinum antitoxin for the patient. Botulizm was confirmed by the test sent from the sample taken from the canned food consumed by the patient. The patient was followed in the intensive care unit for 1 day. The patient was followed up in the infectious diseases service for 7 days. After treatment, the patient was discharged in good health.

DISCUSSION

Botulism is a life-threatening illness first recognized centuries ago; it results from blockade of acetylcholine release into neuromuscular junctions (1). Botulism is a rare but potentially fatal neurological disease caused by Clostridium Botulinum (2). The time of onset of botulism toxidrome may vary depending on the patient, the type and amount of toxin ingested. and symptoms begin 12 to 36-48 hours after ingestion of the contaminated food (3). In all 3 cases we studied, we found that the complaints of the patients started an average of 24 hours after the consumption of canned food.

In a study by Rao et al., the most common clinical features identified among patients with botulism are; dysphagia, blurred vision, speech disorder, diplopia, stroke, ptosis symptoms were detected (4). In our 3 cases, there was a complaint of vertigo. In our first and second cases, dizziness, nausea, vomiting and double vision were accompanied. In our first case, there were also complaints of dysarthria, dysphagia and muscle weakness. We thought that this situation was related to the amount of toxin ingested.

Laboratory confirmation of foodborne botulism is possible by detection of BoNTs in clinical or food samples and isolation of BoNT-producing clostridia from feces. The most direct way to confirm the diagnosis is to show BoNTs in the patient's serum or feces by injecting mice with serum or faeces and looking for signs of botulism.

Other Clostridia may cause cases of botulism, therefore isolation of other BoNT-producing clostridia (eg, C. Butyricum and C. Baratii) should be considered in laboratory diagnostic criteria (5). Although the blood, gastric lavage and stool tests of our cases were negative, toxin was detected in the sample taken from the canned food.

Botulism is a public health emergency because of the severity of illness, because one case may herald an outbreak, and because many persons may be ill during an intentional exposure (6).

CONCLUSION

It should not be forgotten that botulism may be among the underlying diseases of patients who apply to the emergency department with the complaint of dizziness.

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PATELLAR DISLOCATION:CASE REPORT

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KEY WORDS: patellar disclocation, knee pain,trauma

INTRODUCTION

Patellar dislocation is a clinical state rarely seen among patients admitted to emergency department because of orthopedic injuries. They may occur during traffic accidents, falling, sports activities due to a high energy trauma or in case of excessive knee hiperflexion. It happens usually spontaneously reduction. If patellar dislocation are not reducting themselves absence an accompanying injury, they can be treated successfully in emergency department

CASE

A 16-year-old male patient was admitted to our emergency department due to left knee pain. After he jumped on the ground, he fell on his knee and his pain began. On physical examination there was redness, pain with palpation and subluxation on knee joint. He had no history of chronic disease. Other vital findings were normal. X-ray of knee joint is seen. And it was compared with other knee. Knee dislocation on left knee is detected. Knee reduction was administered. Knee pad and nonsteroid antiinflamatory drugs were prescribed. Ice administration and elevation of the knee was suggested. The patient was referred to orthopedic clinic for control next week.

CONCLUSION

Knee dislocations are rare injuries. Most acute knee dislocations are either reduced spontaneously at the accident site or reduced in the emergency department under sedation by closed manipulation. The treatment options include close reduction, open reduction and fixation with Steinman pins, Ilizarov techniques, hinged external fixators, arthrodesis, and total knee arthroplasty.The purpose of treatment was to achieve a painless, mobile and stable knee joint without much functional disabilities.

WELLENS SYNDROME WITH ATYPICAL PRESENTATION

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INTRODUCTION: Wellens syndrome is a model of electrocardiographic T wave changes associated with critical, proximal left anterior descending (LAD) artery stenosis. The syndrome is also called LAD coronary T wave syndrome. In Wellens syndrome; There may be no chest pain and troponin values may not be very high even in infarct. In type B form, V2-V3 deep T negativity occurs. However, sometimes T wave negativity is seen in all precordial leads. Our case also presented with complaints of dizziness and atypical chest pain. Our patient was describing short-term atypical chest pain several times in 3-4 days. Our patient had T-negativity in all precordial leads, which is an uncommon type of Wellens syndrome.

CASE: A 66-year-old male patient who applied to our emergency department stated that he had dizziness for 3-4 days and atypical chest pain lasting less than 15 minutes, intermittently for 3-4 days. Our patient; He did not describe any additional chronic disease other than DM, HT. He has no history of coronary artery disease. Neurological examination of our patient was found to be normal GCS: 15 and other systemic examination was normal. In addition to the hemogram and routine biochemical parameters, troponin request was made. Troponin was 15.9 pg/ml (N:0-17) Hg 15.6 g/dl Creatinine: 0.67 mg/dl. In his ECG, V2-V6 T negativity was detected. The patient's old ECG could not be accessed. Bedside transthoracic echocardiography revealed apical hypokinesia and wall motion defect in the anterior part of the heart. Considering Wellens syndrome, early cardiology consultation was requested in the patient. Percutaneous coronary intervention was planned and occlusion was detected proximal to the left anterior descending artery in the patient. TIMI 1 current detected.

CONCLUSION: It should be considered that the ECG of patients with Wellens syndrome will not be in the form of classical Type A or Type B, and may be diagnosed by chance with complaints such as atypical chest pain and dizziness. Troponin values may also be normal. It should be kept in mind that ECG is very beneficial in some special patients and early transthoracic echocardiography may reduce mortality and morbidity.

KEYWORDS: wellens, chest pain, vertigo

NADİR GÖRÜLEN BİR YAN AĞRISI NEDENİ: RENAL ENFARKT

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ÖZET

Renal enfarktüs; böbrek dokularında hasara neden olan arteriyel vasküler acil bir patolojidir. Tüm acil servis başvurularının yaklaşık %0.007'ni oluşturmaktadır. Etyolojisinde birçok farklı neden suçlanmaktadır.[1] Genel olarak, hastalar böğür veya karın ağrısı, nadiren bulantı, kusma ve ateş gibi belirtiler ile başvurmaktadır. Biz de burada yan ağrısı şikayetiyle acil servise başvuru yapan genç hastamızda renal enfarkt tanısı ve takip sürecinde edindiğimiz tecrübeyi sizlerle paylaşmak istedik.

GİRİŞ

Renal enfarktüs; böbrek dokularında hasara neden olan arteriyel vasküler acil bir patolojidir. Tüm acil servis başvurularının yaklaşık %0.007'ni oluşturmaktadır. Etyolojisinde birçok farklı neden suçlanmaktadır.[1] Genel olarak, hastalar böğür veya karın ağrısı, nadiren bulantı, kusma ve ateş gibi belirtiler ile başvurmaktadır. Etyolojisinde tromboemboli, kalp veya aorttan kaynaklanan trombüs, renal arter hasarı, protrombotik durumlar sayılabilir.[2] Genellikle lökositoz, CRP, LDH, bazen aspartat transaminaz (AST), ALT düzeylerinde yükseklik ile ortaya çıkar. İdyopatik olan olgular ile birlikte bazı olgularda altta yatan etyolojik neden saptanabilmektedir. Tromboemboli; ana renal arter veya segmental arterin tamamen tıkanmasına neden olabilen özellikle kalp veya aorttan köken alan bir trombüs, altta yatan hiperkoagülabilite durumları, renal arter hasarı[1-3] ve nadir olarak fibromusküler displazi (FMD) bu nedenler arasındadır. Renal enfarkt ayırıcı tanısında üreter taşı, pyelonefrit, mezenter iskemi, genital hastalıklar, akut apandisit gibi abdominal ağrı ile seyreden klinik tablolar sayılabilir. Klinik ve laboratuar bulgularının spesifik olmaması tanıda gecikmeye ve renal fonksiyonlarda geri dönüşümsüz hasara neden olmaktadır [4,5]. Biz de burada yan ağrısı şikayetiyle acil servise başvuru yapan genç hastamızda renal enfarkt tanısı ve takip sürecinde edindiğimiz tecrübeyi sizlerle paylaşmak istedik.

VAKA

Yirmi iki yaşında kadın hasta ateş, kusma, sağ yan ağrısı şikayeti ile acil servise başvurdu. Alınan öyküde mevcut şikayetlerinin son 2-3 gündür olduğu ve analjeziklerle rahatlama olmadığı öğrenildi.Özgeçmişinde özellik yoktu. Hastanın başvuru anında genel durumu iyi, şuur açık oryante koopere, tansiyon arteriyel 100/60 mmHg, saturasyon % 98(O2'siz), ateş 38 °C idi. Cildi soluk, dinlemekle solunum sesleri doğaldı, batın muayenesinde belirgin defans-rebaund olmayan hastanın, sağ tarafta yan ağrısı ve kostovertebral açı hassasiyeti mevcuttu. Yapılan tetkiklerde, WBC 20.26 u/L, kreatinin 1.24 mg/dL, eGFR 62 ml/dk/1.73m², sodyum 133 mmol/L, potasyum:4.3 mmol/L, ast 18 U/L, alt 10 U/L, crp 345.8 mg/L, d-dimer 958 ng/mL, tam idrar tahlilinde lökosit esteraz (LEU) +2, hemoglobin(BLD) +1, bakteri 170 p/HPF idi. Diğer tetkikleri normaldi. Hasta kliniğinin düzelmemesi, crp ve d-dimer değerinin yüksek olması ve barsak anslarındaki olası enflamasyonu gösterebilmek amacıyla kontrastlı Abdomen BT tetkiki planlandı. Abdomen BT de sağ böbrek orta kesim posteriorunda 3.5 cm lik bir segmentte renal enfarkt ile uyumlu hipodens alan izlendi (Resim 1,2). Hasta renal enfarkt ön tanısı ile üroloji bölümüne konsulte edildi. Hasta takip ve tedavi amaçlı üroloji servisine yatırıldı.

TARTIŞMA

Renal enfarkt; böbrek dokusunda geri dönüşümsüz hasara neden olan arteriyel vasküler bir olaydır. Tüm acil servis başvurularının yaklaşık %0.007'sini oluşturur. Bağıl olarak nadir bir durumdur. Etyolojisinde birçok farklı neden suçlanmaktadır.[1] Genel olarak, hastalar böğür veya karın ağrısı, nadiren bulantı, kusma ve ateş gibi belirtiler ile başvurmaktadır. Etyolojisinde tromboemboli, kalp veya aorttan kaynaklanan trombüs, renal arter hasarı, protrombotik durumlar sayılabilir.[2]Genellikle lökositoz, CRP, LDH, bazen aspartat transaminaz (AST), ALT düzeylerinde yükseklik ile ortaya çıkar. Normalin üst sınırı olan dөerin 2-4 katına kadar artan LDH ve bununla birlikte hafif veya hiç artmayan serum aminotransferazlar güçlü bir şekilde renal enfarktı düşündürür.[6,7] Uğur ve ark.nın[2] olgusunda, LDH seviyesi normal düzeyde saptanmıştır. Uygun klinik bir durumda artmış LDH seviyeleri renal enfarkt tanısını düşündürülebilmesine rağmen, normal LDH seviyeleri uygun klinik bir durumda bu tanının dışlanması için yeterli olmayabilir. Bizim olgumuzda kontrastlı batın BT ile renal enfarkt saptandı.

Renal enfarktüs olgularında, tanının düşünülmesi, ivedilikle yapılandırılması ve acil olarak tedaviye başlanması önemlidir.[8] Uzun vadeli antikoagülan tedavi ile olumlu sonuçlar bildirilmiştir.[9] Ağrının başlangıcından sonra altı saat içerisinde trombolitik tedavi başlanması önerilmektedir. Yeni tedavi yöntemlerinde düşük doz intraarteriyel streptokinaz enjeksiyonu ve perkütan transluminal anjiyoplasti gibi özgül tedavi yaklaşımları yer almaktadır.[10,11] Tanının gecikmesi ve trombolitik/antikoagülan tedavinin zamanında başlanmaması durumlarında nefrektomiye kadar gidebilen cerrahi seçenekler gündeme gelebilmektedir.[12]

SONUÇ

Sonuç olarak, acil serviste nedeni belirlenmemiş akut yan ve karın ağrılarının ayırıcı tanısında renal arter trombozu veya renal enfarkt göz önünde bulundurulmalıdır. Bu olguların tanısında uygun klinik durumlarda İV kontrastlı BT incelemesi yararlı olabilir.

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NADİR GÖRÜLENBİROLGU:GÜDÜKAPANDİSİT

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OLGUSUNUMU:

Akutapandisit en sık cerrahi akut karın nedenlerinden birisidir.İnsanlarınyaşamlarıboyuncabuhastalıkla karşılaşmaihtimaliyaklaşık%7'dir. Nadir olmakla beraber yara yeri enfeksiyonu,postoperatif brid ileus, intraabdominal apse veappendiks güdüğünden kaçak gibi komplikasyonlarapendektomisonrasındagörülebilenkomplikasyonlardandır.Tam olarak yapılamayanappendektomisonrasındakalanrezidüelappendiksinenflamasyonusonucuoluşangüdükapandisitiseçoknadirgörülenbirkomplikasyondur.

TARTIŞMA:

İnsanların tüm yaşamsüreleri boyuncacerrahi akutkarının en sık sebeplerinden biri olan apandisit ilekarşılaşma ihtimali %7'dir.Tedavisi cerrahi olarak kompletbir şekilde enflame appendiksin çıkarılması ileyapılmaktadır.Bu işlem açık veya laparoskopik şekildeyapılabilir.İnkomplet olarak yapılan appendektomisonrasında kalan appendiks güdüğünün enflamasyonusonucu oluşan güdük apandisit ise oldukça nadir görülenbir komplikasyondur.Güdük apandisit, 1/50000 oranındagörülür. Güdük apandisit, akut apandisit operasyonusonrası rezidüel apandisit dokusunun tekrar inflamasyonuolaraktanımlanır.

Apendektomi sonrası nadir bir durum olarak izlenen bukomplikasyon,literatüregöre birkaç haftaiçinde de,yıllarsonradaortayaçıkabilir.Bizimhastamızda

güdükapandisitortayaçıkmazamanıüçyıldı.

Güdük apandisit sıklığının günümüzde artışının en önemlisebebi olarak laparoskopik cerrahideki artış ve bu sıradadiseksiyonunyeterinceyapılamamasıveapendiksgüdüğünün 5 mm ve daha kısa bırakılması gerekirkendaha uzun bırakılmasıdır. Daha uzun bırakılan güdükfekalit için bir rezervuar görevigörerek tıkanmaya sebepolup,komplikasyonunortayaçıkmasınazeminhazırlar.

Acil tıp ve genel cerrahi hekimlerinin bu konuyadikkatlerinin çekilmesive sağ alt kadran ağrısı ilebaşvuran hastalarda uyanık olup ayırıcı tanıda güdükapandisit olasılığını düşünmeleri gerekmektedir. Geç tanılan hastaların hastanede kalış süreleri uzamaktadır. Ağrıgöbek çevresinde başlayarak sağ alt kadrana yerleşir veberaberinde iştahsızlık ve mide bulantısı izlenir. Tipikolarak akut apandisit tablosu mevcuttur. Bizim hastamızınacil servise başvurusunda mevcut bulguları tamamen akutapandisittablosuydu.

Sonuçolarak,öyküsündeapendektomibulunanancakakut apandisit tablosu ile başvuran hastalarda ayırıcıtanıdagüdükapandisitmutlakadüşünülmelidir.

Olgumuz 39 yaş erkek hasta, yaklaşık 2 gün önce umblikal bölgede başlayan ve daha sonra sağ alt kadrana doğruyayılan ağrı,iştahsızlık,kusma şikayeti ile acil servisimizebaşvurmuştur. Hastanınherhangibir gastroenterittablosumevcut değildi. Acil servise başvuru anındaki ateşi 37.2ºColarak tespit edildi. Yapılan karın muayenesinde sağ altkadrandabirinsizyonskarıolduğu tespitedildi.Hastanınöyküsündenmevcutolanbuskarın3yılönceyapılanappendektomiyeaitolduğuöğrenildi.Hastanınbağırsakseslerinormalolaraktespitedildi.Muayenedekarınsağaltkadranda hassasiyet, rebound tespit edildi. Çekilen ayaktadirektkarıngrafisindeherhangibirpatolojikbulguyarastlanmadı.

Hastanın laboratuvar değerlerinden beyaz küre 19900/mm³ve %81 nötrofil hakimiyetinde olarak saptandı. Tam idraranalizinde herhangi bir patolojik bulgu yoktu.Çekilen karıntomografisindeapendiksçapıbelirginolduğudüzeyde13mm ölçülmüş.Orta kesimde 12mm apandikolit görünümümecvut.Apandiksduvarbütünlüğü yeryerbozulmuşvedüzensizleşmiştir.Çevreyağdokudaçizgiseldansiteartışlarımevcuttur.Yapılanfizikmuayenevetetkiklersonucundagüdükapandisitteşhisikonularakhastagenelcerrahiyekonsülteedildi.Konsültasyon sonucu hastanın genel cerrahiservisineyatışıyapıldı.

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HIZLI VENTRİKÜL YANITLI ATRİYAL FİBRİLASYON İLE BASVURAN HASTALARDA DİLTİAZEM ETKİNLİĞİ VE CYP2D6 GEN POLİMORFİZMİ İLİŞKİSİ

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ÖZET

GİRİŞ: Acil serviste hızlı ventriküler yanıtlı atriyal fibrilasyon (HVYAF) saptanan hastalarda akut hız kontrolünün sağlanması amacıyla diltiazem en çok tercih edilen ilaçlardan birisidir. Diltiazemin metabolizmasında görevli sitokrom enzimlerinden birisi de sitokrom P450 2D6 (CYP2D6) enzimidir. CYP2D6 enziminin gösterdiği genetik polimorfizm neticesinde ilaç metabolizması ve dolayısıyla ilaç etkinliği bireyler arasında farklılıklar gösterebilmektedir. Bu çalışmamızdaki amaç HVYAF ile acil servise başvuran hastalarda akut dönemde hız kırıcı tedavide diltiazem etkinliğinin CYP2D6'nın genetik polimorfizmi ile ilişkisini inceleyerek bireylerdeki gen profilinin belirlenmesinin tedaviyi yönlendirip yönlendiremeyeceğini belirlemektir.

MATERYAL METOD: Ventriküler hızı 120 atım/dk'nın üzerinde olan 87 kişi hasta grubunu ve 100 sağlıklı kişi kontrol grubunu oluşturdu. Hasta grubuna diltiazem intravenöz 0,25mg/kg dozunda uygulandı. İlaç dozu yeterli gelmeyen hastalarda ikincil doz olarak 0,35 mg/kg dozunda diltiazem uygulandı. Kalp hızı 110/dk'nın altına inen ve 2 saat boyunca 110/dk'nın tekrar üzerine çıkmayan hastalarda, kalp hızı kontrolü sağlanmış olarak kabul edildi. Bütün katılımcılardan 2 ml kan örneği alındı. DNA genom izolasyonu standart fenol kloroform metoduyla gerçekleştirildi. CYP2D6 *2, *3, *4 ve *10 allelerin genom analizleri PCR ve ABI PRISM 7700 Sequence System (USA) sistemi kullanılarak yapıldı.

BULGULAR: Çalışmaya katılan hasta grubunu 87 gönüllü, kontrol grubunu ise 100 gönüllü oluşturmaktadır. Normal varyant (wt/wt) gen taşıyan bireylerde bir veya iki doz diltiazem uygulaması sonrası yeterli hız kontrolünün sağlanması durumu, wt/*2, wt/*4 ve wt/*10 heterozigot varyant genlerini taşıyan bireylere göre istatistiksel olarak anlamlı şekilde yüksektir (p=0,003, p=0,0001, p=0,0001; sırasıyla); wt/*3 heterozigot varyant geni taşıyan bireylerde ise istatistiksel olarak anlamlı farklılık yoktur (p=0,225).

SONUÇ: Genetik polimorfizm saptanmayan, *1/*1 genotipi olan, HVYAF ile gelen hastalarda diltiazem etkili bir ilaçtır. *2, *4 ve *10 allelerinin varlığında ilaç etkinliğinin normal varyanta göre anlamlı derecede düşük olduğunu saptanmıştır. Öte yandan *3 alleli ise diltiazemin hız kontrolü üzerine etkisi ile ilişkisiz bulunmuştur.

ANAHTAR KELİMELER: CYP2D6, HVYAF, diltiazem, Genetik polimorfizm

BLEEDING AFTER PERCCUTANEOUS KIDNEY BIOPSY(PKB) THAT WAS TREATED WITH EMBOLIZATION; A CASE REPORT.

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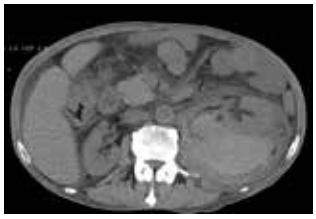
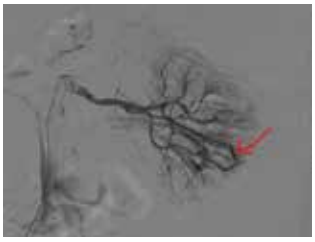
Percutaneus kidney biopsy is a gold standard diagnostic and therapeutic tool for variety kidney related pathologies(1). Despite improved skills and ultrasound guidance, the mortality and morbidity due to percutaneus kidney biopsy is still not uncommon (2). We are presenting a case of renal haemorrhage after percutaneus kidney biopsy,that was treated with double embolization.

68 year patient was reffered to the nephrology clinic due to creatinine elevation after undergoing liver transplant in 17.11.2009 on a background of HBV superimposed with HDV, the patient who had indication for percutaneus kidney biopsy was consulted to interventional radiology. We performed,kidney biopsy on 25.08.2022, after the procedure the patient who was on close monitorization in the wards was noted to be hypotensive. The laboratory findings revealed that the haemoglobin level which was 13.1 g/dl before the intervention has reduced to 7 g/dl. Emergency CT abdomen was which showed an area of hematoma in the left kidney(pic1).The patient was reconsulted to the us, after we made an urgent embolization. During the procedure,fluoroscopy images reveals extravasation of contrast matter from the distal interlober artery of the lower pole(pic 2).The vascular described above was embolized with a coil, and the bleeding was controlled(pic 3).The patient was taken back to the nephrology ward, the patient continued to decrease in hemoglobin level, despite our intervention. The team consulted us again.The initially coiled lower lobe, left kidney was noted to be rebleeding(pic 4).We did a recoiling, to the same area we coiled initially, that was bleeding, hence achieved hemostasis(pic 5).

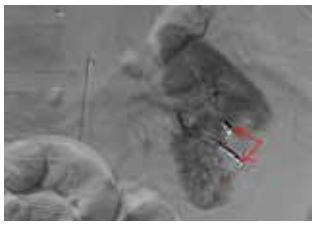
However much PKB, is seen a safe procedure, occurrence of major complication is not uncommon.



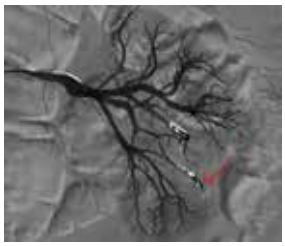
Picture 1:non contrast CT abomen showing left perinephric hematoma.



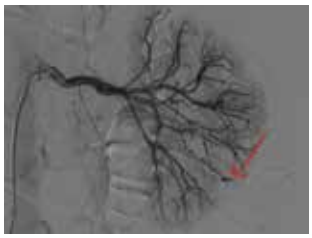
Picture 2: showing the extravasation of contrast matter from the distal interlober artery of the lower pole, left kidney.



picture 3: vascular with coils.



Picture 4:area of re-bleeding



Picture 5: The bleeding area squeezed with coils.

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CAUDA EQUINA SYNDROME: A CASE REPORT

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INTRODUCTION

In this case report, we aimed to present the case of a patient who applied with the complaint of inability to urinate and the underlying cause was cauda equina syndrome.

CASE

A forty-four-year-old male patient presented to the emergency department with complaints of inability to urinate and low back pain. It was learned that the patient had low back pain for a long time and the complaint of inability to urinate had been for 5-6 hours. He also stated that he did not feel his perineal area. It was learned that he was followed up with lumbar disc herniation in his history. Other than that, he had no disease. Patient's vital signs are blood pressure 120/80 mmHg, fever 36.5°C, heart rate 80/min, respiratory rate 17/min and oxygen saturation 97%. Physical examination revealed suprapubic tenderness in the abdomen, motor muscle strength in the lower extremities was bilateral 4/5, decreased rectal tone, and the perianal region was anesthetic. Other system examinations were normal. It was determined that there was 1500 cc urinary output after the urinary catheter was inserted to the patient. No abnormal values were detected in the laboratory tests. Lumbar magnetic resonance radiography (MRI) showed a protrusion at the level of L4-L5 intervertebral disc in the central zone, which severely compresses the thecal sac (Figure 1). At this level, significant signs of stenosis of the central spinal canal were detected. A consultation was requested from the neurosurgery department for the patient who was thought to have cauda equina syndrome. The patient was operated with the diagnosis of cauda equina syndrome. The patient was discharged 3 days after the operation. It was learned that his complaints were resolved during the follow-up.

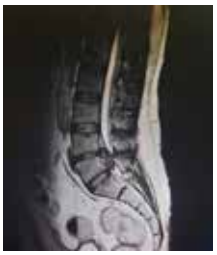

Figure 1. The protrusion at the level of L4-L5 intervertebral disc in the central zone, which severely compresses the thecal sac.

DISCUSSION

Patients with cauda equina syndrome may present with very different combinations of symptoms. These are low back pain, groin and perineal pain, bilateral sciatic nerve pain, weakness in the lower extremities, hypoflexia or areflexia, sensory deficit, perineal hypoesthesia or saddle-like anesthesia, and loss of bladder function (1). In our case, the patient had complaints of bladder dysfunction, saddle-like anesthesia, weakness in the lower extremities, and low back pain.

Bladder dysfunction is a necessary element for cauda equina syndrome. In the early period, bladder dysfunction may present with unnoticed and difficulty starting to urinate. Bladder dysfunction can progress to urinary retention and overflow incontinence. Before cauda equina syndrome, patients will often complain of low back pain, unilateral or bilateral sciatic pain, reflecting uncomplicated lumbar disc herniation (2).

Our patient had long-standing low back pain, sciatic pain and new-onset bladder retention.

Kostuik et al conducted a retrospective review of cauda equina syndrome and found no correlation between timing of surgery and extent of neurological or bladder recovery. However, despite the conclusion that decompression did not need to be done within 6 hours, it was recommended that surgery be performed as soon as possible to avoid potential progression of neurological deficits (3).

Our case was operated within 24 hours by neurosurgery. It was learned that his complaints were resolved in the post-operative follow-up.

CONCLUSION

It should be kept in mind that cauda equina syndrome may be among the underlying diseases of patients who apply to the emergency department with the complaint of inability to urinate.

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BANKART LEZYONU

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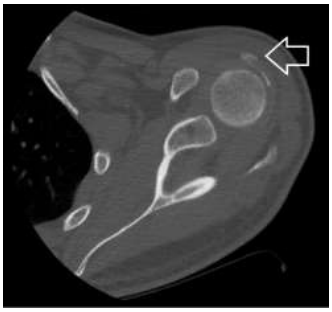
GİRİŞ

Bankart lezyonu, omuz ekleminin stabilitesinde görevli olan ve glenoidi çepeçevre saran labrumun kapsül ile birlikte yırtılmasıdır. İntraartiküler bir lezyondur ve genellikle omuz ekleminde ilk çıkık ile gelişir. Takibinde hastalar tekrarlayan omuz çıkıkları ile başvurabilmektedir. Acil serviste oldukça sık karşılaşılan omuz çıkıklarının önemli bir kısmında gelişen bir komplikasyondur. Genellikle fizik muayene ile tanı konulması zordur. Hastaların redüksiyon sonrası kol ekstansiyonunda ağrıda artış ve omuzda instabilite hissi ile şüphe duyulmaktadır. Tanı için genellikle MRI gerekmektedir. Bu olgu sunumunda fizik muayene ve direkt grafiler ile tanı konulması zor olan Bankart lezyonlarının klinik özelliklerinin vurgulanması amaçlanmıştır



OLGU SUNUMU:

37 yaşında erkek hasta acile maç esnasında yere düştükten sonra sol kolda ağrı hareket kısıtlılığı ve omuz ekleminde güvensizlik hissi ile başvurdu. Hastanın tekrarlayan omuz çıkığı öyküsü mevcuttu. Fizik muayenede hastanın omuz hareketlerinde ağrı, iç-dış rotasyonda kısıtlılık ve abdüksiyonda ortaya çıkan omuzda takılma hissi vardı. Apolet bulgusu veya omuzlarda asimetri görülmedi.

Anteriorapprehensiontesi pozitif saptandı. Direkt grafilerinde tanısal özellik saptanmayan hastada omuz BT çekildi. BT'de de aşikar patoloji görülmedi. Ortopedi tarafından değerlendirilen hastadaomuz MR görüldü.Omuz MR ile hastadaBankart lezyonu saptanması üzerine hastanın sol omzu velpau bandajı ile sabitlendi. Elektif artroskopik onarım planlanarak acil servisten taburcu edildi.

TARTIŞMA:

Bankart lezyonları olarak adlandırılan glenoidrim kırıklarının, ilk kez anterior omuz çıkığı olan hastalarda %22'ye varan oranlarda görüldüğü bildirilmiştir. Redüksiyon sonrası devam eden ağrı, apprehension testi pozitifliği ve tekrarlayan omuz çıkıkları Bankart lezyonu düşünülmesi gereken bulgulardır. Direkt grafilerin tanısal duyarlılığı düşüktür. Kemik Bankart lezyonları BT ile saptanabilirken yumuşak doku Bankart lezyonları için MR gerekli olabilmektedir. Tedavinin birincil amacı, stabil bir glenohumeral eklem ve iyi bir omuz fonksiyonu oluşturmaktır. Terapötik müdahale seçenekleri büyük ölçüde lezyonun kronikliğine, hastanın aktivite düzeyine ve büyüklük, yer ve kırıkfragmanlarının sayısı gibi redüksiyon sonrası kırık özelliklerine bağlıdır. Omuz redüksiyonundan sonra anatomik olarak küçük, akut kırıklar için konservatif tedavi başarılı olabilir. Bununla birlikte, tekrarlayan instabilite için yüksek risk profili olan hastalarda Bankart onarımı önerilir. Bizim de hastamızda tekrarlayan omuz çıkığı öyküsü mevcuttu. Hastada eklem hareket kısıtlılığı, tekrarlayan çıkık öyküsü ile birlikte redüksiyonsonrası devam eden ağrı nedeniyle cerrahi planlandı.Her ne kadar Bankart lezyonu acil cerrahi gerektiren bir durum olmasa da anterior omuz çıkıklarından sonra sık görülen ve tekrarlayan omuz çıkıkları ve omuz eklem instabilitesi ile sonuçlanan bir durumdur.

Sonuç: tekrarlayan omuz çıkığı olan, omuz ekleminde güvensizlik olan hastalar ve apprehension testi pozitif olan hastaların acil serviste velpau bandajı ile eklem stabilizasyonu sağlanarak ortopedi kontrolüne yönlendirilmesi gerekmektedir.Omuz redüksiyonuna engel oluşturan Bankart lezyonları ise acilservisten ortopedi yatışı gerektirmektedir.

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SUICID AMAÇLI KESİ SONRASI GELİŞEN ÖLÜMCÜL HASTALIK: PNÖMOMEDİASTİNUM

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ÖZET

Pnömomediastinum (PM), mediastinal alanda serbest hava bulunması şeklinde ifade edilir. Bir diğer tanımlama şekli de mediastinal amfizemdir. Nadir görülen bir hastalık olup, sıklıkla genç yaşta izlenmekle beraber, yapılan bir çalışmada 5-35 yaş arasında görülme sıklığı 1/25.000 olarak raporlanmıştır. Erkek popülasyonda daha sık raporlanmıştır. Pnömomediastinum; spontan (SPM) ve sekonder olarak iki grupta sınıflandırılır. Pnömomediastinum olgularında sıklıkla görülen semptomlar nefes darlığı ve göğüs ağrısıdır. Biz de burada suıcıd girişimi sonrası ani gelişen göğüs ağrısı ve nefes darlığı şikayetiyle acil servise başvuru yapan genç hastamızda pnömomediastinum tanısı ve takip sürecinde edindiğimiz tecrübeyi sizlerle paylaşmak istedik.

GİRİŞ

Pnömomediastinum (PM), mediastinal alanda serbest hava bulunması şeklinde ifade edilir. Bir diğer tanımlama şekli de mediastinal amfizemdir(1-2). Nadir görülen bir hastalık olup, sıklıkla genç yaşta izlenmekle beraber, yapılan bir çalışmada 5-35 yaş arasında görülme sıklığı 1/25.000 olarak raporlanmıştır(3) Erkek popülasyonda daha sık raporlanmıştır(4-5) Pnömomediastinum; spontan (SPM) ve sekonder olarak iki grupta sınıflandırılır. Sekonder pnömomediastinumda altta yatan bir nedene bağlı olarak mediastende hava saptanır. Örneğin solunum yolu hastalıklarında (bronşiektazi, interstisyel akciğer hastalıkları, akciğer kistleri ve akciğer maligniteleri), özellikle akut alevlenmelerle ve öksürük krizleriyle seyreden astım, kronik obstrüktif akciğer hastalığı (KOAH) ve pulmoner enfeksiyonlarda saptanabilir(7,8). Ayrıca, marihuana, kokain, metamfetamin gibi uyarıcı maddeler kullananlarda PM bildirilmiştir(9-10). Travma, iyatrojenik, özofagus hastalıkları, peptik ülser, gastrit ve aşırı kusma da sekonder PM sebepleri arasındadır. Pnömomediastinum olgularında sıklıkla görülen semptomlar nefes darlığı ve göğüs ağrısıdır. Göğüs ağrısı ani ve akut başlayıp, boyuna ve sırta yayılabilir, çoğunlukla retrosternal bölgede izlenir(2,6,11). Pnömomediastinum ayırıcı tanısında ayırıcı tanı olarak anjina pektoris, kardiyak tamponad, aort anevrizması, pulmoner emboli ve mediastinit gibi acil müdahale gerektiren durumlar akılda tutulmalı ve ekarte edilmelidir. Pnömomediastinum olgusunda ilk tercih edilen tanı yöntemi posteroanterior (PA) akciğer grafisidir. Akciğer grafilerinin yetersiz kaldığı şüphelenilen durumlarda, altta yatan patolojiyi aydınlatmak veya pnömomediastinumun yaygınlığını ve şiddetini (hafif, orta, ağır) saptamak amacıyla Toraks bilgisayarlı tomografisi (BT) altın standart tanı yöntemi olarak istenir.

Biz de burada suıcıd girişimi sonrası ani gelişen göğüs ağrısı ve nefes darlığı şikayetiyle acil servise başvuru yapan genç hastamızda pnömomediastinum tanısı ve takip sürecinde edindiğimiz tecrübeyi sizlerle paylaşmak istedik.

VAKA

Yirmi sekiz yaşında erkek hasta suıcıd amaçlı ilaç alımı ve sol bileğinde kesi şikayeti ile acil servise başvurdu. Alınan öyküde 2 gün önce ilaç alımı ve 1 gün önce de bilek kesisinin olduğu öğrenildi. Özgeçmişinde özellik yoktu. Hastanın başvuru anında genel durumu orta, şuur açık oryante koopere, tansiyon arteriyel 100/60 mmHg, saturasyon % 90(O2'siz), ateş 36 °C idi. Cildi soluk, AC sesleri dinlemekle doğal, batın muayenesinde belirgin defans-rebaund olmayan hastanın, göğüs ağrısı ve nefes darlığı mevcuttu. Yapılan tetkiklerde, WBC 19.07 u/L, kreatinin 1.53 mg/dL, eGFR 60 ml/dk/1.73m², sodyum 136 mmol/L, potasyum:5.5 mmol/L, ast 90 U/L, alt 51 U/L, crp 10.8 mg/L, troponin 121.8 ng/mL idi. Diğer tetkikleri normaldi. Ulusal zehir danışma merkezi ile görüşülen hasta için yoğun bakım yatışı önerildi. Hasta kardiyoloji ve dahiliye bölümüne konsulte edildi. Hastadan alınan anamnez derinleştirildiğinde bilek kesisi sonrasında şiddetli öğürme ve kusmalarının olduğu ve bunun ardından hastada aniden yırtılır tarzda göğüs ağrısı ve nefes darlığı geliştiği öğrenildi. Hastanın kliniğinin düzelmemesi üzerine altta yatan patolojiyi aydınlatmak amacıyla Torax BT tetkiki planlandı. Torax BT de boyun çevresinde her iki supraklavikuler fossalarda, mediastinumda ve sol aksillada yaygın serbest hava dansiteleri saptandı(Resim 1,2). Hasta pnömomediastinum ön tanısı ile göğüs cerrahisi bölümüne konsulte edildi. Hasta takip ve tedavi amaçlı yoğun bakım ünitesine yatırıldı.

TARTIŞMA

Spontan pnömomediastinum genellikle genç erkeklerde görülen, tanının ardından semptomların gerilediği nadir bir klinik durumdur (12). Pnömomediastinum insidansı 1/7000 ile 1/32000 arasında bildirilmiştir (13). Sıklıkla öksürme, kusma, ıkınma ve valsalva manevrası gibi alveol basıncında artışa yol açan durumlarda spontan alveol rüptürü ortaya çıkar. Astım, KOAH, Diabetik Ketoasidoz, aşırı egzersiz, esrar veya kokain, doğum eylemi, mekanik ventilasyon sırasındaki barotravma, suya dalış, hiperbarik tedavi, künt göğüs travması, endoskopi sırasında özofagus veya trakeo-bronş ağacının rüptürü pnömomediastinuma neden olabilir(12-13-14-15). Spontan pnömomediastenumlu hastalardaki klinik genellikle ani başlayan göğüs ağrısı ile solunum güçlüğü, sırt ağrısı, siyanoz, boyun venlerinde dolgunluk, boğazda takılma hissi, disfaji, disfoni, cilt altı amfizemi ve muhtemel boyun ve sırt ağrısıdır (16). Ağrı öksürmek ve nefes almakla artar (17). Tipik bulgusu, göğüs ön yüzünde oskültasyonda kalp tepe atımıyla senkron çatırtı-çıtırtı sesinin duyulmasıdır (Hamman Belirtisi) (18). Hava deri altına geçerek boyuna ve yüze doğru ilerleyerek cilt altı amfizemine neden olabilir (8). Klinik olarak mediastinal amfizeme ateş, hipotansiyon, disfaji ve lökositoz eşlik edebilir (19). Bizim hastamızda da belirtilen semptomlar mevcuttu. Öldürücü ve tanı koymada gecikme yaşanabileceği nedeni ile hızlı teşhis önemlidir. Tansiyon ve/veya bilateral pnömotoraks, kardiak outputun azalmasına neden olan tansiyon pnömomediastinum gibi ciddi komplikasyonlar mevcuttur (15,16). Tanı genelde posteroanterior ve lateral akciğer grafisi ile konur. Ancak akciğer grafisinin normal olduğu hastalarda pnömomediastinum tespit edildiği, bu nedenle tomografi ile değerlendirilmesi gerektiği önerilmektedir. Küçük pnömomediastinumu olan hastalarda bilgisayarlı tomografi altın standarttır. (20) PA akciğer grafisinde ve özellikle de lateral grafide; özofagus, ana bronşlar ve mediastinal kan damarlarını çevreleyen çubuk veya kabarcık şeklinde hava birikimi saptanabilir. Ayrıca sunulan bu olguda gördüğümüz gibi mediastende pnömomediastinum ile uyumlu yaygın hava dansiteleri izlenmiştir. Mediastende genişleme ile beraber hava kabarcıkları görülmesi tanıyı kesinleştirir. Tedavi, sebebe yönelik olup hızla tanı konularak gerekiyorsa cerrahi girişim uygulanarak yapılmalıdır. Cerrahi müdahale düşünülmeyen hasta gruplarında hastalar izlemlerinde orali kapatılmalıdır. Bu süreç içinde hastalar günlük fizik muayeneleri yapılarak ve göğüs radyografileri ile izlenirler. İzlemlerde hastaların semptomlarının hızla gerilediği görülür ve klinik olarak stabil seyreden hastalar taburcu edilebilirler [16]. İzlem süreleri en az 24 ya da 36 saat olmakla birlikte bu süre klinik duruma göre uzatılabilir [16]. Genellikle 48 saat içinde kendiliğinden gerileme gösteren bu klinik durumda, eğer hastanın nefes darlığı şiddetli ise %100 oksijen tedavisi ve mediastinit komplikasyonu gelişirse antibiyotik tedavisi yapılmalıdır (21).

SONUÇ

Sonuç olarak, acil serviste nedeni belirlenmemiş ani başlangıçlı göğüs ağrısı ve nefes darlığı ayırıcı tanısında anamnez derinleştirilerek pnömomediastinum göz önünde bulundurulmalıdır. Bu olguların tanısında şüphelenilen uygun klinik durumlarda Torax BT incelemesi yararlı olabilir.

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MAKAS İLE YARALANMA

ÖZET

Orbita bölgesininde yabancı cisim ile oluşan penetren yaralanmalar; ev, okul ya da iş yeri gibi ortamlarda çoğunlukla kaza orijinli oluşmaktadır. Özellikle orbitokranial penetran yaralanmalarda enfeksiyöz komplikasyonlar sık görülmekle birlikte travmatik arteriovenöz fistül, intrakraniyal hemoraji, serebrospinal sıvı sızıntısı, epileptik nöbetler, beyin parankimindeki büyük hasarlara bağlı motor ve mental fonksiyon kaybı da görülebilen diğer komplikasyonlar arasında yer almaktadır (1). Biz de bu yazımızda orbita bölgesine penetran yaralanma sonucu intrakranial yaralanma görülen bir vaka sunduk.

OLGU

3 yaşında kız hasta tarafımıza 112 ambulans ile sağ gözde makasla yaralanma sonucu getirildi. Hastanın genel durumu iyi, bakılan vital bulguları stabil değerlerde idi. Hastanın ailesinden alınan anamnezde gözüne makas geldiği belirtildi. Yapılan fizik muayenesinde Glaskow Koma Skoru (GKS) 15 ve sağ üst göz kapağında ödem ve ekimoz olup yer yer hemorajik alanlar ve medial kısımda marjine kadar uzanan yaklaşık 1cm'lik vertikal kesi mevcut idi (Resim-1). Hastanın bilgisayarlı beyin tomografi (BT)görüntülemesi esnasında hastanın GKS'si 14'e geriledi ve kusması oldu. Çekilen BT sonucu 'sağ frontal lob inferiorda intraparankimal hemoraji alanları ve çevresinde ödem ile uyumlu hipodansiteler; her iki lateral ventrikülde hemoraji değerleri; periorbital alanda cilt-cilt altı dokuda ödematöz kalınlaşma ve hemoraji; orbita süperomedial duvarda deplase parçalı fraktür hatları izlendi' şeklinde raporlandı (Şekil-1, Şekil-2). Hasta Göz Hastalıkları ve Beyin Cerrahi Bölümlerine konsülte edildi. Beyin Cerrahi Bölümü tarafından acil cerrahi müdahele düşünülmeyen hasta için şuur takibi önerildi. Göz Hastalıkları bölümü tarafından hayati riski ortadan kalktığında göz kapağı onarımı yapılacağı belirtildi. Hastanemizin Yoğun Bakımında boş yer olmaması nedeni ile hasta sevk edildi.

TARTIŞMA

Orbitanın penetran yaralanmalarında ön planda perforasyon gibi göze ait hasarlar görülmesi beklenir. Ancak intrakranial komplikasyonlar da nadir de olsa görülebilir(2). Bizim olgumuzda da göze penetran yaralanma sonucu intrakranial kanama mevcut idi.

Çocukluk çağında kranial yaralanmalar, genellikle trafik kazaları, yüksekten düşme veya ateşli silah yaralanmalarına bağlı olabilir. Bunun yanında yabancı cisimlere bağlı penetran yaralanmalar sonucu da görülebilir. Genellikle orbital, frontal sinüs ve nazal bölgedeki yabancı cisim ile yaralanmalar sonucu olduğu literatürde mevcuttur (3). Cisimlerin sayısı, uzanımı ve yerleşimi, cisim çıkarılmış olsa dahi hasarın boyutunun inspeksiyonla tam olarak belirlenemeyebileceği için tanıda mutlaka görüntüleme yöntemlerinin kullanılması gerekir.

Sonuç olarak, bu olgularda komplikasyonlara dikkat edilmeli ve tedavi yaklaşımı buna göre düzenlenmelidir.

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VAZGEÇİLMEZ OTUMUZ HELİZ!

GİRİŞ:

Eski çağlardan beri bitkilerin şifa amaçlı kullanımları oldukça yaygındır. Ancak bilinçsizce kullanımları sonrası karaciğerin etkilendiği çok sayıda vaka rapor edilmiştir (1). Doğu ve Güneydoğu Anadolu kesimleri başta olmak üzere ülkemizde de birçok vaka örneği mevcuttur. Biz de bu yazımızda bilimsel adı Ferula olan Van bölgesinde yaygın kullanılan Heliz otunun (Resim-1) neden olduğu toksik karaciğer hastalığı olgusunu sunmayı planladık.

OLGU:

59 yaşında kadın hasta 2-3 gün önce başlayan karın ağrısı şikayeti ile acil servise başvurdu. Hikayesinde 1 hafta önce heliz otu denilen bir bitkiden yediğini belirten hastanın öz ve soygeçmişinde akciğerde tümör (*schwannoma)* nedeni ile operasyon öyküsü mevcut idi. Herhangi bir tedavi sürecinde olmayan hastanın sık sık mide ve karın ağrısı nedeni ile gastroenteroloji bölümüne başvuruları olduğu da öğrenildi. Bakılan vital bulgularında ateş 36,6 °C, arteriyel tansiyon(TA) 120/80 mmHg ve oksijen saturasyonu %96 idi. Fizik muayenesinde batında epigastrik bölgede hassasiyeti olup rebound ve defans saptanmadı. Diğer sistem muayeneleri olağan idi. Tablo-1 de labarotuvar değerleri verilen hastanın çekilen elektrokardiyografisi (EKG) 80 vuru/dk normal sinüs ritmi idi. Çekilen batın ultrasonografisinde (USG) herhangi bir patoloji tespit edilmedi. Hasta toksik hepatit açısından ilgili branş olan gastroenteroloji bölümüne danışıldı. Hastada Heliz otuna bağlı toksik hepatit düşünüldü ve tedavi amaçlı gastroenteroloji bölümüne interne edildi. Gastroenteroloji bölümünde tedavi sonrası hastanın karaciğer fonksiyon testleri normal sınırlara geriledi ve klinik bulguları düzelen hasta 6 günlük tedavi sonrası şifa ile taburcu edildi.

TARTIŞMA:

Heliz bilimsel adı Ferula olan ve yaklaşık 170 tane alt grubu olan bir bitkidir. Doğu ve Güneydoğu Anadolu'da cilt hastalıkları, katarakt, alerjik hastalıklar gibi birçok alanda bitkisel tedavi olarak kullanılmakla birlikte günlük hayatta çeşitli şekillerde gıda olarak da tüketilebilmektedir. En yaygın kullanım alanı ise Van'ın ünlü otlu peynirinin yapımıdır (2). Bizim olgumuzda da heliz otunun şifa amaçlı değil gıda amaçlı kullanımı söz konusudur.

Aydın'ın yaptığı çalışmada Ferrula Communise (çakşır otu) bağlı toksisitenin yenilen miktardan bağımsız ve farklı yaş ve cinsiyet gruplarında öngörülemez şekilde geliştiği görülmüş olup toksisite tipinin idiyosenkrazik tipe uyduğu belirtilmiştir (2). Bizim yazımızda ise tek bir vaka sunulmuş olup mekanizması hakkında net bir fikir vermemektedir.

Heliz ilk çıkmaya başladığında yenmesinin zararlı olduğu, bulantı kusma yaptığı, erişkin bitkinin tüketiminin zararlı olmadığı söylenmekte ancak olgunlaşmış bitkinin de, turşu şeklinin de, peynirin içindeki şeklinin de toksik hepatit yapabileceği yapılan çalışmalarda gösterilmiştir (3). Ancak gıda amaçlı kullanımlarında organ hasarı nadir beklenilen bir durumdur. Bizim olgumuzda da hastada toksik hepatit gelişmiş olup tedavi sonrası organ hasarına ilerlemeden şifa ile taburcu edilmiştir.

Sonuç olarak; birçok bitkinin de yol açtığı gibi Ferulla isimli bitkinin de teröpatik veya besin amaçlı kullanımında karaciğer toksisitesi görülebileceği unutulmamalıdır.

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ABSTRACT

Objective: According to the World Health Organization, an occupational accident is defined as an unplanned incident that mostly causes personal injuries, damage to machinery and equipment, and production stops for a period of time. Occupational accidents cause injuries ranging from simple injuries to serious, life-threatening ones. In our country, the frequency of this type of injuries is still high despite recent advances in occupational health and a number of preventive measures. This study aimed to determine the distribution of hand dominance and to evaluate the relationship between the dominant hand and injury site among patients who presented to emergency service with occupational accident and had isolated hand injury.

MATERIALS AND METHODS: This single-center prospective descriptive study was conducted in the ED of a training and research hospital between 01.12.2019 and 01.06.2020 after receiving approval from the local ethics committee. 528 patients who applied to the emergency department due to work accident and were found to have isolated hand injuries were included in the study.

RESULTS: An analysis of the injury types showed that 369 (69.9%) patients had isolated skin cuts while the rest of the patients had more severe accompanying injuries such as neurovascular and tendon injury, fracture, or amputation. The most common mechanism of injury was hand cuts while using a tool (163 cases, 30.9%). The most commonly affected regions in hand were the first and second fingers. The analysis of the proportion of patients using the dominant hand opposite to the expected dominant hand according to the dominant hemisphere showed that a significantly higher proportion of patients with a dominant right hemisphere used the dominant hand opposite to the expected dominant hand according to the dominant hemisphere

CONCLUSION: The risk of isolated hand injury due to occupational accidents appears to be greater in left-handed individuals, and hand injury more commonly involves non-dominant hand in left-handed individuals than the right-handed ones.

KEYWORDS: Occupational accidents, Dominant hemisphere, hand injury, dominant hand.

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ACİL SERVİSE BAŞVURAN VİRAL PNÖMONİLİ HASTALARDA SERUM ACE (ANJİYOTENSİN DÖNÜŞTÜRÜCÜ ENZİM) DÜZEYİ VE ACE GEN POLİMORFİZMİNİN ARAŞTIRILMASI

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ÖZET:

GİRİŞ: Viral pnömoniler dünyada pandemiye sebep olabilecek morbidite ve mortaliteye neden olan önemli bir hastalıktır. Bu duruma en yakın örnek Sars-Cov-2 pandemisidir. Sağlıklı bir insanda ACE'nin akciğerde vasküler endotelyal yatakta üretilmesinden dolayı solunumsal patoloji yaratan hastalıklarda serum ACE düzeyi etkilenmektedir. ACE genotip olarak polimorfiktir. Viral pnömoni geçiren hastalarda ACE gen polimorfizminin önemi ve serum ACE düzeyinin hastalığın tanısında, seyrinde ve mortalitesinde önem arz edecek biyobelirteç olup olamayacağını klinik açıdan değerlendirdik.

MATERYAL METOD: Hastanemiz acil servisine başvuran 18 yaş ve üstünde 100 kontrol ve 100 hasta olmak üzere toplam 200 kişi çalışmaya dahil edildi. Hastalardan elde edilen periferik kan örnekleri DNA izolasyon aşamasına kadar -20C'de saklandı. ACE PCR Detection Kit ile genomik DNA izolasyonu yapıldı. Ayrıca periferik kanlardan serum elde edilerek serum ACE düzeyi belirlendi. Hastaların verileri SPSS programı kullanılarak istatistiksel analizler yapıldı.

BULGULAR: Çalışma grubunda ortalama yaş 43,62±20,81'dir. Hasta grubunda ise ortalama yaş 50,17±19,94'tür. Kontrol grubu katılımcılarının yaş ortalaması ise 37,07±19,66'idi. Hasta grubunda çekilen tomografi görüntülemelerinde akciğer tutulumu hafif olan 68 kişi (%68), orta-ağır olan 32 kişi (%32) bulunmaktadır. ACE serum düzeyi kontrol gruba kıyasla viral pnömoni geçirenlerde daha yüksektir. ACE serum düzeyi tomografide akciğer tutulumu hafif gruba kıyasla ağır-orta grupta daha yüksek bulundu. ACE gen polimorfizminin hastalık bulaşıyla ilişkisi yoktur. Hastalığa yakalananlarda çekilen toraks tomografisinde akciğer tutulumu hafif veya ağır olması ACE gen polimorfizmiyle ilişkisi yoktur. Elde ettiğimiz verilere göre serum ACE düzeyi viral pnömonide kontrol hasta grubuna göre artmaktadır. I/I genotipi seyri en iyi olan iken, D/D genotipi en ağır seyreden genotiptir.

SONUÇ: Serum Ace düzeyi belli bir cut-off değerinin üzerinde viral pnömoni ayrıcı tanısını yaptırabilir ve Covid-19'a bağlı viral pnömonide belirgin yüksek olup bu hastalıkta bir biyobelirteç olarak kullanılabilir. Ağır akciğer tutulumu olan kişilerde serum Ace düzeyi yükseldikçe hastalığın prognozu ağırlaşmaktadır. Kötü prognoz belirteci olan D-dimer, NLR ve Ferritin düzeyleriyle birlikte akciğer tutulumunun ağırlığının göstergesi olabilir.

ANAHTAR KELİMELER: Viral pnömoni, Acil Servis, ACE düzeyi, ACE gen polimorfizmi, Covid-19

SAĞ BRONŞTA FIRÇA

ÖZET:

Yabancı cisim aspirasyonları çocuklara oranla yetişkinlerde daha az görülebilen ve bazen ölümle sonuçlanabilen ciddi bir klinik durumdur. Biz bu yazımızda oldukça ender gözlenen trakeostomi kanülünden yabancı cisim aspirasyonu olan bir vaka sunduk.

OLGU:

İki yıl önce larinks kanseri nedeniyle larenjektomi yapılan ve trakeostomi açılan 67 yaşındaki erkek hasta evde trakeostomi kanülünü temizlerken trakeostomi fırçasını aspire etmiş. Hastanın genel durumu iyi olup vital bakıları stabil idi. Yapılan fizik muayenesinde inspeksiyon ile fırça ucu görünüyordu ve akciğer sesleri sağ tarafta azalmıştı. Çekilen PAAC grafisinde sağ bronşta radyoopak yabancı cisim (Resim-1) ve bilgisayarlı toraks tomografisinde (BT) sağ ana bronşta hiperdens yabancı cisim (Resim-2) saptandı. Hasta Kulak Burun ve Boğaz Hastalıkları, Göğüs Hastalıkları ve Göğüs Cerrahisi Hastalıkları Bölümleri ile konsülte edildi. Konsültasyon işlemleri devam eden ve Acil Serviste gözlemine devam edilen hastanın öksürmesi ile birlikte yabancı cisim trakeostomi kanülünden çıktı (Resim-3). Çekilen kontrol PAAC grafisinde yabancı cisim gözlenmedi. Hastanın acil serviste gözlemine devam edildi. Takibinde herhangi bir patoloji gelişmeyen hasta 4 saatlik gözlemin ardından şifa ile taburcu edildi.

TARTIŞMA:

Trakeostomi larinks sfinkterinin havayolunu korumasını engeller ve yabancı cisim aspirasyonunu kolaylaştırır. Yabancı cisim aspirasyonlarında kalıcı hasarların önlenmesi için erken tanı koymak ve hızlı bir şekilde tedavi etmek gerekir (1). Bizim vakamızda hastanın takibinde öksürmek ile yabancı cisim trakeostomi kanülünden çıkmıştır. Ancak bunun aksine yabancı cismin daha da ileri gitmesi de söz konusudur.

Sonuç olarak erken tanı ve tedavinin yanında hastanın bütün bu süreçte yakın takibi gelişebilecek komplikasyonlar açısından oldukça önemlidir.

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HEMOLYTIC UREMIC SYNDROME, A RARE CAUSE OF FATIGUE: A CASE REPORT

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INTRODUCTION

In this case report; We aimed to present a patient who was brought to the emergency room by his relatives with complaints of weakness and altered consciousness and diagnosed with hemolytic uremic syndrome.

CASE

A sixty-six-year-old female patient was brought to the emergency service by her relatives with complaints of weakness, loss of appetite, swelling in the whole body, and tendency to sleep for 5 days. His history was unremarkable except for known asthma disease. Vital signs of the patient were blood pressure of 154/94 mmHg, temperature 36.7°C, heart rate 109/minute, respiratory rate 16/minute, and oxygen saturation 93%. In the physical examination; The abdomen was distended and there was tenderness in all quadrants, but there was no defense and rebound. On lung examination, lung sounds were found to be bilaterally decreased. In the neurological evaluation, it was determined that the patient had a tendency to sleep. In addition, there was widespread edema in the whole body of the patient and +3 edema was detected that left pretibial pitting. Other systemic examinations were normal. In the thorax computed tomography examination, pleural effusion reaching the bilateral middle zones was observed. Whole abdomen ultrasonography (USG); In the perisplenic, perihepatic area and lower abdominal quadrants, free fluid reaching 6 cm in the deepest part between the intestinal loops was detected. In the peripheral smear examination, 5-6% fragmentation was detected. Consultation from the departments of infectious diseases, neurology, hematology and nephrology was requested for the patient. The patient was admitted to the intensive care unit as a result of all evaluations. As a result of further investigations, a disintegrin and metalloproteinase with thrombospondin type 1 motif, member 13 (ADAMTS-13) value was measured as 0.53 IU/mL, and the patient was diagnosed with atypical HUS.

DISCUSSION

Hemolytic uremic syndrome is a thrombotic microangiopathy clinically defined by: thrombocytopenia, microangiopathic hemolytic anemia and acute kidney injury. HUS is an extremely rare disease that is most common especially in children. Affecting those younger than 5 years old (100,000 children per overall annual incidence), evenly distributed by sex (1, 2).

HUS in adults is less common and most cases are reported during outbrakes and epidemics. Shiga toxin-induced hemolytic uremic syndrome and atypical hemolytic uremic syndrome are the most common presentations in children and adults, respectively. Atypical HUS (aHUS) accounts for 5% to 10% of HUS cases in children, but is the most common presentation of HUS in adults; although general, the incidence remains lower in adults than in children (3, 4).

Our case was also in the adult age group and presented with a presentation suitable for atypical HUS classification. However, we did not have any determination as to whether it developed due to Shiga toxin.

Testing the ADAMTS13 activity level can distinguish Shiga toxin-induced HUS (STEC-HUS) from TTP, with an activity level of less than 10% typically observed in patients with Thrombotic thrombocytopenic purpura (TTP) was found to be significant (5). In our case, ADAMTS-13 activity was found to be significant in terms of HUS.

The efficacy of therapeutic plasma exchange (PE) for the management of STEC-HUS also remains unclear. No randomized controlled trials have been conducted to date to evaluate the efficacy of PE in STEC-HUS. A review by Keenswijk et al. showed that early PE can reduce mortality and achieve good outcomes in patients over 60 years of age with STEC-HUS or in selected severe paediatric patients (6).

However, a definite recommendation cannot be made in the light of current evidence. In our case, PE treatment was also applied in the early period.

CONCLUSION

In patients who applied to the emergency department with complaints of weakness and altered consciousness; It should be kept in mind that the underlying cause may be HUS, which is rare.

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GİRİŞ:

Trakea ve özofagusun birlikte yaralanması en sık perforasyon şeklinde olup ateşli silah yaralanmalarında sık görülür.

Bizim vakamız da hem araç ici trafik kazası sonrası künt bir travma olması hem de servikal düzeyde yaralanma olması acısından nadirdir.

OLGU:

65 yasında erkek hasta araç içi trafik kazası nedeni ile 112 ambulans ekipleri tarafından acil servisimize getirildi. Gelişinde genel durumu orta, bilinci konfü idi.

Bakılan vital bulgularında ateş 36,7 °C, arteriyel tansiyon (TA) 130/80 mmHg, nabız 110 vuru/dk ve oksijen saturasyonu %92 ve glaskow koma skorlaması (GKS) 13 idi. Fizik muayenesinde boynunda krepitasyon mevcut olup iki akcığer eşit olarak solunuma katılıyordu. Diğer sistem muayeneleri olağandı.

Çekilen boyun ve toraks tomografisin 'trakeada hipofarenks düzeyinde anteriorda defektif görünüm ve komşuluğunda hava değerleri mevcuttur (perforasyon?).Servikal özefagus sol yan kesimde defektif görünüm ve bu düzeyden cilt altına uzanan hava değerleri dikkati çekmektedir (perforasyon?)' şeklinde raporlandı. Genel durumu orta olan hasta solunum yolunun korunması amacı ile elektif olarak entübe edildi. Hasta için Genel Cerrahi ve Göğüs Cerrahisi bölümlerinden konsültasyon istendi ve hasta operasyon planlanarak yoğun bakıma yatırıldı. Ancak opere edilen hasta post-op yoğun bakımı takibinde 25. gününde genel durumu kötüleşerek ex oldu.

TARTIŞMA

Özofagus ve trakeanın travmatik perforasyonları, acil tedavi gerektiren yıkıcı yaralanmalardır(1). Genellikle penetran travmalarda birlikte yaralanmaları görülebilir. Bizim vakamızda ise araç içi trafik kazası sonrası trakea ve özefagusun birlikte perforasyonu tespit edilmiştir. Bu nadir görülen bir birlikteliktir.Özofagus perforasyonundan sonraki sonuç, yaralanmanın nedenine ve yerine, altta yatan özofagus hastalığının varlığına ve yaralanma ile tedavinin başlaması arasındaki süreye bağlıdır(2). Olayın mekanizmasını anlamak, spesifik anatomik yaralanma paternlerinin olasılığını ve ciddiyetini tahmin etmede faydalı olabilir. Akut ortamda hava yolu güvence altına alındığında, yemek borusundakiler de dahil olmak üzere gizli yaralanmaları teşhis etmek için uygun kontrast veya endoskopik inceleme ile yüksek bir klinik şüphe indeksi mevcut olmalıdır(3).

Sonuç olarak erken teşhis ve tedaviye önem verilir(4).

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ACİL SERVİSE GÖĞÜS AĞRISI BAŞVURAN HASTALARIN SOSYODEMOGRAFİK ÖZELLİKLERİ VE SONLANIMLARININ RETROSPEKTİF DEĞERLENDİRİLMESİ

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ÖZET

GİRİŞ: Göğüs ağrısı, ayırıcı tanısının dikkatli yapılmaması halinde hem hasta hem de hekim açısından dramatik bir şekilde sonuçlanabilecek bir semptomdur. Bu nedenler konudaki güncel kılavuzlar, çalışmalar ve istatiksel veriler göz önünde bulundurularak erken tanı ve tedavi amaçlanmalıdır.

MATERYAL METOD: Bu çalışmada 01.07.2020-31.12.2020 tarihlerinde acil servise göğüs ağrısı şikâyeti ile başvuran 3466 hasta retrospektif olarak incelendi. Hastalara ait veriler Hastane Yönetim Bilgi Sistemi'nden (Probel) ve dosyaların geriye dönük olarak taranması ile elde edildi. HBYS'de R07.4 (Göğüs ağrısı, tanımlanmamış) ICD10 tanı kodu girilip EKG çekilmiş 3568 hastadan; dahil edilme ve dışlama kriterlerine göre 3466'sı çalışmaya alındı. İstatistiksel analizler için SPSS 22.0 kullanıldı.

BULGULAR: Hastaların çoğunluğunun erkek ve yaş ortalamalarının 58 olduğu; acil servise en sık 16.00-20.00 saatleri arasında çoğunlukla kendi imkanları ile başvurdukları saptandı. Aynı zamanda %24,8'inin özgeçmişinde koroner arter hastalığı; %63,4'ünün HT, DM ve KOAH vb. komorbid hastalıkları bulunmaktaydı. En sık EKG bulgusu normal EKG olup en az bulgu acil servis takiplerinde 12 hastada gelişen ST-T segment değişiklikleriydi. %85 hastadan kardiyak biyobelirteç çalışılıp bunların sadece %6,5'inde anlamlı artış saptandığı; hastaların %12'si için Kardiyoloji konsültasyonu istendiği, bunların da %46'sına Kardiyoloji tarafından yapılan ekokardiyografide %32,9'unda patolojik bulguya rastlandığı tespit edildi. Acil serviste AKS tanısı konup Kardiyoloji adına yatış yapılan 272 hastanın takiplerinde 194'üne PCI yapılıp 78'ine yapılmadığı; yine acil serviste AKS tanısı alan 274 hastanın da yer bulunamaması sebebiyle dış merkeze sevkinin gerçekleştirildiği görüldü.

SONUÇ: Göğüs ağrısı yakınması ile acil servise başvuran hastaların triyajının acil servis hekimleri tarafından dikkatli bir şekilde yapılması gerekmektedir. Fizik muayenesi yapılan hastanın öyküsü, yaşı, cinsiyeti, risk faktörlerinin varlığı göz önünde bulundurularak kardiyak/kardiyak dışı patoloji ayrımını çok iyi yapması, erken tanı ile tedavi protokolünü başlatması gerekmektedir.

ANAHTAR KELİMELER: Göğüs ağrısı, Acil servis, Retrospektif

ACİL SERVİSE BAŞVURAN İŞ KAZALARINA BAĞLI GELİŞEN YARALANMALARIN DEĞERLENDİRİLMESİ

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ÖZET

GİRİŞ: İş kazaları önemli bir mortalite ve morbidite nedeni olmasının yanı sıra iş gücü kaybı ve ekonomik kayıpların da önemli bir nedenidir. İş kazaları çoğu zaman genç yaştaki işçileri etkileyen, sağlık durumlarının bozulmasına neden olup geçici veya kalıca hasarlara neden olan, can ve mal kayıplarıyla sonuçlanabilen, bireylerin ve ailelerin yaşamını etkileyen önemli bir halk sağlığı sorunudur.

MATERYAL METOD: 01.01.2018- 31.07.2018 tarihleri arasında hastanemizin acil servisine doğrudan başvuran 18 yaş ve üzeri iş kazalı 1200 vaka çalışmaya dahil edildi. Çalışmamızda hastanemiz acil servisine iş kazası nedeni ile başvuran vakalarda demografik bilgiler, başvuru zamanı, yaralanmaların özellikleri, sonuçlar ve bunlar arasındaki ilişkiler değerlendirildi. Veriler Hastane Yönetim Bilgi Sistemi (HBYS) ve hasta dosyalarının retrospektif olarak incelenmesiyle elde edildi.

BULGULAR: Çalışmaya dahil edilen vakaların yaş ortalaması 34,56±8,1 (18-66) idi. Hastaların %80,7'si erkekti. Yaralanmalar en fazla 28-37 yaş grubunda görüldü (%37). Acil servise başvuran hastaların, Nisan ayında (%21,2), pazartesi günlerinde (%26,2), gün içinde ise 09:01-17:00 arasında (%75,5) arttığı görüldü. Hastaların %33'ü inşaat alanında çalışmaktaydı. Yaralanmaların %34,6'sı kesi, %19,5'i sıkışma ve %19,3'ünün düşme sonucu gerçekleştiği, en fazla el parmaklarının etkilendiği, hastaların çoğunlukla yumuşak doku travması (%20,3) ve kırık (%16,8) tanısı aldığı saptandı. Hastaların taburculuk oranı %55,7 idi. Etkilenen anatomik bölgeler cinsiyetlere göre karşılaştırıldığında alt ve üst ekstremite yaralanmaları erkek olgularda istatistiksel anlamlı olarak daha yüksek bulundu. Öte yandan iş kazalarının sonucu olarak konulan tanılar ile hastaların cinsiyeti arasındaki ilişkiye bakıldığında tendon, sinir, arter ve ampütasyon yaralanmaları erkeklerde daha çok olduğu ve aradaki fark istatistik olarak anlamlı olduğu saptanmıştır.

SONUÇ: İş kazalarının azaltılabilmesi, dolayısıyla gelişebilecek kayıpların önlenebilmesi için iş kazalarının ulusal ve bölgesel düzeyde incelenmesi önem arz etmektedir. Demografik bilgiler, kazaların mekanizmaları, etkilenen anatomik bölge, tanı ve taburculuk bilgilerinin yanı sıra kaza öncesi dinlenme ve çalışma süresi, iş eğitimi ve tecrübe düzeyi, çalışma koşulları hakkında ulusal, bölgesel ve sektörel düzeyde daha kapsamlı ve çok merkezli çalışmalara ihtiyaç vardır.

ANAHTAR KELİMELER: İş kazası, acil servis, mesleki yaralanmalar

KOAH HASTALARINDA KLİNİK DEĞERLENDİRMEDE KULLANILAN SKORLAMALARIN KARŞILAŞTIRILMASI

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ÖZET

GİRİŞ: Kronik Obstrüktif Akciğer Hastalığı (KOAH) dünyada ve ülkemizde oldukça sık görülen bir sağlık sorunudur. Özellikle gelişmekte olan ülkelerde önemli bir mortalite nedenidir. Özellikle kış aylarında KOAH alevlenme nedeniyle acil servise başvuru oranları artmaktadır. KOAH alevlenme ile başvuru yapan hastaların acil servisten taburcu edilmesi veya yatış verilmesi acil servis hekimlerinin zorlandıkları bir konudur. Taburculuk veya yatış kararının verilmesinde kullanılan birçok skorlama mevcuttur. Bu çalışma ile yatış kararında kullanılan skorlamaların karşılaştırılması amaçlanmıştır.

MATERYAL METOD: Bu çalışma 05.01.2021-04.05.2021 tarihleri arasında Pamukkale Üniversitesi Tıp Fakültesi Hastanesi acil servisine akut KOAH alevlenme tanısı ile başvuran 18 yaş üstü 182 hasta ile yapıldı. Çalışmaya katılmayı kabul eden hastalarda CURB-65, BAP-65 ve DECAF skorlama sistemleri uygulandı. İstatistiksel analizler için SPSS 22.0 kullanıldı.

BULGULAR: CURB-65 skorlama sisteminde taburcu edilen hastalar ortalama 0,94 puan alırken, servise yatan 1,78 puan ve yoğun bakıma yatışı yapılan hastalar 2,75 puan ortalaması mevcuttur. BAP-65 skorlama sisteminde taburcu edilen hastalar 0,48 puan alırken 1,17 puanla servise ve 1,81 puanla yoğun bakıma yönlendirilmiştir. DECAF skorlama sisteminde taburcu edilen hastalar 1,54 puan alırken 2,09 puanla servise ve 3,30 puanla yoğun bakıma yönlendirilmiştir. BAP-65 skorlama sistemi ile CURB-65 skorlama sistemi arasında pozitif yönlü yüksek düzeyde korelasyon ilişkisi vardır. BAP-65 skorlama sistemi ile; DECAF skorlama sistemi arasında pozitif yönlü orta, yaş ile çok zayıf ve acil servis taburculuğu arasında negatif yönde zayıf düzeyde korelasyon ilişkisi vardır.

SONUÇ: Sonuç olarak çalışmamıza katılan hastalardan elde ettiğimiz verilerle KOAH alevlenme ile gelen hastaların acil servise kabulünden sonra tedavinin devamını belirlemek amacıyla sorguladığımız 3 ayrı skorlama sistemininde kullanılabilir olduğunu düşünüyoruz. Sonuçların daha belirgin olması için daha geniş bir örneklem ile tekrarlanmasını ayrıca hastaların bu skorlama sistemlerindeki puanlarıyla 30 günlük, 90 günlük mortalitelerinin karşılaştırılması gerektiğini düşünmekteyiz.

ANAHTAR KELİMELER: Kronik Obstrüktif Akciğer Hastalığı, BAP-65, CURB-65, DECAF

AN UNEXPECTED SINUS VEIN THROMBOSIS: CASE REPORT

ABSTRACT

Sinus vein thrombosis can cause generalized tonic-clonic seizures and it is a rare condition. Early diagnosis can be difficult. A 45 year old male patient was admitted to our emergency department with the complaint of two times seizures. No pathology was detected in the neurological examination and neuroimaging. Neuroimaging was performed again at the fifth hour of the patient's clinical follow-up due to the development of Wernicke's aphasia. Venous infarction and sinus vein thrombosis involving bleeding sites can also be seen in neuroimaging. Venous infarction and sinus vein thrombosis including bleeding area were also visualized in neuroimaging.In this article, a case of sinus vein thrombosis, which can be difficult to diagnose in the early period, is presented.

KEYWORDS:Sinus vein thrombosis, Wernicke's aphasia,Venous infarction

INTRODUCTION

Sinus vein thrombosis (SVT) is a multifactorial cerebrovascular disease caused by the interaction of risk factors such as pregnancy, malignancies, trauma, genetics.Virchow's triad, characterized by endothelial damage, venous stasis, and hypercoagulability.(1,2)Clinical findings in SVT usually fall into 2 major categories, depending on the mechanism of neurological dysfunction: Those that are related to increased intracranial pressure attributable to impaired venous drainage and those related to focal brain injury from venous ischemia/infarction or hemorrhage. In practice, many patients have clinical findings due to both mechanisms, either at presentation or with progression of the underlying disease.(3) Most frequent clinical symptoms and signs were headache (87%), which was isolated in 25%, nausea and vomiting in 28%, seizures in 24%, visual field defects in 27%, other focal neurological deficits in 18%, altered consciousness in 18%, and cranial nerve palsies in 18%. (4) When focal brain injury occurs because of venous ischemia or hemorrhage, neurological signs and symptoms referable to the affected region are often present; most common are hemiparesis and aphasia, but other cortical signs and sensory symptoms may occur. (3)

CASE

A 45-year-old male patient who no known history of seizures was admitted to the emergency department with twice generalized tonic-clonic seizures. There is known use of acetylslicylic acid. He hasn't any semptom before. He has a history of deep vein thrombosis. TA: 130/70 mmHg, Heart rate: 84/min, O2 98%, body temperature 36.5 C, and blood glucose 150mg/dl. He has normal neurological examination. ECG was evalutated as sinüs rythm. WBC 18.100 109/L, Neutrophil 93%, Hs-Troponin negative. CT was normal. No diffusion restriction was detected in diffusion MR. Neurology consultation was requested and levetiracetam was given to the patient. At the 5th hour of the follow-up period developed Wernike's aphasia. In CT, an area of approximately 1 cm in diameter was detected in the left temporal area, which was evaluated in favor of hemorrhagic venous infarction.(Figure1) Brain MRI and MR venography were performed on the patient. Thrombosis was detected in the left transverse sinus and sigmoid sinus in MRI venography. (Figure2) The patient was taken to the intensive care unit with the diagnosis of sinus vein thrombosis.

DISCUSSION

Sinus vein thrombosis is a rare disease with a rate of 5/1.000.000 and involving less than 1% of all strokes.(5) It is usually seen in female patients between the ages of 20-50. It presents with headache in approximately 90% of cases. Seizure is the second most common symptom. Approximately 80% of patients experience acute symptomatic seizures before diagnosis. (6) Brain parenchymal lesions can lead to various focal neurological deficits corresponding to the anatomical location of the injury. The symptoms, diagnostic criteria, and treatment options of SVT are complex. With its numerous risk factors and diverse patient presentations, SVT continues to cause a great deal of morbidity and mortality. (7) Although our patient was poor in sinus vein thrombosis risk factors and there was no finding suggestive of SVT in his physical examination and examinations, he developed neurological symptoms and bleeding due to venous infarction occurred during the follow-up. Although it is rare, considering it in atypical cases will reduce mortality and morbidity.

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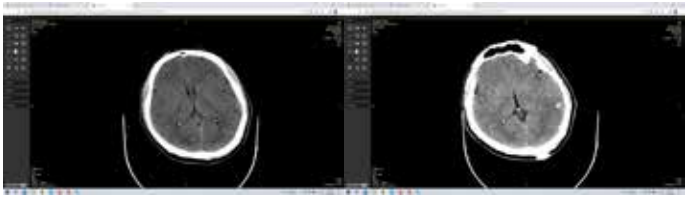

Figure1. Hemorrhagic venous infarction

Figure 2. Left transverse sinus and sigmoid sinus in MRI venography

YÜKSEK ENERJİLİ TRAVMA HASTALARINDA KAN GAZI LAKTAT SEVİYESİNİN MORTALİTE VE YOĞUN BAKIM YATIŞI ÜZERİNDEKİ ETKİSİ

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ÖZET

GİRİŞ: Dünya üzerinde acil servislere en sık başvuru sebeplerinin arasında travma bulunmaktadır. Acil servise başvurularda basit kas ağrısından yüksek enerjili travma hastasına kadar birçok alanda hasta başvurusu olmakta. Bu durum asıl öncelik verilmesi gereken hastaların ayırılmasını gerektirmektedir. Özellikle hızlı tanı ve tedavi için çabucak tanınması için skorlama sistemleri geliştirilmiştir. Acil serviste dakikalar içinde görebildiğimiz kan gazı parametrelerinden laktatın mortalite ve morbiditeye öngörmede aynı zamanda yoğun bakıma yatışı üzerindeki etkisini saptamayı amaçladık.

Materyal Metod: Çalışmamız prospektif gözlemsel kohort şeklinde tasarlandı. Araştırmamız Ekim 2020-Nisan 2021 tarihleri arasında Pamukkale Üniveristesi Hastanesi acil servisinde gerçekleştirildi. Yüksek enerjili travma nedeniyle acil servise başvuran 18-65 yaş aralığındaki her birey çalışmaya alındı. Kritik hasta seçilimi için yüksek enerji travma kriterleri konulmuş olup herhangi bir yüksek enerjili travma kriterini karşılayan hasta çalışmaya alınmıştır. Yüksek enerjili travma kriterleri ATLS – 10 da yayınlanan yüksek enerjili travma kriterleri kabul edildi.

BULGULAR: Yüksek enerjili travma tanısı konulmuş 207 hastanın 174 tanesi çalışmaya dahil edilmiştir. Araştırmaya dâhil edilen bireylerin yaşları 18-64 arasında olmakta ve ortalama 34,13±13,397'dir. Çalışmaya dâhil edilen bireylerin 19'u (%10,9) anestezi yoğun bakımda, 5'i (%2,9) beyin cerrahisi servisinde, 2'si (%1,1) genel cerrahi servisinde, 7'si (%4,0) göğüs cerrahisi servisinde, 2'si (%1,1) göz hastalıkları servisinde, 2'si (%1,1) kulak burun boğaz hastalıkları servisinde, 1'i (%0,6) kalp ve damar cerrahisi servisinde, 15'i (%8,6) ortopedi servisinde, 1'i (%0,6) plastik cerrahisi servisinde, 1'i (%0,6) üroloji servisinde yatırılarak takip edilmiş olup 117'si (%67,2) ise taburcu olmuştur. Çalışmaya katılan bireylerin sonuçları ile laktat değerleri arasındaki ilişkiyi belirlemek amacıyla yapılan One-Way ANOVA analizine göre aralarında anlamlı bir ilişki saptanmıştır ($p<0.05$). Mortal travmaların laktat değerleri diğer bireylere kıyasla daha yüksek çıkmıştır.

SONUÇ: Travma hastaları acil servis başvurularında büyük bir paya sahiptir. Yüksek laktat değerleri, hastasının yüksek mortalite oranına işaret edebilir. Literatür ile uyumlu olarak laktat değeri yüksek hastaların mortalitesinin daha yüksek olduğu tespit edilmiştir.

ANAHTAR KELİMELER: Kan Gazı, Laktat, Travma, Yüksek Enerjili Travma

ABDOMİNAL AORT OKLÜZYONU:LERİCHE SENDROMU

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ÖZET

Acil servise ateş ve halsizlik şikayetleriyle başvuran hastalarda enfeksiyöz, nörolojik, vasküler nedenler gibi çok çeşit etyolojiler saptanabilmektedir. Hastaların kendilerini yeterince ifade edememeleri, acil servis hekimlerinin fizik muayene için yeterince zaman ayıramamaları gibi çeşitli nedenlerle hayati öneme sahip ancak sık rastlanmayan patolojiler atlanabilmekte veya tanıdan uzaklaşılabilmektedir. Ancak özellikle genel durumu bozuk hastalarda anamnez ve fizik muayenenin yeterince derinleştirilmesi ile beraber ender rastlanabilen patolojiler saptanabilmektedir. Bu olguda acil servise ateş öksürük şikayetleriyle başvuran hastanın yapılan detaylı anamnez ve fizik muayeneleri ile Leriche sendromu tanısı koyma süreci sunulmuştur.

GİRİŞ

Abdominal aorta tutulumu gösteren çeşitli periferik arter hastalıkları bulunmaktadır. Leriche sendromu ise aterosklerozun distal abdominal aort, iliak arterler ve femoropopliteal arterlerin tutulması ve oklüzyonu ile ortaya çıkan bir sendromdur (1). Hastalar genellikle altmışbeş yaş üzeri kronik hastalıkları olan kişilerden oluşmaktadır ve egzersizle artabilen kramplı bacak ağrıları, erektil disfonksiyon, femoral nabızların yokluğu gibi tipik semptomlarla acil servise başvurmaktalar (2,3). Bu hastalığa sahip kişiler sıklıkla hipertansiyon, hiperlipidemi, diabetes mellitus ve tütün kullanımı gibi çeşitli risk faktörlerine sahiptirler (4). Ancak hastalığın bazen klinik prezentasyonları atipik olabilmektedir. Hastalığı tanısında öncelikle kolay ulaşılabilir olması, ucuz ve non invaziv olması nedenli doppler ultrasonografi kullanılmaktadır (5). Bu makalede de ateş ,öksürük ve halsizlik şikayetleriyle acil servise başvuran bir hastada yatak başı yapılan ultrasonografi ile Leriche sendromu tanısı konulan bir olgu sunulmuştur.

VAKA

64 yaşında erkek hasta ateş, öksürük şikayetleri nedenli acil servise başvurdu. Hastanın detaylı alınan öyküsünde beyin metastazı yapmış akciğer kanseri olduğu, mevcut şikayetlerine ek olarak dört beş gündür olan yaygın halsizlik ve yürümede güçlük şikayetlerinin olduğu öğrenildi. Hastanın başvuru anında genel durumu orta-kötü, şuur açık koopere oryante, tansiyon arteriyel 120/80 mmHg, saturasyon (oksijensiz) %96, ateş 38.5 °C idi. Cildi belirgi soluk, alt ekstremitelerinde bilateral dolaşım bozukluğu ait livedo retikülaris görünümü mevcut, bilateral alt ekstremite nabızları zayıf ,dinlemekle solunum sesleri kaba, sağ akciğer alt loblarda ralleri mevcut, batın muayenesinde defans rebound yok. Hastanın yatak başı yapılan alt ekstremite doppler ultrasonunda sağ anterior tibial arter ile arteria tibialis posteriorun distal ucunda, iç malleolun arkasında ve arteria dorsalis pedis trasesinde efektif akım yokluğu mevcut. Hastanın alt ekstremite dolaşım bozukluğu ve ateşi olması nedenli kalp ve damar hastalıkları cerrahisi ve enfeksiyon hastalıkları bölümlerine konsülte edildi. Hastada yapılan abdominal aorta anjiografi bilgisayarlı tomografisinde infrarenal aorta total oklüzyonu yani Leriche Sendromu tanısı konuldu. Hasta takip ve tedavi amaçlı yoğun bakıma yatırıldı. Aksillobifemoral bypass planlanan hastanın takiplerinde hemodinamik açıdan stabil olmaması ve inotrop tedaviye yanıt vermemesi üzerine operasyona alınamadı. Hasta yatışının beşinci gününde eksitus oldu.

TARTIŞMA

Leriche sendromu abdominal aorta tutulumuyla seyreden bir periferik arter hastalığı sendromudur. Hastaneye başvurular sıklıkla klodikasyon ,erektil disfonksiyon gibi sebeplerle olsa da hastalar dolaşım bozukluğunun etkilediği organ veya dokuların yerlerine ve çeşitliliğine bağlı olarak farklı sebeplerle acil servislere başvurabilmektedir. Lezyonların yerlerinin ve derecesinin saptanmasında doppler ultrasonografi, anjiyografik bilgisayarlı tomografi kullanılmaktadır 6-7-8-9**. Lezyonlar en çok aortoiliak seviyede görülmekle beraber alt ekstremiteler nadir tutulum göstermektedir10.** Bizim olgumuz da nadir görülen alt ekstremite tutulumu mevcut olup atipik olarak halsiz yorgunluk gibi şikayetler ile acil servise başvurmuştur. Hastaların tedavisinde mevcut lezyonların derecesine ,yerlerine göre aortoiliak bypass, aortobifemoral bypass (AFB), stentli veya stentsiz olabilen perkütan translüminal anjiyoplasti (PTA) ve tromboendarterektomi yöntemleri kullanılmaktadır 11-12-13**.

Bizim olgumuzda aksillobifemoral bypass planlanarak ybu yatırıldı. Takiplerinde anstabil seyreden hastaya operasyon yapılamadı. Hasta yatışının beşinci gününde eksitus oldu.

SONUÇ

Leriche sendromu ve diğer vasküler hastalıklar için ateroskleroz risk faktörlerine sahip hastalarda yapılan detaylı fizik muayene ve incelemeler sonucu hayatı tehdit edici patolojiler olarak karşımıza çıkabilmektedir. Risk faktörlerine sahip hastalar atipik şikayetlere sahip olsalar bile mutlaka sistemik muayene ve incelemeleri detaylı şekilde yapılmalı, nadir de olsa vasküler hastalıklar ve sendromlar akılda bulundurulmalıdır.

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ACİL SERVİSE BAŞVURAN GERİATRİK TRAVMA HASTALARINDA GKS, ISS VE RTS SKORLARININ MORTALİTE VE MORBİDİTE ÜZERİNE ETKİSİNİN DEĞERLENDİRİLMESİ

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ÖZET

GİRİŞ: Acil servise başvuruların artmasıyla, hasta seçiminin yüksek bir doğrulukla yapılarak hızlı ve yoğun bakım gerektiren ağır hastaların ayrılması kritik önem kazanmıştır. Bu amaçla, çeşitli travma ciddiyet skorlama sistemleri geliştirilmiş ve önerilmiştir. Bu çalışmada da travmalı olgularda skorlama sistemleri (GKS, RTS, cRTS, ISS, TRISS) birbiriyle karşılaştırılarak, mortalite ve morbiditeyi hangi travma skorunun en doğru ve güvenilir bir şekilde tahmin ettiğinin araştırılması amaçlanmıştır.

MATERYAL METOD: Bu çalışma Pamukkale Üniversitesi Tıp Fakültesi Acil Tıp Anabilim Dalı'nda acil servisimize 65 yaş üstü 314 geriatrik travma hastası ile 1 Haziran 2020 tarihi ile 1 Kasım 2020 tarihleri arasında kendilerinin veya yakınlarının onayıyla çalışmaya alındı. Çalışmaya katılmayı kabul eden hastalara travma öyküsü alınması sonrasında, travmanın hastalarda GKS, ISS, RTS, cRTS ve TRISS skorlarının mortalite ve morbidite üzerine etkisini değerlendirmek amacıyla prospektif olarak uygulandı. 1. ay sonundaki mortaliteleri takip edildi.

BULGULAR: Hastaların 161'i (%51,3) ayaktan başvuru yapmış ve 221 (%70,4) hastanın travma oluş şekli basit düşme olarak tanımlandı. Hastaların acil serviste ilk müdahalesi sonrası 113'ü (%36) hastane içi ilgili bölümlere yatış yaptırırken 1 hasta eksitus olarak değerlendirildi. Hastaların 80'i (%70,8) ortopedi bölümüne yatırılırken 1. ay mortalitelerine bakıldığında 294 hasta (%93,6) yaşamaya devam etmiştir. Hastaların 297'si (%94,6) künt, 17'si (%5,4) ise penetran travma tipine sahiptir. Hastalardan 217'sinin (%69,1) tek bölge, 38'inde (%12,1) çoklu bölge travma hasarına sahip olduğu belirlendi. Hastaların 133'ünde (%42,4) ekstremite hasarı, 43'ünün (%13,7) göğüs kısmında travma, 67 (%21,3) hastanın yüz, baş ve boyun kısmında travma oluşmuştur. GKS (14,93), RTS (11,98) ve cRTS'yi (7,82) yaşamını devam ettiren hastalarda belirleyici bir skala olarak değerlendirdik.

SONUÇ: Yaptığımız çalışmanın sonucunda ISS skorunun geriatrik travmalı hastalarda GKS ile kullanımının hastaların tedavisinde ve 1. ay mortalitesinde diğer skorlama sistemlerine göre daha yararlı olduğunu düşünüyoruz. Skorlama sisteminin haricinde hastanın mortalitesini ve sağkalımının hesaplamasında travma bölgesinin ve şiddetinin etkisinin olduğunu düşünüyoruz.

ANAHTAR KELİMELER: Acil servis, Çoklu travma, GKS, Mortalite, Travma skorlama sistemleri

THORACIC STAB INJURIES IN EMERGENCY DEPARTMENT: A 2-YEAR REVIEW

BACKGROUND: The chest trauma ranks third in all the trauma. Although blunt trauma in thorax injuries is a with a hiher rate, penetrating stab wounds are at very high rates in emergency department.In this study, we aimed to review chest stab injuries in ED (Emergency Department) a two year process and to draw attention to the social significance.

METHODS: A total 45 cases with stab wounds penetrating the chest who present to ED were evaluated in terms of age, sex, clinical and radiologic findings and therapeutic approaches reviewing patient records between February 2018-March 2020.

RESULTS: Cases were 16-59 years old, mean age was 30,29.Forty-one were male, four were female. The incision length in thorax ranged from 1 to 10 centimeter and the mean was 2,62. There were on left (32), right (11) and bilateral (2).20 of injuries penetrating thorax were in 5th intercostal gap, 9 of them were in 4th intercostal gap. Anterior axillary (n=15), medium axillary (n=10), midscapular (n=7) were the most frequently injured region. There were hemopneumothorax (21), pneumothorax (13) and hemothorax (11). Tube thoracoscopy (35), conservative approach (10), thoracotomy (2) were treatment methods.

CONLUSIONS: Thoracic injuries should be quickly treated because it contains organ inuries, which is of vital importance and impaired cardiopulmonary system dynamics should be corrected urgently. Thorax injuries are never isolated and therefore the other system injuries should be revised absolutely. As in all thorax injury cases, to ensure rapid transport to ED and proper treatment with early diagnosis will contribute in reducing the rate of mortality and morbidity.

MULTİSYSTEM İNFLAMMATORY SYNDROME İN CHİLDREN" (MIS-C) RELATED COVID-19: A CASE REPORT IN TURKEY

INTRODUCTION

The coronavirus disease 2019 (Covid-19) pandemic has caused a worldwide illness, although children are relatively protected.(1-2)Severe lung involvement with acute respiratory failure is the most common complication of Covid-19 in adults, but many have complications in multiple organs.(3-5) in the April 2020, a novel syndrome in children and adolescents termed "multisystem inflammatory syndrome in children" (MIS-C) with likely relation to SARS-CoV-2 infection was first described. Initial reports surfaced in the UK and Italy , followed by New York and other parts of the U.S. (6-7) The majority of children affected were RT-PCR negative for SARS-CoV-2 virus, but were antibody positive, indicating past infection. The cause of the clinical syndrome was postulated to be a post-infectious inflammatory response following SARS-CoV-2 infection. The WHO use the term multisystem inflammatory syndrome in children and adolescents temporarily related to covid-19 (MIS-C) to describe the disease. .

CASE

A 7-year-old-boy presented with fever for 6 days, conjunctivitis and diarrehe. He did not report history of contact with Covid-19 patient. He had received oral amoxicillin-clavulanate for 5 days without any improvement. Examination showed bilaterally conjunctival injection of eyes, mucositis in the oropharynx and dehydration. systemic examination revealed hepatosplenomegaly. He had a temperature of 39.2 C, tachycardic with a heart rate of 140 beats per minute, respiratory rate of 25 breaths per minute, blood pressure 101/62 mmHg and oxygen saturation of 98%.

He had hemoglobin 11 g/l (normal:11.5-14.53g/l), lymphopenia (total leukocyte count 3.87 103/l, neutrophils 78.8%, lymphocytes 14.2%, monocytes 5.4%, eosinophils 0.3 %) and thrombocytopenia (platelet count 64 103/l, normal: 150-450 103/l), with elevated inflammatory markers (C-reactive protein (CRP) 136 mg/l]. Pro-brain natriuretic peptide (NT-pro BNP: 3043 pg/ml, normal:< 125pg/ml) and also d dimer (>4560 mg/l ,normal <550 mg/L) were elevated.

Chest X-ray, urine examination, renal and liver functions were normal. Real-time polymerase chain reaction (RT-PCR) for severe acute respiratory syndrome coronavirus 2 (SARS CoV-2) was also negative. SARS-CoV-2 antibody test was demonstrated to be positive (IGG and IGM positive). Echocardiography showed normal heart functions. Hepatocyplenomegaly and increased renal echogenicity were detected in abdominal ultrasonography. viral panel was negative (HAV, HBV, EBV, Rubella, CMV, HSV 1, HSV 2, , Paramiksovirus, Rubeola ,VZV,Parvovirus B19, HIV, Noravirus, Rotavirus, Adenovirus) ,

Hospital day 3 the patient has hypotension. Blood pressuere was 70/40 mmHg. He transfered pediatric intensive unit.

The patient received intravenous hidration, cefotavime , intravenous immunoglobulin (IVIG) at 2 g/kg body weight and adrenalin infusion 0.1 mcg/kg/min. Hydrocortisone (4mg/kg/day) was given to the patient because of the fluctuating blood pressure. After IVIG treatment, the need for inotropes disappeared. Blood pressure 100/78 mmHg 3 hours after inotrope stop. Evaluated by echocardiography, as the pulse pressure narrowed. Echocardiography was normal. Milrinone needed up to 0.375mcg/kg/min in steps of 0.125mcg / kg / min. After 48 hours, the need for milrinone disappeared. The patient, who was followed up stable for 48 hours, was transferred to the service.

DISCUSSION

After the onset of the Covid-19 pandemic, it has been reported starting from April 2020 that there may be catastrophic effects on children, starting from Italy, New York and USA(7). Later, these cases were given a common name, MIS-C related covid-19. In our case, the patient with RT-PCR negativity has IgG and IgM positivity. Verdoni et al. study, while 80% of MIS-C cases had IgG positivity, 20% of cases had RT-PCR positivity (10). All patients were SARS-CoV-2 antibody-positive, suggesting that although this entity is triggered by Covid-19, the hyperinflammatory syndrome seen in these children is likely due to post- infectious cytokine storm, rather than a result of direct cell injury caused by viral replication(12).

Although it will not come to mind as the first diagnosis when the patient is evaluated, MIS-C has come to mind due to the ongoing pandemic in our country. Gupta et al.,there was myocardial involvement, therefore it was initially considered as Kawasaki Disease(11). Although our case has pro-bnp elevation, his echocardiography is normal. Cardaic biomarkers were normal and there was no reduction in ejection fraction. In cases with cardiac involvement, there are those who experience ECMO(13).Short-term inotropic support was sufficient in our case.

The relative absence of pulmonary signs in pediatric Covid-19 cases compared to adults has a pathogenesis in which pulmonary involvement does not appear to be the main dysfunction factor in SARS-CoV-2 infection in children(12). In our case, a patient with advanced gastrointestinal symptoms is seen. Since respiratory symptoms are prominent in adults, it may be late for the diagnosis to be considered.

In our case, IVIG, supportive therapy, and inotrope support were sufficient and the clinical regression was rapid and successful.

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MASSIVE PULMONARY EMBOLISM FOLLOWING ACHILLES TENDON REPAIR

INTRODUCTION: Pulmonary embolism (PE) is a relatively common cardiovascular emergency. Occlusion of the pulmonary arterial bed can lead to life-threatening acute but potentially reversible right ventricular failure. The diagnosis of PE is difficult and may be overlooked because it does not present with a specific clinical picture. In contrast, early diagnosis is crucial, as early treatment is highly effective. PE and deep vein thrombosis (DVT) are two clinical manifestations associated with venous thromboembolism. Predisposing factors are common in both PE and DVT. DVT is an important source of morbidity in orthopaedic surgery. It can progress to PE, a significant source of mortality. Both operative and nonoperative treatments of Achilles tendon rupture include a period of immobilization which is a well-documented risk factor for DVT. However, the most recent antithrombotic guidelines (published by the American College of Chest Physicians) suggested no DVT prophylaxis for this type of injury. This case demonstrates the rare massive PTE case in a patient with no risk factor of venous thromboembolism who underwent open repair after Achilles tendon rupture.

CASE: A 30-year-old male patient presented to the emergency department with right-sided chest pain. The patient described her chest pain as “sharp”. The patient had no known chronic disease and was not using any medication. The patient declared that his left Achilles tendon was ruptured while playing sports 3 weeks ago and that Achilles tendon repair was performed with open surgery the next day. The patient was discharged after the operation and used enoxaparin for DVT prophylaxis for 15 days. In this process, the patient did not have any complaints until he applied to the emergency service. Vital signs revealed a temperature of 37.1°C, heart rate of 112 beats per minute, blood pressure of 140/80 mm Hg, respiratory rate of 21 breaths per minute, and an O2 saturation of 92% on room air. Cardiac exam demonstrated tachycardia, a fixed wide of the second heart sound, the presence of a third heart sound at the left lower sternal border, and a right ventricular heave. Pulmonary findings consisted of bilateral crackles at the bases. An electrocardiography showed tachycardia with evidence of right-sided strain (Figure-1). His arterial blood gas showed pH 7.41, pCO2 of 38 mm Hg, and pO2 of 64 mm Hg on room air. A complete blood count, coagulation panel, troponin and basic metabolic panel were normal. With these findings PTE was suspected and he was examined with pulmonary angiography with computed tomography. A computed tomography of the chest with pulmonary embolism protocol confirmed large bilateral massive pulmonary embolism (Figure-2-4). The patient, who was started on anticoagulation and fluid resuscitation, was admitted to the intensive care unit. The patient, who was treated in the intensive care unit for eight days, was discharged in a healthy condition.

CONCLUSION: The incidence of PE and DVT after Achilles tendon rupture was quite rare in the literature. The overall rates for DVT and PE after Achilles tendon ruptures were 0.43% and 0.34%, respectively. However, in the literature, there are few case reports documenting Achilles tendon rupture with subsequent DVT and PE. In the case of rupture of the Achilles tendon, the risk of DVT and pulmonary embolism is increased, and the potential outcome in patients who develop this complication can be devastating. For this reason, venous thromboembolism prophylaxis is warranted in this patient population.

KEYWORDS: Achilles tendon rupture, pulmonary thromboembolism, venous thromboembolism

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BİR ÜNİVERSİTE HASTANESİNDE NÖROŞİRURJİK ACİLLER; BİR YILLIK DENEYİM

GİRİŞ VE AMAÇ: Acil serviste travmatik ve nontravmatik nedenlerle sıkça nöroşirurji konsültasyonu istenmektedir. Bu hastalarda erken tanı ve tedavi zamanla yarışan klinisyen için çok önemlidir. Biz de bu çalışma ile acil servisten nöroşirurji kliniğine yatırılan hastaların demografik özellikleri, başvuru nedenleri (travmatik ve non travmaik) ve prognozlarını incelemeyi amaçladık.

Yöntem ve Gereçler: Çalışmada nöroşirurji kliniği tarafından yatışı yapılan 148 hasta retrospektif olarak tarandı. Hastaların başvuru şikayetleri, yatış tanıları ve prognozları incelendi. Verilerin analizinde SPSS (Statistical Package for Social Sciences) Windows 23.0 programı kullanıldı.

BULGULAR: Hastaların, yaş ortalaması 50,66±25,24 olup, 113'ü (%76,4) erkek ve 35'i (%23,6) kadındı. Olguların 81'i (%54,7) travmatik nedenlerden, 67'si (%45,3) nontravmatik nedenlerden dolayı başvurdu. En sık kafa travması (n:53) tanısı konulmuş olup, bunu subaraknoid kanama (n: 29) ve subdural kanama (n:22) takip ediyordu. Hastanede kalış süreleri değerlendirildiğinde non travmatik grup 9,82±12,1 gün iken travmatik grubun ise 7,07±11,8 gün olarak bulundu.

TARTIŞMA VE SONUÇ: Acil serviste nöroşirurji konsültasyonu, özellikle beyin fonksiyonu etkilenen ve acil takip veya cerrahi gerektiren hastalarda istenir. Bu hastalarda en sık saptanan patoloji kafa travması olup, en sık takip ve yatış gerektiren durumlardır. Çalışmamızda da olduğu gibi bu hastaların erken dönemde tanı ve tedavisi nin hastanede kalış süreleri üzerine etkisi olumludur.

GİRİŞ:

Acil servislere başvuran ve nöroşiruruji branşını ilgilendiren hastalıkların çoğu aslında acil cerrahi müdahele gerektiren hastalılar oluşturmaktadır. Travmatik ve travmatik olmayan olarak ayırabileceğimiz bu hastalık gruplarında özellikle kafa travması ve spinal travması tespit edilen hastaların değerlendirilmesinde stabilizasyon ve hızlı bir şekilde patolojinin aydınlatılması mortalite ve morbiditenin azaltılması açısından önemlidir. Meydana gelen travma sonrasında nöral dokunun ikincil hasardan korunabilmesi amacıyla gerekli durumlarda acil cerrahi müdahelelerin yapılması fonksiyonel sonucun iyileştirilmesinde oldukça değerlidir. Yine non travmatik durumlarda da intrakranyal yer kaplayıcı lezyonlar, vasküler patolojiler, santral sisteminin diğer hastalıkları gibi zamanında tadavisi başlamayan mortal seyredebilecek hastalıklar içinde acil nöroşirurjik yaklaşımlar oldukça önemlidir. Bizde burada acil tıp kliniğimize 1 yıl içerisinde başvuru yapan ve nöroşirurji tarafından değerlendirilen hasta deneyimimizi sizlerle paylaşmak istedik.

MATARYEL METOD:

Bu çalışma, 01.01.2021–31.12.2021 tarihleri arası, 3. basamak sağlık hizmeti

veren bir üniversite hastanesi acil servisine başvuran ve nöroşirurji kliniği adına servise veya yoğun

bakıma yatırılan tüm yaş gruplarından 148 hasta üzerinde retrospektif olarak yapıldı. Hastaların başvuru şikayetleri, yatış tanıları ve prognozları incelendi. Verilerin analizinde SPSS (Statistical Package for Social Sciences) Windows 23.0 programı kullanıldı.

BULGULAR:

Hastaların, yaş ortalaması 50,66±25,24 olup, 113'ü (%76,4) erkek ve 35'i (%23,6) kadındı. Olguların 81'i (%54,7) travmatik nedenlerden, 67'si (%45,3) nontravmatik nedenlerden dolayı başvurdu. Genel olarak değerlendirildiğinde en sık kafa travması (n:53) tanısı konulmuş olup, bunu subaraknoid kanama (n: 29) ve subdural kanama (n:22) takip ediyordu. Travmatik olguların hastaneye başvuru nedenleri incelendiğinde ise en sık nedenin trafik kazasına (n:41) bağlı olduğu bunu düşme olgularının (n:38) takip ettiği görüldü. Hastanede kalış süreleri değerlendirildiğinde non travmatik grup 9,82±12,1 gün iken travmatik grubun ise 7,07±11,8 gün olarak bulundu.

TARTIŞMA

Acil servise başvuran nöroşirurji olgularının büyük kısmını travmalar oluşturmaktadır. Literatür irdelendiğinde travmaya maruz kalan esas cinsiyetin 40 yaşın altında erkeklerin olduğu ve erkeklerin kadınlara oranla 2-3 kat daha fazla travmaya ve dolayısı ile kafa travmasına maruz kaldıkları bildirilmiştir (1). Bizim çalışmamızda da travma olgularında çoğunluğu erkek cinsiyet oluşturmaktadır (E/K: 60/21). Yine çalışmamızdaki olguların çoğu da travma olgusu olup literatüre benzer olarak trafik kazaları kafa travmalarının en sık sebebi olarak saptanmıştır (2).

Acil olgular travmatik ve non travmatik nöroşiruriji acilleri olarak değerlendirildiğinde literatürde buna benzer çok az bir çalışma olmasına rağmen travmatik olamayan grup çalışmanın daha az bir kısmını oluştursa da hastanede kalış süreleri açısından değerlendirildiğinde istatistiksel olarak anlamlı bir şekilde uzun süre takip ve tedavileri sürmektedir. Buda prognoz ve erken tanı ve tedavi açısından önemli olduğu kanısındayız. Benzer çalışma olmasa da literatürde non travmatik hastaların travmatik hastalara sayı oranla sayı olarak daha az acil başvurusu yaptığı gösterilmiştir (3).

Sonuç olarak nöroşirurji acilleri sadece kafa travması olarak düşünülmemeli diğer nedenlerle de acil ameliyat yapılan olgular bildirilmeli ve bu konudaki deneyimler paylaşılmalıdır. Bununla birlikte kafa travmaları halen çok önemli bir morbidite ve mortalite nedeni olup bu travmaların gelişiminin engellenmesine yönelik toplumsal kökenli önlemler alınmalıdır.

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ANORMAL VAJİNAL KANAMA İLE GELEN BİR İNME VAKASI, OLGU SUNUMU

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ÖZET

ANAHTAR SÖZCÜKLER: hiperseksüalite, inme, olgu sunumu, serebrovasküler hastalık, vajinal kanama

GİRİŞ

Hiposeksüellik inme hastalarında yaygın bir sorundur. Ancak bazı inme hastaları hiperseksüalite ile başvurabilir. Bu davranış değişikliklerinin kesin nedeni bilinmemekle birlikte temporal lob tutulumu ve limbik sitem tutulumu ile ilişkili olabilir. Hiperseksüalite daha önce hayvanlarda ve temporal lob nöbetleri olan hastalarda bildirilmiştir(1).

VAKA

Altmış altı yaş kadın hasta vajinal kanama şikayeti ile acil servise başvuruyor. Hasta yakınlarından alınan anamneze göre hastanın 4 gündür bilinç durumunda değişme, davranış bozukluğu, artan cinsel istek ve cinsel içerikli konuşmalarda artma şikayetleri mevcut. Fizik muayenesinde genel durumu orta, bilinç açık, oryantasyon kooperasyon kısıtlı, konuşma doğal, nörolojik muayene sol alt ekstremite 3/5 (sekel olarak değerlendirildi). Diğer sistem muayenelerinde patoloji saptanmadı, vitaller stabil olarak değerlendirildi. Özgeçmişinde HT, DM ve 1 ay önce iskemik SVO öyküsü mevcuttu. Laboratuvar sonuçlarında anlamlı patoloji saptanmadı. Hastaya yapılan beyin tomografisi görüntüleri kronik değişiklikler ile uyumluydu. Hastadan akut serebrovasküler hastalık ön tanısı ile difüzyon manyetik rezonans (MR) görüntülemesi istendi. MR görüntülemede; sağ serebral hemisfer sentrum semiovalde bölgede akut difüzyon kısıtlaması izlendi. Hasta nörolojiye konsulte edildi. Amigdala enfarktı tanılı ile hastaya 300 mg asetilsalisilik asit ve 75 mg klopidogrel tedavisi başlandı. Takip ve tedavi için nöroloji yoğun bakım yatışı planlandı.

TARTIŞMA

İnsan cinselliği, kişilik ve davranışın biyolojik, fiziksel, kültürel ve psikolojik boyutlarını kapsar ve beyin hasarları cinsel davranışta değişikliğe yol açabilir(2). Hipoaktif cinsel istek bozukluğu, beyin hasarı ile ilişkili iyi bilinen bir komorbiditedir, hiperseksüalite ise nadir görülen bir durum olarak kabul edilmiştir. Hiperseksüalite talamus, frontolimbik bağlantılar, subtalamik çekirdekler, orbito-frontal devreyi içeren frontal lob ve temporal lob lezyonlarını etkileyen laküner enfarktlar gibi beynin belirli bölgelerine verilen hasarla ilişkili bulunmuştur(3,4,5). İnme veya beyin hasarlarının neden olduğu beynin farklı bölgelerindeki yapısal hasar, farklı hiperseksüel davranışlara neden olur. Subtalamik enfarktlar sonucunda hiperseksüalite ve hemiballizm, prefrontal ve bazal medial frontal lezyonlarda disinhibisyon ve hiperseksüalite ortaya çıkar(6). Bilateral talamik enfarktüste aşırı mastürbasyon ve üçüncü sinir felci tanımlanmıştır. Anterior serebral arter enfarktüsüne bağlı korpus kallozum ve frontal lob lezyonları nedeniyle aşırı mastürbasyona yol açan yabancı el işareti oluşur(7)(8).

SONUÇ

Hiperseksüalite, inmeyi takiben nadiren tanımlanmıştır ve genellikle talamik veya subtalamik enfarktüsler ve genellikle disinhibisyon ve diğer bilişsel işlev bozuklukları ile ilişkili ön lob veya temporal lob yaralanmalarından kaynaklanır.

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COVID-19 PANDEMİSİNİN 112 PERSONELİNİN ANKSİYETE VE DEPRESYON DURUMU İLE UYKU KALİTESİ ÜZERİNE OLAN ETKİSİ

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ÖZET

GİRİŞ: Pandemi döneminde hastalığa yakalanma, sevdiklerine bulaştırma, toplumdan dışlanma, sosyal izolasyon gibi korkular nedeniyle ön safta çalışan sağlık personelinde psikososyal problemler de görülebilmektedir. Çalışmamızın amacı, pandeminin 112 personelinde yarattığı anksiyete ile depresyona neden olan ve uyku kalitesini azaltan sebepleri ortaya koyabilmektir.

Materyal Metod: Araştırma verilerinin toplanmasında tanıtıcı bilgi formu, Pittsburgh Uyku Kalitesi İndeksi ve Hastane Anksiyete Depresyon Ölçeği kullanılmıştır. Pittsburgh Uyku Kalitesi İndeksi 24 sorudan oluşmaktadır. 5 ve üzerindeki puanlar kötü uyku kalitesini göstermektedir. Hastane anksiyete ve depresyon ölçeği toplam 14 sorudan oluşmaktadır. Anksiyete için 7, depresyon için ise 10 puan ve üstü anksiyete ve depresyonun şiddetinin arttığını gösterir.

BULGULAR: Çalışmaya 284 gönüllü katılmıştır ve yaklaşık yarısı 26-35 yaş aralığındadır. Katılımcıların çoğunluğunu (%80) acil tıp teknikerleri ve paramedikler oluşturmaktadır. Katılımcıların 261'i (91,9) COVID-19 semptomu olan bir hastayla karşılaşmış ve 230'u (%81) bu hastalara muayene veya bakım vermiştir. Çalışmaya katılanların anksiyete skor ortalaması 12,11±4,87, depresyon skor ortalaması 13,28±4,66 olarak saptanmıştır. Katılımcıların %64,1'inde anksiyete, %90,1'inde depresyon skorları yüksektir. Katılımcıların uyku kalite indeksi ortalaması 8,47 ± 3,06 olarak bulunmuş ve %89,8'inde uyku indeksi skoru 5 ve üzerinde çıkmıştır. Çalışmamızda 46 yaş ve üzeri çalışanların anksiyete ve depresyon skorları diğer yaş gruplarına göre daha yüksektir. Kadınlarda uyku kalitesi daha kötü, erkeklerde ise anksiyete skorları daha yüksektir. Paramedikler, acil tıp teknikerleri ve diğer sağlık çalışanları arasında anksiyete, depresyon ve uyku kalitesi ölçekleri arasında anlamlı farklılık mevcuttur. Uyku kalitesi en düşük meslek grubu paramediklerdir. Kronik hastalık durumu, ruhsal sorun geçmişi, iş memnuniyeti gibi ölçeklerde anksiyete, depresyon ve uyku kalitesi açısından istatistiksel olarak anlamlı farklılıklar mevcuttur. Çalışmacıların toplam uyku kalitesi ile anksiyete ve depresyon skorları arasında ilişki olduğu gözlenmiştir.

SONUÇ: Pandemi döneminde 112 personelinde anksiyete ve depresyon daha şiddetli olarak görülebilmekte ve uyku kalitesi kötüleşmektedir. Anksiyete, depresyon ve uyku probleminin altta yatan sebepleri analiz edilerek 112 personelinin çalışma şartlarının iyileştirilmesi yönünde çalışmalar yapılmalıdır.

ANAHTAR KELİMELER: Anksiyete, Covid-19, Depresyon, Sağlık çalışanı, Uyku kalitesi

ACUTE ISCHEMIC STROKE PRESENTING WITH SPEECH DISORDER

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KEYWORDS: aphasia, stroke, ischemia

INTRODUCTION: Stroke is the leading cause of disability and the second leading cause of death worldwide. With the global population aged 65 and over growing faster than all other age groups, the incidence of stroke is also increasing. In addition, there is a shift in the overall stroke burden towards younger age groups, particularly in low and middle-income countries. Stroke in most cases is caused due to an abrupt blockage of an artery (ischemic stroke), but in some instances stroke may be caused due to bleeding into brain tissue when a blood vessel ruptures (hemorrhagic stroke). Aphasia is one of the most severe symptoms in stroke patients, affecting one-third of acute stroke patients.

CASE: A 77-year-old male presented to the emergency department with aphasia that started 1 hour ago. Vitals on arrival: arterial blood pressure 160/80 mm/hg, Spo2 98, pulse 87 bpm and no fever. The patient's chronic diseases are hypertension and calcific aortic stenosis. On physical examination, right upper extremity muscle strength was 4/5. He has no verbal response and does not take orders. Abdominal examination is normal, defense and rebound were not detected. Lung sounds are natural. The patient was prediagnosed with cerebrovascular disease. Routine blood parameters of the patient were takena nd an ECG was taken. ECG is normal. Diffusion MRI was performed because the brain tomography was normal. MRI showed acute diffusion restriction in the left parietal lobe. The patient was consulted to the neurologist. Written informed consent was obtained from family members for the administration of tissue plasminogen activator to the patient. Tissue plasminogen activator was discontinued due to the development of pulmonary edema during the treatment. Control brain tomography and lung tomography were taken. No bleeding was detected on brain tomography. He was admitted to the intensive care unit after receiving cardiology consultation.

CONCLUSION: Even though the overall IS incidence rate has decreased during the first decades of the 21st century, the proportion of IS patients with aphasia at stroke onset remains stable at 30%. Aphasia continues to be an important symptom that needs to be considered in stroke care and rehabilitation.

KÜNT TRAVMAYA BAĞLI İNCE BARSAK PERFORASYON OLGULARI

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GİRİŞ-AMAÇ: Abdominal travmalar, tüm travmalar arasında 3. sıklıkta karşımıza çıkmaktadır. Travma kaynaklı ölümlerin %10'undan sorumludur. Abdominal travmaların %75'ini künt travmalar oluşturmaktadır. Künt travmalarda öncelikle dalak ve karaciğer gibi solid organ yaralanmaları görülmekle birlikte barsak yaralanmaları da meydana gelebilmektedir. Künt karın travması sonucu akut batın tanısı sonrası operasyona alınan iki hastanın klinik sonuçlarını paylaşmayı amaçladık.05.07.2022 tarihinde acil servise aynı araç içinde yaralanma sonucu multi travma nedeniyle başvuruda bulunan künt karın travması tespit edilen iki hastanın yaş, cinsiyet, laboratuvar değerleri, batın tomografi sonuçları, yapılan cerrahi girişimler ve yatış süreleri kaydedildi.

BULGULAR: 21 ve 55 yaşındaki erkek hastalar acil serviste değerlendirildi. Karın ağrısı şikayetleri mevcuttu. Her iki hastada multi travmalıydı fakat acil operasyon gerektirecek batın dışı patolojileri yoktu. Başvuru sırasında batın muayenesinde iki hastada da batın normal bombelikteydi, minimal hassasiyet ve defans mevcuttu ve rebound yoktu. Laboratuar değerlerinde WBC: (19880-14400), LDH: (746-391), Amilaz: (498-359) olarak ölçüldü. Çekilen karın bilgisayarlı tomografi görüntülemesinde ilk hastada ince barsak anslarında duvar kalınlık artışı ve perihepatik ve perisplenik mayii olduğu ikinci hastada pelvik bölgede minimal serbest mayii olduğu ve intra-peritoneal serbest hava ile uyumlu görünüm olduğu rapor edildi. Bu değerlendirmeler neticesinde ilk hasta hemoperitoneum, ikinci hasta ise perforasyon ön tanılarıyla operasyon planlanarak Genel Cerrahi Yoğun Bakım ünitesine yatırıldı. Takiben ilk hasta genel anestezi altında operasyona alındı. Operasyonda batında ince barsak muhtevası olduğu ve jejenumda 50. ve 60. cm'lerde tam kat barsak perforasyonu olduğu gözlendi. İkinci hasta da genel anestezi altında operasyona alındı. Explorasyonda batında ince barsak muhtevası olduğu ve jejenumda 100. cm'de tam kat barsak perforasyonu olduğu gözlendi. Her iki hastaya da perforasyon alanlarını içine alacak şekilde ince barsak rezeksiyonu ve stapler ile yan yana ince barsak anastomozu uygulandı. Batın içi bol izotonik solüsyonla yıkanarak dren tatbik edildi ve ameliyatlar sonlandırıldı. Hastalar post operatif dönemde uygun antibiyoterapi başlanarak takip edildi. Post operatif problemleri olmayan hastalardan ilk hasta 5. gününde çene operasyonu için ilgili kliniğe devredilerek, ikinci hasta ise 7. gününde şifa ile taburcu edildi.

SONUÇ: Künt karın travmaları her ne kadar sıklıkla solid organ yaralanmasına neden olsa da barsak perforasyonuna da yol açabileceği gözden kaçırılmamalıdır. Batın tomografisi güvenle kullanılan bir görüntüleme yöntemi olmasına rağmen perforasyon bulguları olan batın için serbest hava her hastada görülmeyebilir. Künt travma hastalarında batın içi organ yaralanma şüphesi mevcut ise operasyondan kaçınmamak gerekmektedir.

AKUT İSKEMİK İNME HASTALARINDA TROMBOLİTİK TECRÜBEMİZ

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İnme hastalığının en sık görülen mekanizma beyin dokusunu besleyen arterlere emboli atmasıdır. İskemik inmelerde primez lezyon serebral enfarktüstür. Bu enfarktüsler ilk başta geri dönüşümlü olmakla beraber tedavideki gecikmeler geri dönüşüm ihtimalini azaltmaktadır. (1) Zamanında yapılan reperfüzyon tedavileri akut iskemik inmeli hastalar için en etkili tedavilerdir. Günümüzde reperfüzyon tedavisi olarak inme semptomunun başlangıcından itibaren ilk 4.5 saat içinde doku plazminojen aktivatörü verilmesi şeklindedir. Bu saat büyük arter tıkanıklıklarında 6 saate kadar uzatılabilmektedir. (2) fakat rTPA tedavilerinin en korkulan komplikasyonu olarak karşımıza kanamalar çıkmaktadır. Bu kanamalar küçük peteşiyel kanamalardan intraparankimal kanamalara kadar geniş bir şiddet spektrumuna sahiptir. (3)

Biz çalışmamızda hastanemize iskemik svo tanısı almış ve trombolitik tedavi verdiğimiz kanama komplikasyonu gelişen hastaları saptamayı amaçladık.

MATERYAL METOD: hastanemize 2020-2022 yılları arasında iskemik svo tanısı alıp trombolik tedavi verdiğimiz hastaların dosyası retrospektif olarak tarandı. Kanama komplikasyonu gelişen ve gelişmeyen olarak iki grupta incelendi. Kanama komplikasyonu gelişen hastaların mortalitesi hesaplandı.

BULGULAR :

Hastanemize 437 sayıda hasta akut iskemik svo tanısı ile başvurdu. Başvuran hastaların 247 Kadın 190 Erkekti. Başvuran hastaların kadın hastalar için yaş ortalaması 65 Erkek hastalar için yaş ortalaması 63 İdi. Hastalardan trombolitik tedavi sonrası 22 (%5) kanama komplikasyonu geliştiği saptandı. Kanama gelişen hastaların ise 12 (%54) mortal seyretti.

TARTIŞMA :

Yapılan çalışmalarda İV tPA sonrası en sık görülen ve en korkulan komplikasyon olarak intrakranial kanama bildirilmiştir (7-9). İntrakranial hemoraji %22 oran ile Kutluk ve arkadaşları (10), %23,9 oranı ile Çabalar ve arkadaşları (11) tarafından bildirildi.

Literatüre bakıldığında mortalite oranı %30 oran ile (sadece intrakraniyal hemorajiye bağlı) Kutluk ve arkadaşları (10), %21,7 oranı ile Çabalar ve arkadaşları (11) tarafından bildirilmektedir.

Yaptığımız çalışma sonuçlarına göre kanama gelişen hastaların mortalitesi kanama gelişmeyen hastalara oranla daha yüksek saptadık. Bizim çalışmamızda intrakranial hemoraji oranı %5 , intrakranial hemorajiye bağlı mortalite oranı %54 'dir.

Trombolitik tedavinin intrakranial kanamaları artırdığı ancak bu artışın mortalite oranındaki artış ile ilişkili olmadığını gösteren çalışmaya da rastlanmaktadır (8).

SONUÇ: Son yıllarda inme merkezimize akut iskemik inme başvurusu gün geçtikçe artmaktadır. Akut iskemik inme ile başvuran hastalara, uygun koşullarda ve uygun zamanda iv r-tPA tedavisi etkinliği kanıtlanmış tek tedavi seçeneğidir.

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INTRODUCTION

Pneumothorax is a common condition in the emergency department, which occurs when air passes from the lung to the pleural space. Pulmonary embolism is a condition caused by the migration of thrombi or multiple thrombi from the systemic circulation to the pulmonary vessels. Acquired risk factors for pulmonary thromboembolism are deep vein thrombus, immobilization, surgery, malignancy, heart diseases, pregnancy, postpartum period, oral contraceptive use, obesity, neurological diseases, trauma are such situations. Pulmonary embolism is a preventable disease with high mortality and morbidity, recurrent, sometimes difficult to diagnose, and is responsible for 10% of sudden deaths in hospitalized patients.

CASE

57 years old female patient. He presented to the emergency department with chest pain and shortness of breath. She had a stinging pain in her chest while breathing. On arrival vitals, blood pressure was 90/60 mmHg, saturation was 88%, and pulse was 113/minute. The patient had a known history of hypertension and malignancy (breast cancer). In the physical examination of the patient, right hemithorax was decreased breath sounds during oscultation. Her EKG was sinus tachycardia. In the arterial blood gas taken, sO2: 86%, paO2: 45 mmHg, paCO2: 25 mmHg. Due to hypoxemia and hypocarbia we performed pulmonary computed tomography angiography. Pulmonary embolism and pneumothorax were detected in the pulmonary computed tomography angiography of the patient(Figure-1,2,3). The patient was consulted to the clinics of chest diseases and thoracic surgery.

CONCLUSION

Pulmonary embolism and pneumothorax are life-threatening diseases. When patients with underlying malignancies present with shortness of breath, the preliminary diagnosis of pulmonary embolism should be kept in mind. The patient's complaint of shortness of breath and stabbing chest pain may be related to the pneumothorax, but vitals, physical examination and examinations should be a warning for us to keep pulmonary embolism in mind. Sometimes the symptoms may be due to more than one pathology. The history, vital signs, physical examination findings and examinations of the patients who apply will guide us.

KEYWORDS: Dyspnea, Pneumothorax, Pulmonary Embolism

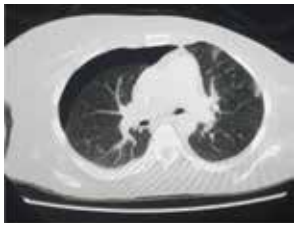

Figure 1

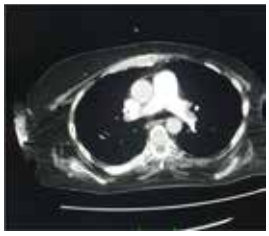

Figure 2

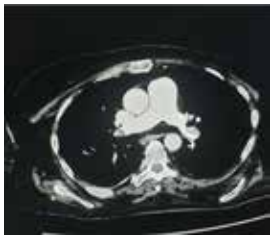

Figure 3

ODONTOİD FRAKTÜRE BAĞLI KARDİYAK ARREST

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GİRİŞ

Odontoid fraktür servikal kırıklar içinde önemli bir yere sahiptir ve tüm servikal kırıkların yaklaşık 1/5'ni oluşturmaktadır. Genellikle yüksek enerjili travmalar sonucunda oluşur. Zorlayıcı bir hiperfleksiyon transvers ligament yoluyla odontoid fraktürüne neden olabilir.Her yaş grubunu etkileyebilir. Yaşlı hasta grubunda düşük enerjili travmalardan sonra bile görüldüğü rapor edilmiştir. Odontoid kırıklar kendi içinde değerlendirildiğinde ise en sık tip II kırıklar (%50), azalan sıklıkla Tip III ve Tip I kırıkları görülmektedir.Mortalite oranı %5-10'dur (1). Odontoid kırığın neden olduğu sempatik ve parasempatik sinir sistemi dengesinde bozulma kalbi bradiaritmilere ve atriyoventriküler bloklara yatkın hale getirir. Dolayısıyla senkop, apne, kuadripleji ve kardiyovasküler instabiliteye yol açabilir. Kardiyovasküler insatbilite omurilik yaralanmasından sonra önde gelen ölüm nedenlerinden biridir (2). Acil servise travma sonucu kardiyak arrest olarak getirilen hastalarda bu tür kırıkların olabileceği göz önünde tutulmalıdır.

OLGU

76 yaşında erkek hasta 112 acil sağlık hizmeti ekipleri tarafından kardiyak arrest nedeniyle kapdiyopulmoner resüsitasyon yapılır halde getirildi. Özgeçmişinde bir yıl önce serebrovasküler olay geçirmiş olan hasta yolda yürürken aynı seviyeden sırtüstü düşmüş ve kafasını yere çarpmış. Senkop geçiren hasta için 112 acil yardım aranmış gelen sağlık ekibi hastada nabız alınmadığı için yaklaşık 10-15 dakika kadar olay yerinde resüsitasyon yapmış.

Acil servise getirildiğinde şoklanabilir ritimden dolayı toplam beş kez defibrile edildi. Elektrokardiyografisinde inferior derivasyonlarda st-segment elevasyonu vardı. Hemogram değerleri normal sınırlardaydı. Çekilen tomografisinde C2 vertebrada parçalı tip-3 odontoid fraktürü izlendi ve spinal kanala hafif uzanımı vardı. Toraks tomografisinde bilateral pnomotoraks ve sol 2-4 kostalarda anteriorda minimal deplase fraktür izlendi. Bu arada kordiyoloji ile konsulte edildi ve acil koroner anjiografi planlandı. Koroner anjiografide damar tıkanıklığı görülmedi. Hasta yoğun bakıma yatırıldı. Beyin cerrahisi operasyon düşünmedi halovest ve Philadelphia tipi boyunluk önerildi.

SONUÇ

Odontoid kırıkları her zaman yüksek enerjili travmalar sonucunda oluşmaz. Geriatrik hastalarda osteoporoz nedeniyle basit düşmelerden sonra bile gelişebilir. Bilinci kapalı halde getirilen ve travma öyküsü bulunan hastalarda odontoid fraktürü altta yatan neden olabilir. Bu tür olgularda anamnez ve klinik semptomları sürekli sorgulanmalıdır. Hastalarda kafa travması sonrasında bradikardi, hipotansiyon ve sıcak ekstremitelerle birlikte nörojenik şok belirtilerine dikkat etmek gerekir (3). Odontoid kırıklarının, genellikle multi travmalı hastalarda görülmesi nedeniyle, diğer organ yaralanmalarının ön planda olduğu durumlarda ilk değerlendirme esnasında gözden kaçabilir.

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NECROTIZING FASCIITIS DEVELOPED IN IMMUNESUPRESSIVE PATIENT AFTER CHEMOTHERAPY

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INTRODUCTION: Necrotizing soft tissue infections are bacterial infections with high morbidity and mortality. Necrotizing fasciitis, one of these infections, usually progresses with comorbidities such as diabetes, obesity, alcoholism and immunosuppressive therapy. It is estimated that there is an average of 0.3-15 cases per 100,000 population for necrotizing fasciitis. In addition to the accompanying comoridides, any procedure that disrupts the integrity of the skin increases the risk. Necrotizing fasciitis often occurs as a result of polymicrobial infection. A gaseous gangrene-like emphysematous environment occurs in a mixed bacterial environment consisting of aerobic and anaerobic bacteria. Gas formation under the skin may give evidence of crepitation on physical examination. Fever, skin edema and redness create a clinical picture similar to cellulitis. Unlike cellulitis, ecchymosis, extreme tenderness, and extreme pain are seen in necrotizing fasciitis. In the following period, hemodynamic instability is added to these findings. The LRINEC scoring system was developed to distinguish necrotizing fasciitis from other soft tissue infections. This scoring includes white blood cell count (WBC), hemoglobin (Hb), sodium (Na), glucose and c-reactive protein (CRP) parameters. Patients with a score of ≥6 on these parameters are considered as necrotizing fasciitis with a probability of 50-75%, and patients with a score of ≥8 with a probability of >75%. In pharmacological treatment, broad-spectrum empirical antibiotics (piperacillin-tazobactam or meropenem or ceftriaxone+metronidazole+vancomycin/linezolid) should be started after taking aerobic and anaerobic cultures. Then, according to the culture result, antibiotic therapy can be changed. In the presence of parenteral fluid resuscitation and septic shock, vasopressor drug support should be initiated. The gold standard treatment for necrotizing fasciitis is immediate surgical debridement. In addition to these treatments, hyperbaric oxygen therapy and intravenous immunoglobulin should be considered, which have limited benefits.

CASE: A 53-year-old female patient received chemotherapy 10 days ago with the diagnosis of malignant breast neoplasm in the hospital where she was followed up by medical oncology. Filgrastim sc was performed on his right arm 48 hours after chemotherapy. After filgrastim administration, swelling and redness started on the right forearm-arm of the patient. The patient was admitted to the emergency department of our hospital due to increased swelling and bruising on his right forearm-arm. There was no chronic disease in her history, except for malignant breast neoplasm. In his physical examination, his general condition was impaired, his consciousness was confused, his blood pressure was arterial: 95/60 mmHg, heart rate: 110/min, SO_2: 90%, respiratory rate: 26/min, body temperature: 38.8 C. There was swelling, ecchymosis covering almost the entire right forearm-arm flexor face, crepitation and distal peripheral pulse could not be obtained. There was no pathological finding in the examination of the other extremities. CT angiography was performed on the right forearm-arm of the patient. As a result of CT angiography, there were extensive edema in the extremities, subcutaneous emphysema, filling defects at the mid-distal ends of the ulnar and radial arteries. In the hemogram, WBC:9380 10^9/L, Hb:10.6 g/dL were found. Arterial blood gas showed lactic acidosis. In biochemistry, it was found as creatinine: 0.96 mg/dL, Na: 134 mmol/L, glucose: 222 mg/dL, CRP: 149 mg/L. LRINEC score was calculated as 5. Wide-diameter vascular access was established and 0.9% NaCl infusion was started. Empirically, ceftriaxone 1 g and metronidazole 500 mg iv were administered. He was admitted to the intensive care unit after consultation with orthopedics and cardiovascular surgery specialist doctors.

DISCUSSION: It is vital to distinguish between necrotizing fasciitis and other soft tissue infections in a patient who presents to the emergency department with complaints of fever, skin edema, and redness. Other soft tissue infections improve with pharmacological treatments. On the other hand, a patient diagnosed with necrotizing fasciitis should be treated with surgical debridement immediately.

Key words: Necrotizing fasciitis, immunosuppression, chemotherapy

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NADİR BİR OLGU; HİPOKALEMİK PERİYODİK PARALİZİ

Dr. Nabi BAYRAMOĞLU, Dr. Ömer TURALİOĞLU, Prof. Dr. Zeynep ÇAKIR

GİRİŞ: Hipokalemik periyodik paralizi, periyodik kas güçsüzlüğü veya paralizi atakları ile kendini gösteren bir hastalıktır. Ataklar genelde yoğun egzersiz, aşırı karbonhidrat tüketimi, stres, enfeksiyon, cerrahi ile tetiklenebilir. Ataklar günde veya yılda bir olup birkaç saat veya birkaç gün sürebilir. Artmış katekolamin deşarjı ile Na/K ATPaz aktivitesi artar. Artan bu aktiviteye bağlı hücre içine giren potasyum paraliziye neden olmaktadır. Atak sırasında serumdaki potasyum seviyesi düşüktür. Ancak ataklar arasında serum potasyum seviyeleri normaldir.

VAKA: 35 yaş erkek hasta her iki bacakta güçsüzlük şikayeti ile acil servise başvurdu. Özgeçmişinde özellik olmayan, yakın zamanda enfeksiyon öyküsü olmayan hastanın gelişinde vital bulgularında özellik olmayıp stabildi. Fizik muayenesinde ense sertliği yok, merkezi fasiyal paralizi yok, motor üst extremite kuvveti bilateral 5/5 olup alt extremite kuvveti bilateral 2/5, taban cilt refleksi bilaterel fleksör, derin tendon refleksleri hipoaktif idi. Hastanın tahlillerinde potasyum seviyesi 1.72 nmol/L, elektrokardiyografide U dalgası mevcuttu. Santral görüntülemelerinde; beyin bilgisayarlı tomografisinde hemoraji ve beyin anjiyo bilgisayarlı tomografisinde majör damar oklüzyonu yok idi. Hastaya potasyum replasmanı başlandı. Nöroloji kliniğince değerlendirilen ve akut nöropatoloji düşünülmeyen hasta, dahiliye kliniğine konsülte edildi ve dahiliye nefroloji kliniğine yatırıldı.

SONUÇ: Kas güçsüzlüğü, lateralizan bulgu ve paralizisi olan hastalarda santral hadiseler olabileceği gibi elektrolit bozuklukları da bu kliniklere sebep olabilmektedir. Bu sebeple elektrolitlerin bakılması büyük önem taşımaktadır.

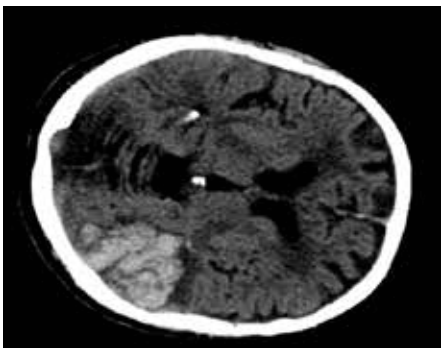
HOCAM ÇOK ÖKSÜRDÜM BAŞIM AĞRIYOR

Dr. Nabi BAYRAMOĞLU, Dr. Ömer TURALİOĞLU

GİRİŞ: Beyin parankiminde oluşan kanamalar intraserebral hemoraji olarak adlandırılmaktadır ve tüm serebral hemorajilerin yaklaşık %10'unu oluşturmaktadır.

VAKA: 86 yaş erkek hasta, bilinen atriyal fibrilasyon, diabetes mellitus, koroner arter hastalığı, benign prostat hiperplazisi tanıları olup 2-3 gündür olan şiddetli öksürük, bir gün önceden başlayan baş ağrısı ve hemoptizi ile tarafımıza başvurdu. Tarafımıza başvurduğu günün sabahında başlayan bilinç bulanıklığı ve bir sefer olan balgama bulaş şeklinde hemoptizi şikayetleri olmuş. Hastanın gelişinde vital bulgularında tansiyon 175/112 mmHg düzeylerinde olup diğer vital bulguları doğal ve stabil idi. Hastanın fizik muayenesinde şuur açık , kısmı oryante koopere , pupil ışık refleksi (++/++), göz hareketleri her yöne serbest , ense sertliği yok , motor sol üst ve alt ekstremite kuvveti +4/5, taban cilt refleksi bilateral fleksör, akciğerlerde dinlemekle bilateral bazallerde ralleri mevcut, bilateral alt ekstremiteler arası ısı çap farkı mevcut değil idi. Hastanın alınan tahlillerinde müspet olarak sadece INR:2.07 idi. Hastanın çekilen elektrokardiyografisinde sağ dal bloğu ve atriyal fibrilasyon mevcut idi. Görüntülemelerde beyin bilgisayarlı tomografisinde sol paryetal kortikale yakın lober kanama olup şhift yok (Resim-1), toraks anjiyo bilgisayarlı tomografisinde ise bilateral ana pulmoner arterler patent olup segment ve subsegment dallarda dolum defekti yok, parankimde aktif pnömonik infiltrasyon yok, konsolidasyon tok, bronşektazisi yok; bilateral dependan alanlarda kondensasyon artışı mevcut idi. Hasta göğüs hastalıkları, beyin cerrahi, kardiyoloji ve nöroloji kliniklerince değerlendirildi. Göğüs hastalıklarınca psödohemoptizi düşünülen, beyin cerrahi kliniğince acil cerrahi müdahale düşünülmeyen, kardiyoloji kliniğinden INR yüksekliği açısından önerileri alınan hasta nöroloji kliniğine yatırıldı.

SONUÇ: Hasta acil servise ne şikayetle başvurmuş olursa olsun kapsamlı bir fizik muayene yapılmalı, başvuran hastalarda antikoagülan/antiagregan ilaç kullanımı mutlaka sorgulanmalı ve travma öyküsü olsun olmaksızın; özellikle antikoagülan/antiagregan ilaç kullanım öyküsü olanlarda gelişebilecek bir intraserebral hemoraji, ayırıcı tanı olarak aklımızın bir kenarında bulunmalıdır.



Resim-1

POSTER 2 KOLEDOKOLİTİAZİS

Büşra Eslem Ölmez[1],İsmet Parlak[1]
1:Aksaray Eğitim Araştırma Hastanesi, Acil Tıp Bölümü

GİRİŞ:

Koledokolitiazis primer olduğu gibi safra kesesindeki taşların düşmesine bağlı olarak sekonder de gelişir. Taş oluşumuna neden olan esas faktörler; safra stazı, artmış bilirubin salınımı, safra çamuru oluşumu, otonom nöropati, kimyasal dengesizlik, pH imbalansı, kolesterol salınımında artıştır. Sıklıkla kolesterol ve bilirubin taşları görülür. Primer taşlar kolesistektomiden en az 2 yıl sonra oluşan taşlardır. Tüm kolesistektomi yapılan hastaların %3-15'inde koledok taşı görülür.

OLGU:

82 yaşında kadın hasta, öğleden sonra başlayan sırta vuran, iki saattir devam eden karın ağrısı şikayetiyle acil servisimize başvurdu. Hastanın koroner arter hastalığı öyküsü mevcuttu. Hasta monitorize edildi; arteriyel kan basıncı 130/70 mmHg, Spo2: %95, Ateş: 37,1 ^{0}C, Nabız 82 atım/dakika olarak ölçüldü. Fizik muayenesinde epigastrik bölgede hassasiyeti mevcuttu, rebound, defans, ele gelen kitle yoktu. Hastanın hikayesi sorgulandığında 3 yıl önce kolesistektomi ameliyatı olduğu öğrenildi. Hastaya Elektrokardiyografi (EKG) çekildi. Hastadan biyokimya, hemogram, troponin istendi.Troponin 6,1 pg/ml, AST 358 U/L, ALT 220,3 U/L, GGT 655 U/L Amilaz 54 U/L, Lipaz 59 U/L çıkması üzerine kontrastlı abdomen ve toraks bilgisayarlı tomografi (BT) çekildi. BT'de koledok distalde büyüğü 7mm iki adet taş izlenmesi üzerine hastanın ercp yapılması için gastroenteroloji servisine yatışı yapıldı.

SONUÇ:

Hastanın yaşı ve özgeçmişi itibariyle sırta vuran epigastrik ağrı koroner arter hastalığını akla getirse de kolesitektomi yapılan hastalarda koledokta taş oluşumu nedeniyle benzer şikayetler ortaya çıkabilir.

POSTER 1 HEMOPTİZİ

Büşra Eslem Ölmez[1], İsmet Parlak[1]
1:Aksaray Eğitim Araştırma Hastanesi, Acil Tıp Bölümü

ANAHTAR KELİMELER: Hemoptizi, Pulmoner emboli

GİRİŞ:

Hemoptizi alt solunum yollarında oluşan kanamaya sekonder bir durumdur. Hemoptizi sebepleri arasında akut, koronik bronşit, akciğer absesi, kemoterapi, tüberküloz, bronşektazi, pnömoni gibi sebepleri vardır .En yaygın sebebi enfeksiyondur.Masif hemoptizi genellikle 600 ml ve üzeri olarak kana olarak tanımlanabilir.Hastaların çoğu minor hemoptizi olarak olarak hastaneye başvurur.%5 inden daha az bir kısmı ise masif hemoptizi olarak hayati tehdit edici ve acil müdahale gerektirecek düzeydedir.

OLGU:

51 yaş erkek hasta bugün başlayan öksürmekle gelen kanla uyumlu kırmızı renkli balgam şikayeti ile acil servisimize başvurdu. Hastanın bilinen KOAH, larinks ca öyküsü mevcuttu. Hasta monitörize edildi, vital bulgularına bakıldı. Tansiyon arteriyel: 140/70 mmHg, Spo_2:%92 Ateş:36.9ºC Nabız:118 atım/dakika, Solunum Sayısı: 28 soluk/dakika olarak ölçüldü. Hastanın oskültasyonla bilateral solunum seslerinde azalma, bazallerinde ralleri mevcuttu. Öyküsü sorgulandıgında yarım çay bardağı kadar hemoptizisi olduğu öğrenildi. Hastadan biyokimya, hemogram, kan grubu, koagülasyon testleri istendi. Hipoksi ve kanser öyküsü olması sebebiyle D-Dimer de istendi. Elektrokardiyografi (EKG) çekildi. Hasta monitörlü gözleme alındı. D-Dimer 12.365 ng/ml olarak çıkması üzerine pulmoner anjiografi fazında bilgisayarlı tomografi (BT) çekildi. Hastanın çekilen BT'sinde submasif pulmoner emboli tespit edildi. Hastanın gögüs hastalıkları adına yoğun bakımı yapıldı. Hasta bir hafta sonra taburcu edildi. Masif hemoptizi görülmedi.

SONUÇ:

Hemoptizinin en sık sebebi enfeksiyon olmasına rağmen hayati tehdit edici pulmoner emboli, diseksiyon gibi sebeplerle de ortaya çıkabilir. Biz bu olgumuzda hemoptizi ile gelen hastalarda pulmoner emboli açısından da dikkatli olunması gerektiğini vurgulamak istedik.

SİLDENAFİL KULLANIMI SONRASI AORT DİSEKSİYONU: OLGU SUNUMU

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ÖZET

Aort diseksiyonu, aortun herhangi bir segmentinde intima tabakasının yırtılması ve kanın intima ile media tabakası arasında birikerek ilerlemesiyle oluşan hayatı tehdit edici durumdur. Aort diseksiyonunun etiyolojik nedenleri arasında en sık kronik sistemik hipertansiyon, kistik medial nekroz, biküspit veya uniküspit aort gibi konjenital aort kapak hastalıkları, Marfan sendromu veya Ehler-Danlos sendromu gibi kalıtsal bağ dokusu hastalıkları, gebelik, kokain kullanımı, aort koarktasyonu gibi doğumsal kalp hastalıkları bulunur. Literatürde bizim olgumuzdan önce sildenafil kullanımı sonrası iki tane Tip A, bir tane Tip B olmak üzere toplam üç aort diseksiyonu vakası bildirilmiş. Acil servisimize her iki bacakta uyuşma ve sırt ağrısı şikayeti ile gelen, bilinen ek hastalık öyküsü olmayan ve sildenafil kullanımı sonrası aort diseksiyonu gelişen vakayı sunuyoruz.

ANAHTAR KELİMELER: Aort, Aort diseksiyonu, Sildenafil, Acil servis

GİRİŞ

Aort kalpten çıkan kanın vücuda dağılmasını sağlayan, insan vücudunun ana arteridir. Aort duvarı üç katmandan oluşur. Bunlar en içte ince intima tabakası, ortada elastik liflerden oluşan media tabakası ve en dışta kollajen liflerden oluşan adventisya tabakasıdır [1]. Aort kalpten çıktıktan sonra sırasıyla asendan torasik aort, arkus aort, desendan torasik aort ve abdominal aort olmak üzere başlıca dört kısımdan oluşur [1]. Aort diseksiyonu, aortun herhangi bir segmentinde intima tabakasının yırtılması ve kanın intima ile media tabakası arasında birikerek ilerlemesiyle oluşan hayatı tehdit edici durumdur [2]. Bu durum iki farklı şekilde ortaya çıkabilmektedir. Vakaların çoğunda intima tabakasındaki yırtıktan sızan kanın iki tabaka arasında birikmesiyle meydana gelen ayrışma söz konusuyken vakaların az bir kısmında ise media tabakasındaki kanama (intramural hematom) kaynaklı iki tabaka arasında ayrışma görülebilir [3]. Aort diseksiyonunun etiyolojik nedenleri arasında en sık kronik sistemik hipertansiyon, kistik medial nekroz, biküspit veya uniküspit aort gibi konjenital aort kapak hastalıkları, Marfan sendromu veya Ehler-Danlos sendromu gibi kalıtsal bağ dokusu hastalıkları, gebelik, kokain kullanımı, aort koarktasyonu gibi doğumsal kalp hastalıkları bulunur [3]. Bu olgu sunumunda 59 yaşında, bilinen ek hastalık öyküsü olmayan ve sildenafil kullanımı sonrası gelişen aort diseksiyonu vakasını sunuyoruz.

OLGU SUNUMU

Elli dokuz yaşında erkek hasta dört saat önce aniden başlayan sırtta, belde ağrı ve bacaklarda uyuşma şikayeti ile acil servisimize başvurdu. Hastanın vitalleri geldiğinde TA: 140/60 mmHg, nabız: 80 atım/dk, oksijen saturasyonu: %98, ateş: 36□C, kan şekeri:117 gr/dl idi. Hastanın ek hastalık ve düzenli ilaç kullanımı öyküsü yoktu. 40 paket yılı sigara tüketim öyküsü mevcuttu. Elektrokardiyografisi normal sinüs ritmindeydi. Hastanın fizik muayenesinde her iki bacakta kas gücü 4/5 idi. Periferik nabızlar açıktı ve ekstremiteler arası nabız farkı yoktu. Diğer sistem muayeneleri olağandı. Hastaya iskemik serebrovasküler olay ön tanısıyla biyokimya, hemogram, koagülasyon tetkikleri ve beyin BT, beyin diffüzyon MR görüntüleme tetkikleri planlandı. Biyokimya, hemogram ve koagülasyon tetkiklerinde hiçbir anormal değer saptanmadı. Hastanın beyin BT ve beyin diffüzyon MR incelemelerinde de patoloji saptanmadı. Bunun üzerine anamnez derinleştirildi. Hastanın, ağrısı başlamadan üç saat önce 100 mg sildenafil kullandığını öğrendik. Daha önce sildenafil kullanım öyküsü olamayan hastanın herhangi bir cinsel ilişki yaşamadığını ilaç kullanımından üç saat sonra ağrısının aniden başladığını öğrendik. Bu sırada hastanın ağrısı giderek şiddetlendi ve hasta ağrının göğsüne yayılmaya başladığını ifade etti. Tekrar çekilen elektrokardiyografisi yine normal sinüs ritmindeydi. Hastaya ek olarak hs Troponin I ve D-dimer tetkikleri planlandı. D-dimer: 4536 ng/ml, hs Troponin I: 0.018 ng/ml idi. Hastaya transtorasik ekokardiyografi yapıldı ve asendan aort çapı 56 mm, aort kökü 62 mm ölçüldü. Asendan aortta diseksiyon flebi izlendi. Orta-ciddi aort kapak yetmezliği mevcut olan hastanın sol ventrikül sistolik fonksiyonları normaldi. Abdominal aort bakısında aort çapı 29 mm ölçüldü ve diseksiyon flebi görüldü. Bunun üzerine hastaya kontrastlı toraks ve tüm batın anjiyo BT görüntülemesi yapıldı. Toraks ve tüm batın anjiyo BT'sinde asendan aort çapı 54 mm olup artmış olarak izlendi. Asendan aorttan başlayarak arkus aort ve desendan torasik aort, abdominal aort boyunca devam eden diseksiyon flebi izlendi (Resim 1,2,3). Kalp damar cerrahisi uzmanına danışılan hasta operasyon amacıyla başka bir kuruma sevk edildi.

Hastadan bu olgu sunumu için sözlü ve yazılı onam alınmıştır.

TARTIŞMA

Aort diseksiyonunun zamana ve lokalizasyona göre farklı sınıflandırmaları mevcuttur. 14 gün içinde oluşmuşsa akut, 90 gün ve üzerindeyse kronik, aradaki sürede oluşmuşsa subakut olarak sınıflandırılır [3]. İntimal yırtığın lokalizasyonuna ve diseksiyonun yayılımına göre de DeBakey ve Stanford sınıflamaları kullanılmaktadır. Stanford sınıflaması Tip A ve B olmak üzere ikiye ayrılır. Stanford Tip A, intimal yırtığın lokalizasyonu önemsenmeksizin diseksiyonun asenden aortta yayılımının olduğu, brakiyosefalik arterin proksimalindeki diseksiyondur [4]. Stanford Tip B, sadece desendan aortta yayılım gösteren, sol subklavyen arterin distalinden başlayan diseksiyondur [4]. DeBakey sınıflaması diseksiyonun başlangıç yerine göre üç ana gruptan oluşur [5]. Tip 1 diseksiyon asendan aorttan desendan aorta yayılır. Tip 2 diseksiyon sadece asendan aorttan başlar ve asendan aort boyunca yayılır. Tip 3 diseksiyon desendan aortta başlar. Eğer diseksiyonun yayılımı distale doğru diyaframın üzerinde kalırsa tip 3a, diyaframın altına inerse tip 3b olarak sınıflandırılır [5]. Stanford sınıflaması daha sık kullanılmaktadır [4]. Bizim olgumuz Stanford sınıflamasına göre Tip A, DeBakey sınıflamasına göre Tip 1, akut diseksiyondur.

Aort diseksiyonunda hastalar diseksiyonun tipine göre farklı şikayetler ile acil servise başvurabilmektedir. Hastalar sıklıkla Tip A diseksiyonda göğüs ağrısı ile Tip B diseksiyonda sırt ağrısı ile gelirler [3]. Ağrı şiddetli, yırtıcı, keskin bir ağrı olarak ifade edilir. Hastaların bir kısmı ise senkop, parapleji gibi nörolojik semptomlarla gelebilir [3]. Bizim olgumuz da her iki bacakta uyuşma ve sırt ağrısı şikayetiyle geldi, acil servisteki takibi esnasında göğüs ağrısından da yakınmaya başladı.

Aort diseksiyonunda ekstremiteler arası nabız farkı Tip A diseksiyonda %30, Tip B diseksiyonda %15 oranında görülse de alt ekstremite iskemisi nadir görülür [3]. Bizim olgumuzda ekstremiteler arası belirgin nabız defisiti bulunmadı.

Aort diseksiyonu tanısında spesifik biyobelirteçler yoktur ancak bazı biyobelirteçler şüpheyi arttırır. D-dimer seviyesinin yüksek bulunması klinik bulgular varlığında aort diseksiyonu şüphesini arttırır [6]. Bununla birlikte troponin değerlerinde de yükseklik saptanabilir. EKG değişiklikleri ve troponin yüksekliği hekimi akut koroner sendrom tanısına yönlendirip tanı ve tedavi sürecinin gecikmesine yol açabilir [3]. Aort diseksiyonu tanısında transtorasik ekokardiyografi ile aorttaki diseksiyon flebinin görülmesi tanıyı koydurabilir. Anjiyo BT son yıllarda aort diseksiyonunda sık kullanılan ilk tanısal testtir [7]. Duyarlılık oranı %95 olan anjiyo BT diseksiyonun yayılımını gösteren en iyi yöntemdir [7].

Tip A diseksiyonda acil cerrahi tedavi yöntemi uygulanır [8]. Tip B diseksiyonda ise komplikasyon (mezenter iskemi, asendan aort tutulumu, diseksiyonun ilerlemesi, ağrının devam etmesi, kontrolsüz hipertansiyon gibi) yoksa medikal tedavi ile takip tercih edilir [8].

Literatürde bizim olgumuzdan önce sildenafil kullanımı sonrası iki tane Tip A, bir tane Tip B olmak üzere toplam üç aort diseksiyonu vakası bildirilmiş [9-11]. Famularo ve arkadaşlarının olgusunda hastanın kokainle birlikte sildenafil kullanım öyküsü mevcuttur [9]. Nachtnebel ve arkadaşlarının olgusunda sildenafil kullanımı sonrası kusma ve ishal gibi atipik şikayetlerle başvuru sonrası aort diseksiyonu tanısı konmuştur [10]. Tiryakioğlu ve arkadaşlarının olgusunda ise genç erkek hasta şiddetli göğüs ağrısı şikayeti ile gelmiştir ve hastanın bilinen biküspit aort, sekonder asendan aort anevrizması mevcuttur [11].

Sildenafil kullanımı ile ilgili sıçanların aortu üzerinde yapılan deneysel çalışmada sildenafilin aort sertliğini azalttığı dolayısıyla aortu intimal yırtılmalara yatkın hale getirdiği bulunmuştur [12]. Bizim olgumuzda bilinen ek hastalık olmamasına rağmen ekokardiyografisinde orta-ciddi aort kapak yetmezliği fark edilmiştir. Hastanın travma öyküsü olmamasıyla birlikte altta yatan bu predispozan faktörle sildenafilin aort diseksiyonuna yol açtığını düşünmekteyiz.

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A CASE OF VT WITH PULSE APPLYING WITH WEAKNESS

LOGIN: Ventricular tachycardia is characterized as a wide complex (QRS duration longer than 120 milliseconds) tachyarrhythmia at a heart rate greater than 100 beats per minute. The most common cause of VT is ischemic heart disease. VT is more common in men than women. Patients may experience hypotension, altered mental status, sweating, and pallor.

CASE:A 62-year-old male patient had a known history of cardiac angio-stent and was admitted to the emergency room with the complaint of fatigue. The patient had gone for a walk in the morning without taking his daily medication and exerted effort in the hot weather. Upon returning home, she was brought to the emergency room by 112 due to sudden onset of malaise and minimal chest pain at home. In the patient's vitals, TA was 106/70 mmHg, and heart rate was between 160-180. Ventricular Tachycardia was detected in his monitorization and ECG, and he was evaluated as VT with Pulse. Due to the regression of consciousness and unstable vitals, the patient who underwent Electrical Cardioversion was admitted to the cardiology clinic after a cardiology consultation.

CONCLUSION: Hemodynamic failure may develop in patients with VT, and if left untreated, mortality may exceed 30%.

KEYWORDS: Pulsating VT, Fatigue, Chest Pain

ACİL SAĞLIK HİZMETLERİNİN KÜRESEL SORUNLARI

Prof. Dr. Mehmet GÜL
Aksaray Üniv. Tıp Fak.

ACİL SAĞLIK HİZMETLERİ

Tüm ülkelerin amaçlarından birisi sağlıklı bir toplum yapısı oluşturulması.

- Sağlıklı ve gelişmiş toplum iyi bir sağlık sistemi ile mümkün olabilir.
- Gelişmiş ve gelişmekte olan ülkelerde sağlık hizmetleri ve özellikle acil ve kritik bakım ayrıcalıklı bir yere sahiptir

''Acil ve kritik bakıma verilen değer ülkelerin gelişmişlik düzeyi göstergesidir''

ÜLKELERİN ACİL BAKIM SİSTEMLERİ,

- Yalnızca toplumun temel sağlık ihtiyaçlarına hizmet etme yeteneğini sürdürmek için değil, aynı zamanda bir kriz, afet sırasında hızlı bir şekilde yanıt vermek için gerekli kapasiteye ve süreçlere sahip olmak için güçlü kalmalıdır.

ASH-SORUN BAŞLIKLARI

- Kalabalık (Triaj sistemleri)
- Afet (deprem, sel, kasırga, yangın, terör,…)
- Trafik kazaları, iş kazaları…
- Profesyonel, eğitimli, deneyimli ekip (doktor, paramedik, ATT…)
- Ekipman (kara-hava-deniz …ambulanslar,)
- Kaynak (özel bütçe, fonlar, yardımlar….)
- Teknoloji (Dijitalizasyon çağı)
- Zaman (time is brain, time is heart,..vakit nakittir)
- klinik hataların %80'e varan kısmı sağlık personeli arasındaki yanlış iletişimden kaynaklanmaktadır.
- Acil bakımda bu tür hatalar mümkün olduğunca en aza indirilmelidir ve yeni yazılım programları yardımcı olabilir.

Bazı analizlere göre,

- Katılımcılar,
  - ayaktan tedavi hizmetlerinin bölgeselleştirilmesi,
  - teletıpın yükselişi ve
  - afete hazırlık ve güvenlik için artan ihtiyaç dahil olmak üzere ana eğilimleri tartıştılar.

Toplantı ayrıca ülke çapında trend olan üç önemli zorluğun da altını çizdi:

- sağlık görevlisi sıkıntısı,
- statik geri ödeme ve
- farmasötik malzeme eksikliği.

- Hastalık Kontrol ve Önleme Merkezlerinden (CDC) yakın tarihli bir rapor, son on yılda acil servislere yapılan ziyaretlerin yüzde 20 arttığını gösteriyor.
- Amerikan Hastaneler Birliği'nden yapılan bir başka araştırma, hastanelerin yüzde 62'sinin çalışma kapasitesinde veya üzerinde olduklarını düşündüklerini belirtti. Seviye 1 Travma Merkezleri ve daha büyük (300+ yataklı) hastaneler düşünüldüğünde bu sayı yüzde 90'a çıkıyor.
- Bu istatistikler birçok hastane ve hasta için korkutucu derecede tanıdık.
- Baskılar (kanun, malpraktis, güncel tıbbi klavuzlar…), kalabalık artıyor ve bocalayan bir ekonomi, sigortasız - birincil bakım için genellikle yerel acil servise güvenen kişilerin - saflarını şişirdi.
- Birçok acil servis, kapasite sorunları ve işgücü eksiklikleri ile başa çıkmaya çalışırken kelimenin tam anlamıyla yaşam desteğinde.
- Covid-19, salgın, deprem, afet, terör, toplu kaza, biyoterörizm gibi ortaya çıkan tehditlere hazırlanmak, bunlara yanıt vermek sistem üzerindeki yükü artırır.
- ABD'deki hastanelerde, acil servisler benzer bir sapma, gecikme ve memnuniyetsizlik hikayesiyle karşı karşıya… hem hastalardan hem de klinisyenlerden.
- Acil servise gelen çok sayıda hasta, bir acil servisin sağladığı bakım düzeyine ihtiyaç duymaz.
- Örneğin Maryland'de, acil olmayan tıbbi sorunları olan hastalar, acil servis ziyaretlerinin yüzde 40'ından fazlasını oluşturmaktadır.*
- Acil tıbbi sistem kapasitesinin ötesine geçti.
- Çoğu eyalette sistem, bir pandemi, doğal afet veya terör saldırısına eşlik edecek talep artışını karşılayamadı.
- Acil servis talebindeki son artışlar, acil olmayan sorunlar için bakım arayan hastalardan kaynaklanmaktadır.
- Mevcut koşullar hasta bakımının kalitesini düşürmektedir.
- Mevcut koşullar, hekimler üzerindeki tazmin edilmeyen bakım yüküne katkıda bulunmaktadır

POLİTİKACILARA

- Özel sağlık sigortası kapsamını hızla genişletin
- Acil tıbbi hizmetlerin sunumunda kilit bir politika hedefi olarak kamu güvenliğine odaklanın ve acil bakım için alternatifleri teşvik edin.
- Acil tıbbi planlamayı hastane planlama ve inşaatını düzenleyen yasalardan ayırın ve hastanelerin geleneksel bakım sunumunda uzmanlaşmasını sağlayın.
- Federal ve eyalet sorumluluklarını açıkça tanımlayın, finansmanı kolaylaştırın ve acil durum hizmetlerinin kapasitesini ve verimliliğini artırın.

ACİL TIP KRİZİ NEDEN DERİNLEŞİYOR?

- Overcrowding.
- The Medicaid Mess (SGK)
- Waste and Inefficiency (Atık ve Verimsizlik)
- Patient Boarding (Yatırılamayan hasta)
- Ambulance Diversion (Ambulans Yönlendirme)
- Yetersiz Yatan Hasta Kapasitesi
- Bazı hastaneler, zorlukların üstesinden gelmek ve daha güvenli, daha verimli ortamlar yaratmak için yeni yollar buluyor.
- Altı Sigma, CAP (değişim hızlandırma süreci), Work-out (sağlık danışmanlığı uzmanlığı) kombinasyonuyla hastaneler, hasta akışı, hasta erişimi, hizmet döngüsü süresi ve kabul/taburcu

süreçlerinin kritik yönlerini hedefliyor.

- Giderek artan sayıda hastane, sistemdeki darboğazları veya verimsizlikleri belirlemek ve ortadan kaldırmak için adımlar atıyor.
- Sonuç olarak, hastalar, personel ve kârlılık üzerinde olumlu bir etki görüyorlar.
- Altı Sigma ile doktora başvurugiden süremizi azaltabilmemizdir" diyor. toplam kalış süremiz de bir başka tatmin edici ve görünmeden ayrılan, beklemekten sıkılıp havalanan hasta sayısında azalma oldu."

Yaşamı Korumak, Daha Fazla Yaralanmayı Önlemek ve İyileşmeyi Teşvik Etmek, ilk yardımın temel ilkelerini yerine getirmek için vardır. Tıptaki bu ortak tema, "yaşam yıldızı" tarafından gösterilmektedir.

. Erken tespit

2. Erken ihbar

3. Erken müdahale

4. Olay yerinde/sahada iyi bakım

5. Transit bakım

6. Kesin bakıma transfer

- Özellikle trafiğin yoğun olduğu metropollerde gerçekleşen yaralanma vb. olaylarda, ambulansın olay yerine ulaşması bir hayli vakit alabiliyor.
- Kırsal yerlerde gerçekleşen yaralanma olayları için ulaşım sorunu
- Ambulansın olay yerine geç ulaşması, ölüm riskinin olduğu yaralanma olaylarında yaralının hayatta kalma şansının azalmasına neden oluyor ve bu yüzden her gün birçok kişi hayatını kaybediyor.

ATS

AS (ER) & ATT-Paramedik.. (EMTs) & ATU (Eps)……

- Tanım:
  - ATS (Emergency Medical Services) ……tarafından hastane öncesi veya dışında (alan, ambulans, helikopter, uçak, gemi,….) yapılan acil bakımdır.
- (ABD, İng., Hongkong, Almanya, Kanada, Fransa, Japonya, Avustralya, Türkiye…)
- Birçok acil durumlarda zaman zaman ambulans helikopterler kullanılsa da bu aracın yüksek maliyetli olması ve her yere iniş yapamaması, bu araçları böyle durumlarda makul bir çözüm olmaktan çıkarıyor.

ACİL SAĞLIK HİZMETLERİ

- Son derece işlevsel, entegre bir sağlık sistemi,
- Karmaşık ve hızlı bakım kararları gerektirir
- Çok yönlü bir stratejiye ihtiyaç var
- Gelişmiş ülkelerin izlediği yörünge takip edilmeli
- Acil bakımın gelişiminin potansiyel yolu tahmin edilmeli
- Teletıp, yapay zeka gibi yeni teknolojilerin, düşük kaynak ortamlarında acil bakımın geleceğini nasıl artırabileceği ve etkileyebileceği keşfedilmeli

KÜRESEL OLARAK,

- Acil tıp sistemi, artan bir nüfusun bakım taleplerini karşılamak için yüksek teknoloji uygulamalarıyla donanımlı, hazır, çevik bir iş gücü gerektiriyor
- Dünyada medikal amaçlı drone kullanımı
- Olay yerine AED ulaşımının kolaylaştırılması
- İlaç/Doku, Kan ürünleri ulaşımı
- Travma kiti vb. medikal malzeme ulaşımı
- Teletıp (telemedicine)
- Arama-Kurtama operasyonlarına katkı

TACTICAL ROBOTICS

yaralıların hızla taşınmasını sağlayan AirMule isimli ambulans drone hazırladı.

AirMule'un asıl amacı, acil durumda olan yaralıların kısa mesafelerde ulaşımını süratle sağlamak.

EHANG,

Çin'deki COVID-19 salgını sırasında tıbbi malzemeleri ve personeli hastaneye taşımak için bir hava ambulansı olarak görev yaptı

Bir grup Güney Koreli tasarımcı, otoyollardaki trafik sıkışıklığından etkilenmeden kaza yerlerine kolaylıkla varabilen fütüristik bir ambulans tasarladı. "Refüj ambulansı" adı verilen bu özel ambulans, otoyoldaki refüj üzerinde ilerliyor ve dar tasarımından dolayı, otoyol üzerinde hemen hemen hiç yer kaplamadığı için trafik sıkışıklığından etkilenmiyor

Özellikle İstanbul gibi nüfusun yoğun olduğu büyük şehirlerde, trafiğin yoğun olduğu saatlerde, otoyolda gerçekleşen bir kazaya acil müdahale ekiplerinin kısa süre içinde ulaşması neredeyse imkansızdır. Her ne kadar bu gibi durumlar için otoyollarda emniyet şeritleri bulunsa da, zaman zaman bilinçsiz ve sorumsuz kişiler tarafından normal bir şerit gibi kullanıldığı için tam anlamıyla verimli bir çözüm değildir.

Refüj ambulansı, otoyolda her iki yönde de yardım sağlamak için her iki tarafta sürgülü kapılara sahiptir. Aynı zamanda bu araçta, hem sürücü hem de asistan için koltukların yanı sıra, yaralının yatırılacağı sedye için bir alan da bulunmaktadır.

ATS (EMS)

- Ülkeden ülkeye değişir
- Sağlık Tesislerine bağlı olmalıdır
- Hastane öncesi ulaşım yetersiz olduğunda veya olmadığında, önlenebilecek ölümler meydana gelir.
- Acil Servis Bakım kalitesi düşük olduğunda, hastaları taşıma kapasitesi mevcut olsa bile, topluluklar hastaları derhal almaktan caydırılabilir.

EMERGENCY MEDICINE

- Popüler medyada saygı duyulan, geleneksel bir uzmanlık alanı olarak tasvir edilmesine rağmen, acil tıp nispeten yenidir ve çoğunlukla içinde yaşadığımız hızlandırılmış, küreselleşmiş dünyanın bir ürünüdür.
- Tahminler, Amerika Birleşik Devletleri'ndeki modern acil sağlık hizmetlerinin gelişimini 1960'ların başlarına tarihlendirmektedir.
- Bu, yeni inşa edilen Amerikan karayollarında arabaların patlamasından kaynaklanan artan trafik kazalarına yanıt olarak oldu.

- Daha sonra, Birleşik Krallık, Avustralya, Kanada, Hong Kong ve Singapur kısa bir süre sonra, 1970'lerde ve 1980'lerde kendi acil tıbbi sistemlerini geliştirdiler.

Anglo-Amerikan modelinde, daha az hasta yerinde tedavi edilmekte ve bunun yerine tedavi için mümkün olan en kısa sürede acil servise nakledilmektedir.

Franco-german sistemi çoğu Avrupa ülkesinde kullanılmaktadır ve bu, sağlık görevlileri tarafından desteklenen tıp doktorlarının daha fazla hastayı kaza mahallinde veya hastaneye getirmeden önce evlerinde tedavi etmesi anlamına gelir; bu nedenle acil bakım olay yerinde veya hastaneye giderken yapılır.

- Şu anda gelişmiş ülkeler her iki modelden de bazı uygulamaları kullanıyor ancak son dijital teknolojiler daha çok acil tıbbı "hastaneden hastaya" yaklaşımı yönünde itecek.

THE FUTURE OF EMERGENCY MEDICINE: 6 Technologies That Make Patients The Point-of-Care

1. Lojistik ve kapasite tahsisi için yapay zeka
2. Acil bakımı kolaylaştıran uygulamalar
3. Pratik uygulama için video oyunu
4. Taşınabilir bakım noktası teşhis cihazları
5. Havadan bakım sağlamak için tıbbi dronlar
6. Ulaşımın Kolaylaştırılması ve Sürücüsüz Ambulans Çağı

TELETIP VE UZAKTAN ERİŞİM SİSTEMLERİNİN ACİL SERVİS ENTEGRASYONU ÖRNEK MODELLER & DENEYİMLER

Prof. Dr. Mehmet GÜL
Aksaray Üniv. Tıp Fak.

GİRİŞ

Son yıllarda, sağlık hizmetlerinde teknolojik gelişmeler, yenilikler çok dikkat çekici

Verilerin dijital ortamda toplanmasında devrim nitelikli uygulamalar

- Büyük miktarda veri toplamak önemli, fakat bu verilerin nasıl analiz edileceğini bilmek (hastaların sağlığına dair daha fazla fikir) daha önemli,
- Bu nedenle gördüğümüz bu teknolojik dönüşüm burada bitmiyor
- Trafik kazaları, afetler, iş kazaları, yangınlar..: Bu tür tıbbi acil durumlarda ve yüksek riskli hastalarda tedavi olmadan geçirilen her dakika hayatta kalma veya uygun iyileşme şansını azaltabilir.
- Aslında oksijensiz kalındığında sadece 4 dakika sonra kalıcı beyin hasarı başlarken, 4-6 dakika sonra ölüm gerçekleşebilir.
- Zamana karşı bu yarışta, hastaları bakım noktasıyla buluşturan dijital sağlık teknolojileri, ilk müdahale ekipleri ve acil servis birimleri için ezber bozan şeyler yapabilir

TELETIP

- Sağlık hizmeti sunumunun çehresini ve belki de bir bütün olarak sağlık sistemini değiştirecek gibi görünüyor.
- Telemedicine (Teletıp) ve Telehealth (Telesağlık) tanımlarının kullanımı konusunda kafa karışıklığı var (birbirinin yerine kullanılıyor)
- Telesağlık, daha kesin olarak bilgi teknolojisini kullanan daha geniş bir sağlık hizmeti çözümlerini kapsamak için kullanılan bir şemsiye terimdir
- Teletıp ise bu şemsiyenin altına yerleştirilen daha dar bir terimdir

TELETIP

- Epeyce bir süredir konuşuluyor (yazılıp çiziliyor),
- Ancak uygulamaya geçiş oldukça uzun bir süre aldı (ta ki, **Covid-19** salgınına kadar)
- Dünya genelinde sosyal mesafe, hastalarla yüz yüze temasın sınırlandırılmasıyla, giderek daha fazla kişi teletıp uygulamalarını kullanmaya başladı.
- Yüz yüze görüşmeye gerek kalmadan **konsültasyonlar** gerçekleştirildi

PANDEMIDE

Doktorların, insanları ameliyathane, klinik ve hastane bekleme odalarından uzak tutmak için teletıp hizmetlerinin sunumunu nasıl hızlandırdıklarını gözlemledik.

- Covid-19 Pandemisi ile birlikte dünyada teletıp uygulamalarının önemi daha iyi anlaşılmış ve kullanımı yaygınlaşmıştır.
- Acil Sağlık Hizmetleri teletıbbın en yaygın kullanıldığı alanların başında gelmektedir.
- Tele triaj, tele konsültasyon, tele inme, tele kardiyoloji, tele radyoloji gibi acil sağlık hizmetlerini de içine alan birçok konuda, teletıp aktif olarak kullanılmakta, Tele CPR (dron aracılığı ile AED) pilot uygulamada
- Teletıp yaygınlaşmasının acil kalabalığına da çözüm olma potansiyeli var

TANIM

- Dünya Sağlık Örgütü (WHO); ‘‘uzaktan şifa’’
- Hastalara sağlık hizmetinin uzaktan sağlanması,
- Teşhis ve tedavide telekomünikasyon teknolojisi (video tabanlı uygulamalar)
- Uzaktan görüntüleme, danışmanlık

TELETIP

- Hasta ile doktorun uzak mesafeye rağmen elektronik bilgi ve telekomünikasyon teknoloji aracılığıyla iletişime geçmesi ve böylelikle teşhis, tedavi, izlem, müdahale, bakım, tavsiye ve hatırlatmalar ile birey ve toplum sağlığına katkı sağlamasıdır.
- Acil Teletıbbın kullanım amacı,
  - Uygun bir ortamda, uygun standartta acil tıbbi bakım ve bakıma erişim
  - Enfeksiyon önleme
  - Bakım verimliliği
  - Tanısal yorumlar
  - Klinik müdahaleler
  - İzleme
  - En uygun acil tedavi seçimi hastaların ihtiyaç duydukları bakımı,

kendileri için mümkün olduğu kadar almalarını sağlamaktır.

TELETIP GÜNÜMÜZDE ÇOK ÇEŞİTLİ TIBBİ DURUMLARIN TEDAVİSİNDE YAYGIN OLARAK KULLANILMAKTADIR

- Astım ve solunum yolu enfeksiyonları
- Soğuk algınlığı ve Grip
- Gerilme ve burkulmalar
- Artrit
- Bronşit

İLAVE OLARAK

- Cerrahlar postop hastaların takibinde
- Aynı şekilde bir onkolog, bir hastayı test sonuçları ve tedavi planı hakkında konuşmak için teletıp kullanabilir

(sesli ve görüntülü olması nedeniyle telefona nazaran hastaya ekstra güvence verir)

TELEMEDİCİNE/TELESURGERY:

- Teletıp sayesinde drone’lar aracılığı ile yapılabilecek ameliyatlar artık hayal dünyasında değil.
- Operatör/cerrah ile drone arasında sadece 20 milisaniyelik gecikme ile yapılabilecek girişimler bilim-kurgu olmaktan çıkıp hayatımıza girmeye başladı bile.

ACEP'E GÖRE ACİL TELETIP UYGULAMA YERLERİ

- Kentsel ve kırsal hastaneler ve bağımsız acil servisler
- Akut bakım merkezleri
- Acil Bakım klinikleri
- Gözlem üniteleri
- Islah hizmetleri, ev, nitelikli bakım tesisleri
- Rehabilitasyon merkezleri
- Tıbbi nakil
- Hastalık ya da yaralanma mahallinde
- Afet bölgeleri
- Denizcilik, havacılık, uzay gibi zorlu ortamlar
- İşyerleri, ordu….
- Ayrıca, belirli tesislere sahip olmayan daha küçük hastaneler, belirli tedavileri veya teşhisleri etkin bir şekilde dışarıdan temin etmek için kendi telekomünikasyon hizmetlerini kullanabilir. Örneğin, test sonuçlarını işlemek veya radyoloji sonuçlarını incelemek.

TELETIP NE ZAMANDIR UYGULANIYOR? TARİHÇESİ NEDİR?

- Lancet tıp dergisi, 1879 yılında gece yarısı kötüleşen bir çocuğun durumunun telefon ile başarılı şekilde tanı konulmasını anlatan bir makale yayınlamış ve telefonun, gereksiz ev vizitlerini azaltılabilme ihtimali tartışılmıştır.
- ABD'de 1968 yıllarında acil tıp yardım telefon numarasını 9-1-1 olarak belirlemesine rağmen, telefonun halk tarafından yaygın kullanımı ve internet kullanımının aktif hale gelmesi 1990 yıllarda başlamış olup bu durum modern teletıp'ın gelişmesini ve yaygınlaşmasını sağlamıştır.

SON YILLARDA TELETIP ALANI,

- göreceli durağanlık, yanlış başlangıçlara tanık oldu.
- ancak istikrarlı büyüme gösterdi
- özellikle telekonsültasyon ve teleradyoloji
- en çok faydaları kayak merkezleri, otoyol veya demiryolu kazaları gibi ortamlarda ve doğal afetlerden sonra acil bakımda belirgindi
- travma uzmanlarının, yaralanmaların ciddiyetini ölçmek ve tedavi veya tahliye hakkında klinik değerlendirmeler sağlamak için saha personeli ile sahada etkileşim kurmasını sağladı.

TELETIP'IN ETİK, HUKUKSAL VE YASAL BOYUTLARI NELERDİR?

- Türkiye'de Telesağlık uygulamalarını doğrudan yasaklayan bir hukuk kuralı bulunmadığından, söz konusu uygulamanın tıbbi standartları ve etik ilkeleri çerçevelendiği takdirde hukuki engel teşkil etmesini ya da sigorta kapsamında sayılmasının önünde hukuken bir engel bulunmadığı tıp otoritelerince düşünülmektedir.

10 Şubat 2022 tarihinde resmi gazetede uzaktan sağlık hizmeti ile ilgili yönetmelik yayınlanmıştır. Yine 13 Mayıs 2022 tarihinde sağlık bakanlığı resmi sitesinde uzaktan sağlık hizmeti ile ilgili kılavuz yayınlanmıştır.

TELETIP UYGULAMASININ ÖNÜNDEKİ ENGELLER

- Gizlilik
- Karmaşıklık
- Yanlış teşhis
- Kontrollü maddeler
- Sahtecilik-dolandırıcılık-kötüye kullanım
- Tıbbi sorumluluk
- Veri doğruluğu
- Hasta mahremiyeti

TELETIP EKSİKLİKLERİ

- En belirgin ve hastalar için endişe yaratmaya devam eden eksiklik, teletıp sistemine geçişin doktorlara yüz yüze ziyaretleri zorlaştırabilmesidir.

- Genellikle teknolojiyi kullanmaya pek alışkın olmayan yaşlı insanlar, teletıp hizmetlerinden yararlanma konusunda güvensiz ve isteksiz olabilirler.

- Teletıp hiçbir zaman kliniklere, ameliyathanelere ve acil servislere yapılan yüz yüze ziyaretlerin yerini tamamen almayacaktır.

- Doktorların hastaların hangi sorunlardan muzdarip olduğunu görmeleri için her zaman fizik muayeneye ihtiyaç olacaktır.

TELETIP'IN AVANTAJLARI NELERDİR?

- Teletıp, hasta ve doktorların, yeterince güvenilir bir internet bağlantısına erişimleri olduğu sürece, nerede olurlarsa olsunlar, birbirleriyle konuşma-görüşmelerine olanak sağlar
- Hekime kolay, rahat, hızlı, ucuz ulaşmanın yanında
- Gereksiz başvuruların azalması
- Elektronik verilerin toplanması, aktarılması,
- Kronik hastaların izleminin takibinin daha iyi olması

Hayat, Zaman + Para Tasarrufu... Günümüzün Uydu Sağlık Araçları Sayesinde

Vital fonk. izleme

Ultrason taraması

- HIV testi
- Hamilelik testi
- Aşılar ve temel kontroller
- Bebeğin izlenmesi
- Doğal doğum

TELETIP FAYDALARI

- Teletıpın en önemli faydalarından biri, hastaların kendilerini kötü hissettiklerinde veya bir şeylerin yanlış olduğundan şüphelendikleri zaman bir doktordan bilgi almasını çok daha az karmaşık hale getirmesidir.

- Doktorun ameliyathanesine yüz yüze gitme düşüncesi bazı hastalar için oldukça caydırıcı olabilir, ancak teletıp ile check-in yapmak ve sorunu evden tartışmak kolaydır.

HEM SAĞLIK PROFESYONELLERİ HEM DE HASTALAR ONU KULLANMAYA ALIŞTIKÇA TELETIP'IN KALICI OLMASI MUHTEMEL GÖRÜNÜYOR

- Teletıp aslında hayatımızın birçok alanında ciddi kolaylıklar sağladı, kullanımı gittikçe artmakta
- Videokonferans, görüntülü görüşmeler (Skype, zoom, teams…)

Teletıp'ın gelecekteki önemi

- kalp atış hızı monitörleri,
- akıllı saatler ve bileklikler,
- fitness giyilebilir cihazları…… sağlık verilerini gerçek zamanlı olarak izler ve görüntüler.

Cep telefonları bile rutin olarak kendi teletıp uygulamalarını içerir ve

kullanıcıların günlük adım sayılarını takip eder.

Bu tür cihazların – dizüstü bilgisayarlar ve tabletlerin yanı sıra – bu kadar yaygın kullanımıyla,

hastaların uzaktan teletıp tıbbi hizmetlerine erişimi bugün hiç olmadığı kadar kolay.

Önümüzdeki birkaç yıl içinde daha da artacak gibi görünüyor.

Teletıp'ın gelecekteki önemi

- Teknolojik alt yapıların gelişmesi,
- Halk ve sağlık çalışanları tarafından teletıp kültürünün oluşması,
- Hukuksal ve tıbbi etik gibi konuların yerleşmesi ile birlikte tüm dünyada yaygınlaşacağı düşüncesindeyiz.
- Türkiye de önümüzdeki 10 yıl içerisinde özel sektörün yanında aile hekimleri, devlete bağlı hastanelerde uzaktan sağlık hizmeti yaygın olarak kullanılacak bir çok kronik hasta takip, tedavi ve izlemi yanı sıra acil durumların uzaktan yönetimi gerçekleşecektir.

Acil teletıpın ekonomik etkisi

1990'ların sonunda, tek başına kolaylıktan ziyade, acil teletıpın ekonomik etkisi hakkında

ilk argümanlar ortaya çıkmaya başlamıştı.

Hong Kong'dan 1997 tarihli bir makale, transfer sırasında meydana gelen olumsuz olaylarda

bir azalmanın yanı sıra gereksiz transferlerde önemli bir azalma buldu.

Aynı yıl Avusturya'da yapılan bir başka çalışma, BT taramaları için teleradyolojinin,

fiziksel taramaları taksiyle transfer etmekten daha pahalı olmasına rağmen, hastayı transfer etmekten çok daha hızlı ve çok daha ucuz olduğu sonucuna vardı.

Artan ER maliyetleri, ABD'nin teletıp alanına ilgisini artırıyor

2000'li yılların sonlarından itibaren mobil telekom kalitesindeki büyümenin hızlanması ve

maliyetlerdeki keskin düşüşler, acil teletıp konusunu yoğunlaştırdı. Ayrıca, yaşlanan nüfus nedeniyle acil servisler üzerinde artan demografik baskı ve acil servis personeli eksiklikleri bunu daha da güçlendirdi.

ER rakamları, ABD'de acil teletıp vakasını yapmak için kullanıldı.

Her yıl 130 milyon insan acil servisleri ziyaret ediyor, 1995'teki 97 milyondan yüzde 36 arttı.

Buna rağmen, ABD'deki acil servislerin sayısı dönem içinde yüzde 11 azaldı.

Önde gelen bir sağlık hizmeti sağlayıcısı olan Cardinal Health, bir acil servis ziyareti

için 922 ABD Doları ile karşılaştırıldığında bir telesağlık ziyaretinin ortalama maliyetinin 40-50 ABD Doları olduğunu ve teletıpın 5 ER ziyaretinden yaklaşık 1'ini ortadan kaldırabileceğini tahmin ediyor.

keşfedilenlerin üçte ikisinin acil olmadığı keşfedildi.

Cardinal Health ayrıca, acil servis ziyaretlerinin %20'sinin benzer koşullar için takip bakımı gerektirdiğini, telesağlık ziyaretlerinin yalnızca %6'sının gerektirdiğini belirtiyor.

Bu, daha önce bahsedilen Wembley Community Hospital MATS çalışmasının 1996 yılındaki bulgularının ruhunu yansıtmaktadır.

BEKLEME SÜRELERİ VE DEMOGRAFİK BASKILAR

Acil tıbbi bakımla ilgili sorunlar İngiltere'de de benzerdir.

A&E bekleme süreleri, birçok Ulusal Sağlık Hizmeti (NHS) biriminin ulusal düzeyde kabul ve taburculuk için dört saatlik

bir standardı karşılamaması nedeniyle son yıllarda önemli ölçüde artmıştır.

A&E'ye giden insan sayısı da önemli ölçüde arttı.

2016/17'de A&E departmanlarında 23.4 milyon katılım vardı - her gün ortalama 63.000 katılım eşdeğeri ve 2011/12'den beri bu her yıl yüzde 1,7 artıyor - ya da her gün fazladan 5.100'e eşdeğer.

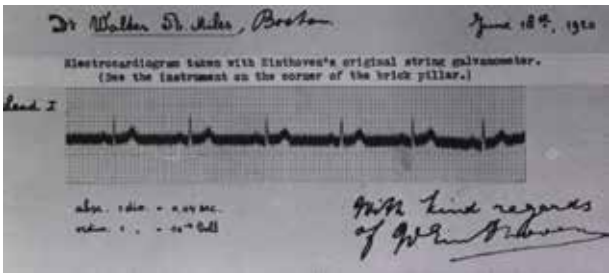
ACİL SERVİSTE DİJİTAL EKG KULLANIMI VE ÖRNEKLERİ

Prof. Dr. Mehmet GÜL
Aksaray Üniversitesi Tıp Fakültesi

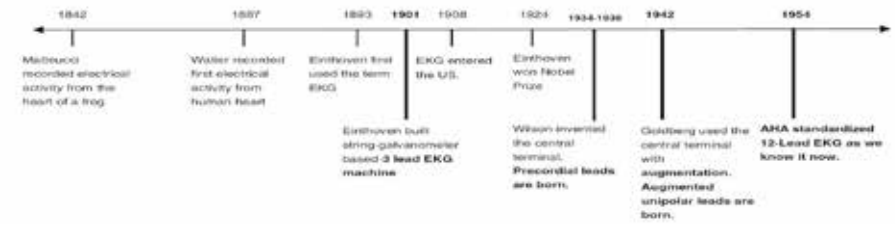
ELEKTROKARDIYOGRAFI TARIHI

İLK EKG KAYDINI

1895 yılında Hollanda'lı fizyolog Willem **Einthoven** (1860-1927) yapmıştır.



Einthoven'in **yay galvanometresi** *ile kaydedilen EKG örneği.*



ACIL SERVISTE ELEKTROKARDIYOGRAFININ ÖNEMI;

İlk değerlendirme
Aritmileri tespit etme
İskemik kalp hastalığını belirleme
Non-invaziv ve kolay bir uygulama
Uygun maliyetli bir tetkik
Birinci basamak tanı aracı

GELENEKSEL EKG KULLANIMININ DEZAVANTAJLARI

EKG çoğunlukla kağıt üzerinde veya sözlü olarak isteniyor.
EKG Teknisyeni hasta bilgilerini EKG cihazına manuel olarak giriş yapıp çekim alır.
Manuel giriş kağıt transferlerinde hata ve gecikmeye yol açabiliyor.
Tam hasta bilgisi içermeyen EKG verileri oluşuyor (eksik yaş ve cinsiyet ve isim…)
EKG kaydedilir ve değerlendirmek için kağıt bize ulaşır.
Hastanın önceki EKG verilerine erişim olmadığından doğru tanı koymak zorlaşıyor.
Kurumun kazanç kaybı (EKG genellikle order edilmiyor)
Termal kağıt maliyeti (artan maliyetler ile iyice yükseldi)
Arşive ulaşmak zor.
Çoğu tekrarlayan EKG'lerle karşı karşıya kalıyor ve bunlarla uğraşmak zaman kaybı

DIJITAL, DIJITALLEŞME, VE DIJITAL DÖNÜŞÜM

DİJİTAL DÖNÜŞÜMÜ TAMAMLANMIŞ EKG KULLANIMININ AVANTAJLARI

Otomatikleştirilmiş iş akışı kullanıcının süreçle etkileşimini azaltır.
HBYS üstünden kayıt ve istek oluşturulan hasta bilgisi dijital olarak EKG Yönetim Sistemine gider
EKG Cihazı tek hareketle tüm hasta demografik bilgilerini indirir (HBYS'den).
EKG çekim işlemi yapılır ve veri dijital olarak EKG Yönetim Sistemine gider.
EKG Yönetim Sistemi üzerinden veya EKG verisini hastane içinde istediğimiz yerden (HBYS) kontrol edebiliriz
Hasta verisi HBYS ve EKG Yönetim merkezinde otomatik olarak depolanır, geçmiş verilerine erişmemiz kolaylaşır.
Hastanın teşhis / Tedavi süreci için zaman kazanılır.
Karar süreci hızlanır
Güvenli bir çekim sağlanır.
Kayıtlara her noktadan erişim sayesinde üretkenlik artar.
Gelişmiş tanısal araçları kullanmamıza olanak sağlanır.

GELİŞMİŞ TANISAL ARAÇLAR

ÖLÇÜM ARAÇLARI

- Büyütme-küçültme
- Ölçüm yapabilme
- PR, QRS, QT, RR or QTc intervalleri ölçümü
- Zemindeki ızgaraları gizle
- Ölçüm tablosu
- Filtre değiştirme
- Bireysel ayarları yapabilme
- Farklı dalga biçimlerini seçebilme

ARAŞTIRMA ARAÇLARI

- QT aralığını ölçmek gibi bir dalga formu içindeki bireysel kompleksler
- Öğretim destek dosyası: Araştırma ve öğretim amacıyla depolamak üzere belirli EKG›leri seçmenize olanak tanır
- Anonim veriler CT Data Guard, klinik çalışma ayrıntılarını yakalamaya ve EKG raporuna kaydetmeye yardımcı olur

Ölçüm Araçları

Kayıt üstünde yakınlaştırma

- Ölçümler için dijital cetvel
- Filtre ve kayma hızları değiştirebilme
- Farklı dalga formu şekillendirebilme imkanı

SERİ KARŞILAŞTIRMA

Son Çekilen EKG bir önceki ve en eski EKG verisinin karşılaştırılması

Hastanın EKG veri geçmişi üstünden çalışılması varsayımlarla ilerlemekten daha iyi

DIJITAL DÖNÜŞÜMÜN EKG VERISINDEKI ÖNEMI

Doğru teknolojiyle hasta bakımında daha iyi sonuçlar elde etme

Zamanın verimli kullanımı

Yanlış tanıdan kaçınma

Hasta bakım kalitesinde artma

Personelin verimli kullanılması

MAC 5-Acil Servis için temel özellikler

SMART ECG & AUTO ECG

Akılı EKG teknolojisi ile saniyeler içinde otomatik EKG verisini hazırlar ve onaya sunar.

Rhythm & Full Disclosure

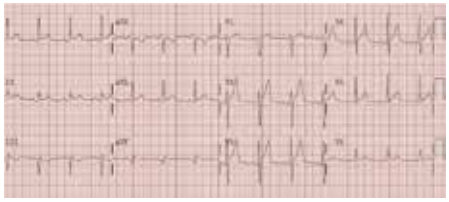
Full Disclosure kayıt **üstünden** seçilen alan için 10 saniyelik

12 Kanal veri yazdırılabilir.

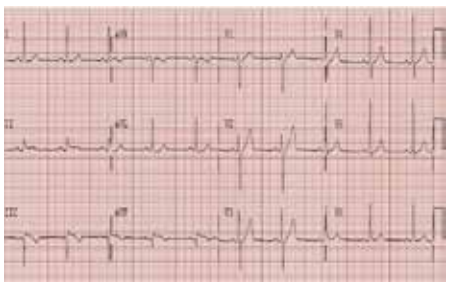
CRİTİCAL VALUES & MARQUETTE 12SL

Test esnasında yazılımın algıladığı Kritik durumları kullanıcıya anlık bildirir.

- 45 yaşında son 1 saattir olan tipik GA yakınması olan erkek hasta
- 6 ay önce inf MI sebebi ile RCA stent LAD ve sol ana koroner arterde yaygın hastalık tespit edilmiş. CABG kararı alınmış ama hasta opere olmamış.
- EKG'de prekordial derivasyonlarda ST elevasyonu ve T dalga sivriliği mevcut DIII resiprok?
- Hiperakut Ant. MI? Benign Erken Repolarizasyon?



- Eski EKG prekordial T sivriliği ve ST elevasyonu yok
- DIII'te Q dalgaları ve ST elevasyonu mevcut (Anevrizmatik ST elevasyonu)
- Hasta akut Ant. MI tanısı ile CABG operasyonuna alındı.



KÜNT TRAVMA BAĞLI AORT DİSEKSİYONU; BİR OLGU SUNUMU (BLUNT TRAUMA INDUCED AORTIC DISSECTION; A CASE REPORT)

Cuma Taşyürek[1], Emre BÜLBÜL[1]
1-Erciyes Üniversitesi Tıp Fakültesi Acil Tıp Ana Bilim Dalı

ÖZET

Multitravmalı hastalarda intrakranial kanamalardan sonraki en sık ölüm nedeni aort yaralanmalarıdır. Hastaların yaklaşık yarısı ilk saatler içerisinde kaybedilir(1). Bu olgu sunumunda 21 yaşında bir erkek hastanın araç içi trafik kazası sonucu gelişen aort diseksiyonunu sunmayı amaçladık.

ANAHTAR KELİMELER: aort diseksiyonu, künt travma, hemorajik şok

ABSTRACT

Aortic injuries are the most common cause of death in multitrauma patients after intracranial hemorrhages. Approximately half of the patients die within the first hours(1). In this case report, we aimed to present the aortic dissection of a 21-year-old male patient as a result of an in-vehicle traffic accident.

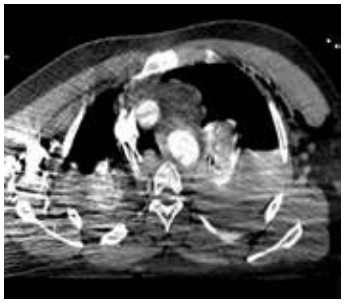
KEY WORDS: aortic dissection, blunt trauma, hemorrhagic shock

GİRİŞ

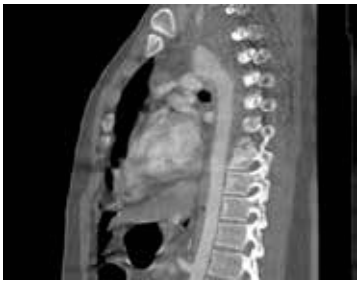
Multitravmalı hastalarda intrakranial kanamalardan sonraki en sık ölüm nedeni aort yaralanmalarıdır. Eşlik eden sistem travmaları morbidite ve mortaliteyi arttırır. Hastaların yaklaşık yarısı ilk saatler içerisinde kaybedilir(1). Aort diseksiyonu De bakey ve arkadaşları tarafından Tip 1,Tip 2 ve Tip 3 olarak sınıflandırılırken, Stanford sınıflamasına göre Tip A ve B olarak ikiye ayrılır(2,3). Stanford A sınıflandırmasında mortalite nispeten daha düşükken Stanford Tip B'de mortalite yaklaşık %60'ı bulmaktadır. Aort diseksiyonlarında cerrahi onarım yapılsa dahi mortalite yaklaşık %30'dur (4).

OLGU SUNUMU

Yirmi bir yaşında erkek hasta, acil servisimize araç içi trafik kazası olarak 112 ekipleri tarafından getirildi. Hastanın genel durumu kötü, oryantasyon ve kooperasyonu yok idi, Glaskow koma skalası:6 idi. Hastanın vital bulgularında tansiyonu 70/40 mmHg, nabzı 160 atım/dk, solunum sayısı 32/dk idi. Hasta hızlı seri entübe edildi. Hastanın fizik muayenesinde bilateral ışık refleksi var, pupiller izokorik görünümde idi. Yüz bölgesinde multiple milimetrik yüzeyel laserasyonlar vardı. Kalp tepe atımı pozitif olup taşikardi ti. Solunum sesleri solda daha belirgin olmak üzere azalmıştı, aynı zamanda sol hemitoraks bölgesinde palpasyonda, krepitasyon vardı. Ayrıca emniyet kemeri ile uyumlu ekimoz mevcuttu. Hastanın batın ve ekstremite muayenesinde herhangi bir patolojik bulgu yoktu. Hastanın yatak başı çekilen akciğer grafisinde pnömotoraksı olması üzerine hastaya göğüs tüpü takıldı. Hastanın yakınlarından alınan anemneze göre özgeçmişinde herhangi bir hastalık yoktu. Hastanın laboratuvar sonuçlarında Hb:11.1 gr/dL, Hct:33.1 %, CK:1667 U/L, AST:170 U/L, ALT: 138 U/L, TROP: 261 ng/L idi. Hemorajik şokta olan hasta 4 ünite eritrosit süspansiyonu, 1 ünite Taze Donmuş Plazma, 1 Ünite Trombosit ve kristaloid sıvı verildi. Hastanın vitalleri toparladıktan sonra hasta kontrastlı bilgisayarlı tomografiye götürüldü. Hastanın çekilen PAN CT'sinde patolojik olarak Arkus aorta ve inen aort proksimalinde lümene uzanan intimal flep ile uyumlu olabilecek şüpheli lineer hipodens görünümler izlendi (Stanfort Tip A aort diseksiyonu). Her iki hemitoraksta apeksten bazale kadar devam eden en derin yerinde sağda 4,5 cm solda 1 cm derinliğe ulaşan plevral mayi ve komşuluğunda kompresif atelektatik dansite artımları izlendi. Her iki hemitoraksta solda belirgin olmak üzere pnömotoraks izlendi. Solda göğüs ön duvarında pektoral kas planları arasında yaygın serbest gaz dansiteleri ve sol göğüs ön duvarından sol hemitoraksa doğru uzanan torakostomi tüpüne ait görünüm izlendi(Resim 1-2). Hastaya künt travmaya bağlı aort diseksiyonu açısından Kalp ve Damar Cerrahisi konsültasyonu ve pnömotoraks ve hemotoraks nedeniyle Göğüs cerrahiye konsültasyonu istendi. Hasta Kalp Damar cerrahisi tarafından Endovasküler işem yapıldıktan sonra yoğun bakıma yatırıldı.



Resim -1



Resim 2

TARTIŞMA

Travmatik aort diseksiyonu tanısıalan hastaların büyük çoğunluğu hastaneye veya ameliyathaneye dahi ulaşamadan kaybedilir(3). Travmatik aort diseksiyonu tanısında en önemli faktör klinik şüphedir. Genellikle hastalarda pnömotoraks ve hemitoraks gibi ek yaralanmalar eşlik etmektedir. Tanı için acil servislerde altın standart yöntem kontrastlı tomografi çekilmesidir(4).Künt travma sonucu meydana gelen travmatik aort diseksiyonu mekanizmasının temelinde akselarasyon deselerasyon bulunulduğu düşünülmektedir(5). Nitekim bizim hastamızda da emniyet kemerine bağlı akselarasyon deselarasyon manevrasına bağlı aort diseksiyonu olduğunu düşünmekteyiz.

SONUÇ

Çoklu travmalarda hastaların tüm sistemleri açısından değerlendirilerek yaralıya en kısa zamanda ve en uygun müdahalenin yapılması önem arz etmektedir. Acil tıp uzmanları diğer branşlara göre sadece tek sistem yönünden değil multisistemik olarak değerlendirdiklerinden dolayı acil hastalara yaklaşımda önemli rol oynamaktadırlar. Özellikle tanı için yüksek klinik şüphe gerektiren hastalıklar da bu durum daha öne çıkmaktadır. Künt travmalarda, nadir görülen fakat mortalitesi yüksek olan travmatik aort diseksiyonu akılda tutulmalıdır.

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YAŞLARA GÖRE KARDİYAK ACİLLER VE YAKLAŞIMLAR

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Afyonkarahisar Sağlık Bilimleri Üniversitesi Tıp Fakültesi Acil Tıp AD.

Çocuklarda kardiyak aciller ve yaklaşımlar

Pediyatrik kardiyak hastalık semptomları: Taşikardi, soluk, soğuk ekstremiteler, azalmış kapiller dolum zamanı, zayıf distal nabızlar gibi şok bulguları, siyanoz, göğüs ağrısı, senkop, disritmiler, letarji, zayıf beslenme, büyüme geriliği, solunum güçlüğü, hışıltılı solunum, apne olarak sayılabilir. Bu semptomlardan bazıları aşağıda açıklanmıştır:

Santral siyanoz: Kardiyak, pulmoner, hematolojik, toksik nedenlere bağlı olarak görülen, dudak, dil, mukozaların saiyanozuyla karekterize durumdur. Kardiyak nedenli ise bebek rahat mavi görünümdedir, ağlamakla kötüleşir, oksijen tedavisine cevap vermez

Göğüs ağrısı: Çocuk yaş grubunda genellikle kas-iskelet sistemi, astım atak, pnömoni, plörezi, gastrit, GÖR gibi kardiyak nedenler dışındaki nedenlerden kaynaklıdır. Ancak prekordiyal yakalama sendromu (Texidor's twinge), pulmoner emboli, AKS, aort diseksiyonu gibi ölümcül nedenler de göğüs ağrısı şikayetine neden olabilir. Hastada, ilaç kötüye kullanımı, gebelik, OK kullanımı kollajen doku hastalığı ve ailede ani kardiyak ölüm gibi risk faktörleri varsa altta yatabilecek ölümcül göğüs ağrısı nedenleri araştırılmalıdır.

Pediyatrik kardiyak hastalıklarda hikaye: Anamnez alırken şu soruların sorulması ve cevabının alınması gereklidir. Kardiyak hastalığı var mı, arsa atak geçirdi mi, evde oksijen kullanıyor mu, önceki $SatO_2$ düzeyi nasıl, O_2 ihtiyacında artış oldu mu, kullandığı ilaçlar, ilaç değişikliği oldu mu, digoksin kullanıyor mu, kullanıyorsa ilaç seviyesi ölçüldül mü, beslenme sırasında terleme durumu nasıl, beslenmesine sık ara veriyor mu, uzun sürüyor mu, büyüme– gelişmesi nasıl, sık solunum yolu enfeksiyonu geçiriyor mu, uyuşturucu, illegal ilaç kullanımı var mı, önceki testleri, tetkikleri, geçirdiği cerrahi, invaziv işlemler, ailede ani ölüm var mı?

Pediyatrik kardiyak hastalıklarda fizik muayene: Vital bulgular değerlendirilmelidir. Özellikle tüm periferik nabızlar, uygun manşon ile 4 ekstremiteden kan basıncı değerlendirilir. Tam sistemik muayene yapılmalıdır. Uyanıklılık, çevreyle etkileşim, solunumun sistemi, yardımcı solunum kaslarının kullanımı, perfüzyon, kardiyovasküler sistem ayrıntılı muayene edilmelidir. Pediatrik vital bulguların aşağıdaki tablolarda verildiği üzere kendi yaş grubuna göre değerlendirilmesi önemlidir.

Yaş grubu	Ortalama kalp hızı (atım/dk)	Solunum sayısı (solunum/dk)
0- 12 ay	140	40
1-4 yaş	120	30
4-12 yaş	100	20
> 12 yaş	80	25
Yaş grubu	Psis (Kabuledilebilir en az) mmHg	
0- 1 ay	60	
1-12 ay	70	
1-10 yaş	(Yaşx2) + 70 mmHg	
> 10 yaş	90	

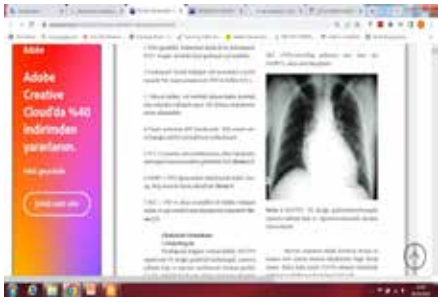
Pediyatrik kardiyak değerlendirme: Diyastolik üfürümler, 3/6 dereceden daha yüksek, sürekli veya tril ile ilişkili sistolik üfürümler, anormal kalp sesleri (klik, sürtünme, gallop) ile ilişkili üfürümler, siyanoz veya solunum sıkıntısı varlığı, sıçrayıcı veya zayıf atım, EKG anormallikleri, göğüs radyografisinde anormal kardiyak siluet, anormal pulmoner vaskülarite veya kardiyomegali ile birlikte olan üfürümler patolojik üfürüm olarak değerlendirilir.

Sistolik üfürüm nedenleri:

- Sol üst sternal sınır: Masum, pulmoner kapak stenozu, ASD, PDA
- Sol alt sternal sınır: Masum, VSD, endokardiyal yastık defekti, fallot, hipertrofik KMP
- Apeks: Masum, mitral yemezlik, aort stenozu, hipertrofik KMP
- Sağ üst sternal sınır: Aort stenozu, aort koarktasyonu
  - S3 (gürültülü): KKY, VSD
  - S4: Hipertrofik ventrikül

Pediyatrik kardiyak hastalıklarda tanısal testler:

- Hiperoksi testi: Oda havasında ve %100 O_2 soluyan (10-15 dk sonra) hastanın sağ radiyal arterinden kan gazı alınır. PaO2> 250mmHg (testi geçti) ise sağdan sola şantlı KKH dışlanır. PaO2<100 mmHg (test negatif) ise sağdan sola şantlı KKH olasılığı yüksek demektir. %100 O_2'nin uzun süre verilmesi sol kalp tıkanıklığı veya pulmoner dilatasyonu olan çocuklarda ductus artriousus kapanmasına ve kliniğin kötüleşmesine sebep olabilir. Şüpheli infantlarda başlangıçta O2 verilmemesi önerilir.
- Kan gazı: genellikle PaO_2 düşüktür ve akut dekompanse hastalarda respirauar asidoz görülebilir.
- Hemogram: Siyanotik KKH'da polisitemi, anemiye sekonder KKY tespit edilebilir.
- Biyokimya: Elektrolit bozuklukları, asidoz
- Kardiyak enzimler: Kardiyak troponin T ve I miyokardiyal hasara karşı duyarlı ve özgüldür. 3 aydan küçüklerde referans değerler biraz daha yüksek olabilir.
- BNP
- EKG: Yenidoğanda sağ aks saptanır. PR, QT aralığı ve QRS süresi yaşla birlikte uzar, aks normale döner.
- EKO
- Kardiyak kateterizasyon
- Akciğer grafisi:



Yumurta şeklinde kalp
Büyük arter transpozisyonu

Kardan adam/ sekiz işareti
Total anormal pulmoner venöz dönüş anomalisi

KONJENİTAL KALP HASTALIKLARI (KKH):

Yaşamın ilk günlerinde asemptomatik olabilir. Siyanotik KKH d. arteriosusun kapanmasıyla (0-2 hafta) birlikte siyanoz ve şok gibi bulgularla ortaya çıkar. Siyanotik olmayan KKH tıkanıklıkla seyreden ve soldan sağa şantla seyredenler olarak 2 gruba ayrılır.

Siyanotik KKH (0-2 hft): Büyük arter transpozisyonu, Total anormal pulmoner venöz dönüş, Triküspit atrezesi, Trunkus arteriosus, Fallot tetralojisi (0-12hft), Ebstein anomalisi, Pulmoner atrezi, Pulmoner stenoz, Hipoplastik sağ kalp sendromu, Hipoplastik sol kalp sendromu

Şokla seyreden KKH (ilk haftadan itibaren): Aort koarktasyonu, Aort stenozu

KKY ile seyreden KKH (4 haftadan itibaren): VSD, PDA,

Eisenmenger sendromu: Düzeltilmemiş büyük defektli, soldan sağa şantlı hastalıklarda pulmoner vasküler direncin sistemik vasküler dirençten daha yüksek seyretmesi sonucu şant tersine döner. Hastada siyanoz, göğüs ağrısı, efor dispnesi, hemoptizi gibi semptom ve bulgular gelişir.

Aort koarktasyonu: Üst ekstremitede Ps yüksektir (sağ kol Ps alt ekstremite Ps'den 15-20 mmHg daha yüksek ve -sol kol Ps'den de daha yüksek, preduktal ise). d.arteriosus kapanırsa şok bulguları görülebilir. Tanı gecikirse komplikasyonları son organ hasarlı HT

Spell: Fallot tetralojisinin komplikasyonudur. 2-4 ayda sık görülür. Ağlama, defakasyon gibi sistemik vasküler direncin aniden düştüğü durumlarda gelişen hipotansiyon, taşikardi şantın tersine dönmesine neden olur. Asidoz, hipoksi, hiperkarbi, hiperpne, uzayan ağlama atakları, siyanozun derinleşmesi, SVO ve ölüme uzanan semptom ve bulgular görülür. Tedavisinde diz-göğüs pozisyonu verilmesi, O_2, morfin (0,1 ila 0,2 mg/kg IV veya IM), midazolam (0,2- 0,3 mg/kg/doz intranazal), sodyum bikarbonat (metabolik asidoz varsa, 1 mEq/kg IV), ketamin (1-2 mg/kg IV veya 3-5 mg/kg IM)

RSV enfeksiyonları: KKH olan çocukların daha çok Yoğun bakım ve mekanik ventilasyon ihtiyacı olur, mortalitesi daha yüksektir.

Konjenital Kalp Hastalıklarının Yönetimi: ABCD değerlendirme ve destekleme, gerekliyse TYD, İKYD. Şok yönetimi. Siyanotik KKH yönetimi: Ductus arteriosus açıklığının sağlanması (Prostaglandin E1 0.05 - 0.1 µg/kg/dk), entübe hastalarda pozitif basınçlı ventilasyon dikkatli yapılmalı, sedasyonda ketamin ve rocuronyum tercih edilebilir.

PEDİYATRİK KONJESTİF KALP YETMEZLİĞİ (KKY):

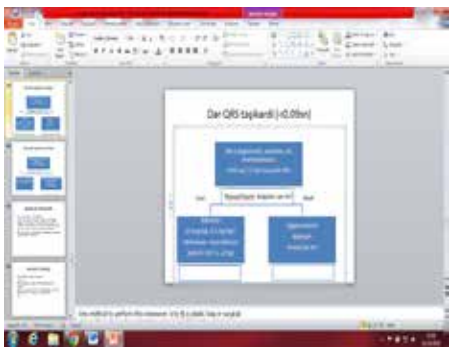
En sık neden KKH'dır. Miyokardit, endokardit, romatizmal kalp hastalığı, perikardiyal effüzyon, anemi, kardiyomiyopatiler, sistemik hipertansiyon, hipotiroidizm, hipertiroidizm, elektrolit dengesizlikleri, endokrin bozukluklar, kardiyak toksinler, kardiyak debiyi bozan aritmiler diğer KKY nedenleridir. Taşikardi, gallop ritim, takipne, ral, hepatomegali, periferik ödem, ekstremitelerde perfüzyon bozukluğu, hışıltılı solunum, uzun süreli öksürük gibi semtom ve bulgular görülebilir. Tanısında akciğer grafisi, EKO,BNP kullanılır. Tedavide ABCD değerlendir, gerekirse desteklenir, baş elevasyonu, oturur pozisyona getirme, O_2, CPAP, BİPAP, entübasyon, mekanik ventilasyon gibi solunum destekleri, Furosemide (0.5 - 1 mg/kg), Norepinefrin (0.1-2.0 µg/kg/dk), dopamin (5-10 µg/kg/dk), Nitrogliserin! (0.1-0.5 µg/kg/dk), nesiritid (0.01-0.03 µg/kg/dk gibi hastanın klinik durumuna uygun tedavi seçilir. Altta yatan hastalığın tedavisi esastır.

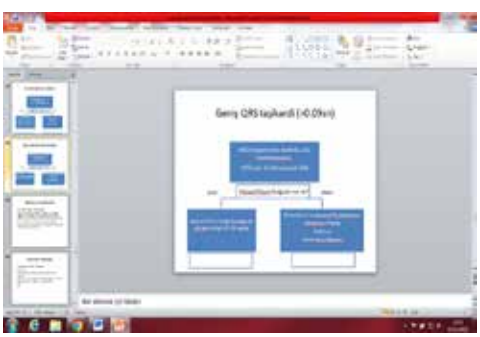
PEDİYATRİK DİSRİTMİLER

En sık görülen ritim bozukluğu çoğunlukla spontan gelişen supraventriküler taşikardi (SVT)' dir. Ventriküler fibrilasyon (VF) yetişkinlerde olduğu gibi miyokardiyal hasar ile ilişkilidir. Disritmi nedenleri, KKH, konjenital AV tam blok (SLE'li anne), miyokardit, romatizmal kalp hastalığı, kawasaki hastalığı, KMP, uzun QT sendromu, WPW, elektrolit bozuklukları, hipotermi, hipoksi olarak sıralanabilir. Huzursuzluk, uyuşukluk, yetersiz beslenme, solgunluk, solunum sıkıntısı, kardiyojenik şok, göğüs ağrısı, çarpıntı, dispne, senkop gibi semptomlar ve bulgular klinik tabloyu oluşturur.

BRADİKARDİ: Kalp hızının kendi yaş grubuna ait hız sınırlarının altında olmasıdır. Nedenleri: Hipoksi, hipotermi, KİBA, AV bloklar, kalp cerrahisi sonrası, hipotroidi, hasta sinüs send, ilaçlar, toksinlerdir. Hipotansiyon, değişen mental durum, şok bulguları kötü perfüzyon bulgularını oluşturur. Tedavisinde ABCD değerlendirilir, gerekliyse desteklenir. Vital bulgular monitorize edilir. IV/IO yol açılır. Mümkünse 12 derivasyonlu EKG çekilir. Hemodinami stabil ise uzman desteğine başvurulur ve hasta sürekli takip edilir.Nb < 60atım/dk ve ciddi hemodinamik anstabilite, solunum desteklendiği halde bile düzelmiyorsa TYD, İKYD uygulanır. Solunum desteği ile birlikte hemodinamisi toparlanan ancak bradikardisi devam eden hastalarda adrenalin (0.01 mg/kg (1:10000 -0.1 mL/kg) 3-5 dk arayla), vagal kaynaklı bradikardi mevcutsa ise atropin (0,02mg/kg) uygulanır. 4H4T aranır ve varsa düzeltilir. Senkop, near-senkop, kötü perfüzyon bulgulu mobitz tip 2 AV blok, AV tam blok, hasta sinüs sendromu bulunan hastalar pace endikasyonu nedeniyle kardiyaoloji kliniği ile konsulte edilmelidir.

DAR QRS'Lİ TAŞİKARDİ: Sinüs taşikardisi, altta yatan hastalığın tedavi edilmesiyle düzelir. SVT spontan oluşur, genelde kardiyak anormallik saptanmaz. AVNRT gibi disritmiler SVT nedenidir. Nabız genellikle 180 atım/dk (infantta > 220 atım/dk) üzerindedir. Tedavide; ABCD değerlendirilir, gerekliyse desteklenir. Vital bulgular monitorize edilir. IV/IO yol açılır. Mümkünse 12 derivasyonlu EKG çekilir. Dar ve geniş QRS'li taşikardi algoritmaları aşağıda verilmiştir.





BAKTERİYEL ENDOKARDİT

VSD, AS, Fallot, prostetik kapak gibi hastalıklar bakteriyel endokardit oluşumu için risk faktöleridir. Ateş (nedeni bilinmeyen), taşikardi, yeni başlayan, değişken üfürüm, peteşi, diş çürüğü, HSPM, KKY, splinter hemoraji, roth spot, osler nodülleri, miyalji klinik tabloyu oluşturur.Tanıda CRP, Sedimentasyon yüksekliği görülür. 3 kan kültürünün kurallara uygun şekilde alınması gerekir. Akciğer grafisi, EKG, EKO tanıda ve ayırıcı tanıda kullanılır. Tedavide kültür sonrası antibiyotiğin (aminglikozid ve penisilinaz dirençli penisilin, vankomisin) hızlı başlanması önemlidir.

KAWASAKİ HASTALIĞI

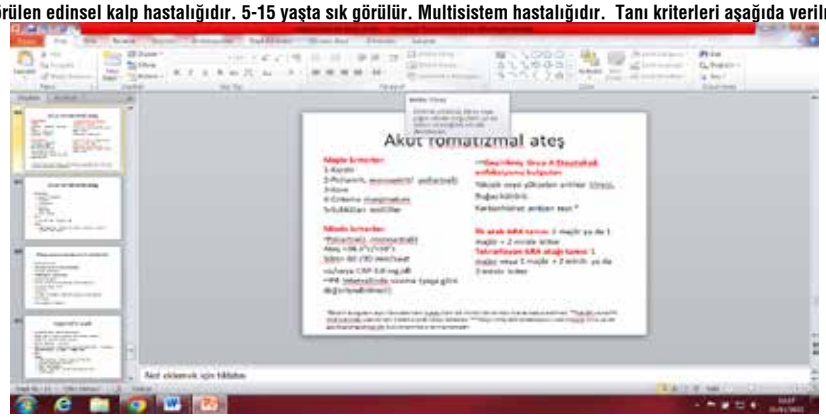
Ateş, eksantem, vaskülit ile seyreder. <5 yaş sıktır. Tedavi edilmeyen çocukların %20'sinde koroner arter anomalisi gelişebilir. Erken tanı, yüksek doz aspirin (30-50mg/kg/gün) ve IVIG (2 g/kg) başlanması morbidite ve mortaliteyi azaltır.

KAWASAKİ HASTALIĞININ KLİNİK KRİTERLERİ:

- En az 5 gün devam eden ateş
- Beş klinik bulgudan en az dört tanesinin bulunması
- Ekstremite değişiklikleri (el/ayaklarda görülen eritem/ödem veya el/ayak parmaklarında soyulma)
- Polimorf ekzantem
- Eksüda olmaksızın bulbar konjunktivit
- Ağız boşluğu ve dudak değişiklikleri (eritem, dudakta çatlak, çilek dili, yaygın orofarenkste mukozal tutulum)
- Servikal lenfadenopati (> 1.5 cm çaplı)
- Benzer bulgulara sahip hastalıkların dışlanması
- Kawasaki hastalığının inkomplet formları için Amerikan Kalp Birliği laboratuvar kriterleri
- Ateşin ≥ 5 gün sürdüğü ve en az 2 klinik Kawasaki hastalığı klinik kriteri olan
- veya Ateşin ≥ 7 gün sürdüğü ve ateşin başka sebeple açıklanamadığı hastalarda C-reaktif protein ≥ 30 mg/L ve/veya eritrosit sedimentasyon hızı ≥ 40 mm/saat iken;
- Aşağıda yazılı kriterlerin en az 3'ünün karşılanması
- Anemi (yaşa göre)
- Ateşin 7. günü sonrası trombosit değerinin ≥ 450.000 olması
- Albumin ≤ 3 g/dL
- ALT yüksekliği
- Wbc ≥ 15.000/mm3 olması
- İdrarda her alanda ≥ 10 lökosit saptanması

AKUT ROMATİZMAL ATEŞ

Sık görülen edinsel kalp hastalığıdır. 5-15 yaşta sık görülür. Multisistem hastalığıdır. Tanı kriterleri aşağıda verilmiştir:



Ayırıcı tanıda bakteriyel endokardit, miyokardit, Lyme hastalığı, SLE, JRA, septik artrit, Serum hastalığı düşünülmelidir. Tanıda EKG, CRP, SDM, Akciğer grafisi, EKO kullanılır. Tedavi: ABCD değerlendirilir, gerekliyse desteklenir, KKY tedavisi, antibiyotik, analjezik, istirahat, uzman görüşü

GENÇ SPORCULARDA ÖLÜM NEDENLERİ

Hipertrofik KMP, Konjenital koroner arter anomalileri, Uzun QT sendromu, Preeksitasyon sendromları, Commotio cordis, Marfan sendromuna sekonder aort diseksiyonu, İdiyopatik dilate KMP, Miyokardit, Kawasaki hastalığına sekonder koroner arter hastalığı, Aort darlığı, Mitral kapak prolapsusu

HİPERTROFİK KMP

İntraventriküler septum kalınlaşması mevcuttur. Göğüs ağrısı, dispne, senkop, near-senkop, çarpıntı gibi semptom ve bulgular klinik tabloyu oluşturur. Ailede ani kardiyak arrest öyküsü sorgulanmalıdır. Muayenede sistolik ejeksiyon üfürümü saptanır. EKG'de sol ventrikül hipertrofisi, sol atriyal genişleme, inferlateral derivasyonlarda Q, yaygın T negatiflikleri tespit edilir. EKO ile tanınır. Tedavi: ABCD değerlendirilir, gerekliyse desteklenir, gerekliyse TYD, İKYD uygulanır. Taşikardi kontrolünde beta bloker tercih edilir. Volüm açığını engellenir. Digoksin, vazodilatör ve yüksek doz diüretikten kaçınılmalıdır. Uzman görüşü gerekir.

COMMOTİO CORDİS

Kalbin yüksek enerjili travmaya maruz kalması sonucu oluşur. 5-15 yaşta sıktır. VF gelişir. Hızlı defibrilasyon, TYD, İKYD hayat kurtarır.

KAYNAKLAR

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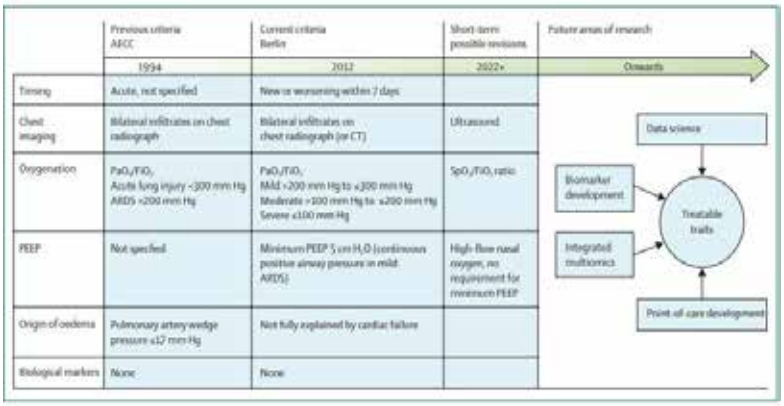
AKUT RESPİRATUAR DİSTRESS SENDROMU VENTİLASYONDESTEĞİVEGÜNCELTEDAVİLER

Doç. Dr. Y. Kemal GÜNAYDIN

TANIM: Çeşitlinedenlerileherikiakciğerdeayrıandagelişenakuthipoksemiksolunum yetmezliği ile karakterize bir sendromdur.

ARDS tanısında Berlin Kriterleri	
Zamanlama	1 hafta içinde ortaya çıkan yeni veya kötüleşen solunum sıkıntısı
Akciğer Görüntülemesi	Efüzyon, kollabs veya nodül ile açıklanamayan bilateral opasite
Ödem kaynağı	Solunum sıkıntısının kalp yetmezliği veya hipervolemiye bağlı olmadığının EKO gibi objektif ölçütlerle gösterilmesi
Oksijenizasyon	
• Hafif	200mmHg< PaO_2/F_iO_2<300mmHg + PEEP veya CPAP≥5cmH_2O
• Orta	100mmHg< PaO_2/F_iO_2<200mmHg + PEEP≥5cm H_2O
• Ağır	PaO_2/F_iO_2≤100mmHg + PEEP≥5cm H_2O

Kısaltmalar: PaO_2: Arteryal parsiyel oksijen basıncı, F_iO_2: İnspiryum havasındaki fraksiyone O_2
CPAP: Continuous positive airway pressure PEEP: Positive end-expiratory pressure



TEDAVİ:

1. Oksijen
2. Yakıntakipvemonitörizasyon,kanşekeritakibi
3. Pronepozisyon
4. MekanikVentilasyon
5. SedasyonveNöromuskulerblokaj
6. Steroidlervediğermedikasyonlar
7. Sıvıvebeslenme
8. Hastanekaynaklıpnömonilerinönlenmesi
9. DVTileGİShemorajiprofilaksisi

PRONEPOZİSYON:

- Oksijenasyonuiyileştirir,V/Puyumununartışı
- Alveolarödemiazaltır
- Homojenhavalanmasınısağlar-PosteriorAChavalanması
- Erkenpronepozisyon–32saatiçinde
- Enaz 16 saat
- Ventilatörkaynaklıakciğerhasarınıvemortaliteyiazaltır.
- UyanıkpronepozisyonveHFNCentübasyonoranını%6oranında azaltmıştır.
- Endotrakealtüptıkanıklığı,basıyaralarıvevenözerişimkaybı

MEKANİKVENTİLASYON:

ARDS hastalarındakötü prognozun en önemli sebeplerinden birisi ventilatör ilişkili akciğer hasarıdır.

DOĞRUSTRATEJİ-LUNGSAFE

- Düşüktidalvolüm(akciğerkoruyucuventilasyon)5-8ml/kg
- YüksekPEEP
- Platobasıncı<30mmHg
- Permissivehiperkapni(Frekansarttırılır)F:20–30/dk
- SedasyonveNMB
- Pronepozisyon
- Recruitmentmanevrası–OpenLung
- İ/E: 1/1yada2/1

KLAVUZLARINTEDAVİ ÖNERİLERİ:

ÖZET:

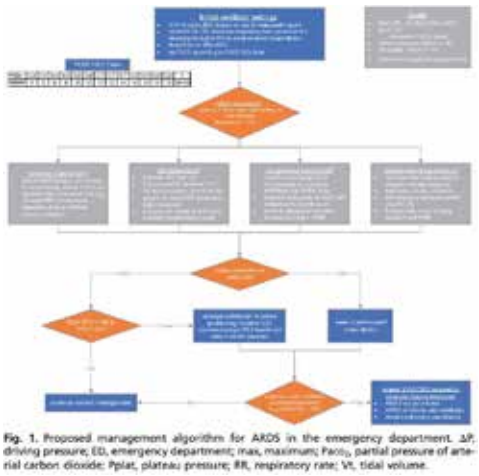


Fig. 1. Proposed management algorithm for ARDS in the emergency department. ΔP, driving pressure; ED, emergency department; max, maximum; $Paco_2$, partial pressure of arterial carbon dioxide; Pplat, plateau pressure; RR, respiratory rate; Vt, tidal volume.

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AFETLERDE ACİL TRANSPORT SİSTEMLERİ, HASTANE İÇİNDE ACİL SERVİSTEN VE ACİL SERVİSE TAHLİYE

Dr Öğretim üyesi Hülya SEVİL
Afyonkarahisar Sağlık Bilimleri Üniversitesi, Acil Tıp Ana Bilim Dalı

İÇERİK:

- Afet ve Tahliye Tanımları
- Afetlerde Tahliye ve Tahliyenin Yönetimi
  - Afet Tahliye Planı
  - Afet Tahliye Basamakları
- T.C. Sağlık Bakanlığı'nın hazırladığı Olaya Özel Plan Örneği: Hastanede Tahliye Gerektiren Durumlar

AFET TANIMI

"İnsanlar için fiziksel, sosyal ve ekonomik kayıplara neden olan, normal yaşamı kesintiye uğratan veya durduran, toplumları etkileyen, yerel olanaklarla baş edilemeyen her türlü doğal, teknolojik veya insan kaynaklı tüm olaylar" genel olarak afet olarak tarif edilmektedir. (1, 2)

Afet, çoğu zaman bir olayın kendisi değil, neden açtığı sonuçlar olarak da tanımlanabilir.

TAHLİYE TANIMI

Tahliye genel olarak hızlı gelişen akut acil bir durum karşısında, maruz kalınan hasarı en aza indirmek ve yaşam kurtarmak için, insanları tehlikeli bir alandan geçici olarak güvenli alanlara, saatler veya haftalar süren kısa bir zaman çerçevesinde taşımaktır.(3) Tahliyenin gerçekleştirilme şekli, uygulayıcıların kabiliyetleri ölçüsünde değişmektedir.

AFETLERDE TAHLİYE VE TAHLİYENİN YÖNETİMİ

Zamanında, iyi hazırlanmış ve etkili bir **şekilde yöne**tilen ve uygulanan tahliye süreci, afet öncesi, esnası ve sonrasında afete maruz kalmış insanların hayatta kalması ve korunması açısından çok önemlidir. Tahliye planlaması sürecin en önemli kısmını oluşturmaktadır.

Özellikle geniş katılımcıların oluşturduğu kitle tahliyelerinde kapasite ve kaynakları etkin şekilde kullanabilmek, tahliyeyi güvenli ve zamanında yönetebilmek, barınma ve acil ihtiyaçları karşılayabilmek için katılımcılar ve kaynaklar arasında güvenli sağlam iş birliği, uyum, koordinasyon ve hareketin sağlandığı iyi bir hazırlık aşamasını içeren planlar yer almaktadır.(4)

AFETLERDE TAHLIYE VE TAHLIYENIN YÖNETIMI

- Afet Tahliye Planı
- Tahliye planlarının hukuki dayanağı
- Roller ve Sorumluluklar
- Afet Tahliye Basamakları
  - Olay öncesi hazırlık
  - Erken uyarı sistemi ve halkın bilgilendirilmesi
  - Tahliye kararı
  - Uyarı
  - Tahliye
  - Barınak
  - Kurtarma
  - Sürekli risk takibi ve iletişim
  - Koruma

AFET TAHLIYE PLANI

Tahliye planları, uygulama, sorumluluk, kaynak ve katılımcıların önceden tespit edildiği, böylelikle zamanında, uyumlu ve kolay, telaş ve panikten uzak bir tahliyenin gerçekleşmesini sağlayan yazılı kayıtlı belgelerdir. Tahliye planı hazırlanırken, uluslararası, ulusal kanunlara ve yerel protokollere uygun olmalı, yasal düzeyde yetkililer belirlenmeli, yönetim yapısı oluşturulmalı, tahliyede yer alan kurum ve kuruluşlar tanımlanmalı, katılımcıların rol ve sorumlulukları tanımlanmalı, katılımcılar arasında uyum, iş birliği ve iletişim sağlanmalı, etkin bir uyarı ve bilgi sistemi kurulmalı, tahliye için gerekli eylemler tespit edilmelidir.(4)

Tahliye planı yapılmadan önce dikkat edilmesi gereken hususlar, afet planı, bölgeye uygun ve esnek olmalıdır. Tahliye nedeni ve bölgesi neresi olursa olsun insanların hayatları, sağlıkları ve fiziksel bütünlükleri mümkün olduğunca üst düzeyde güvence altına alınmalıdır. Tahliye, hazırlık aşaması ile başlar. Bu hazırlık, resmî kurumlar ve halk tarafından beraber yapılmalıdır. Bireyler ve halk tahliye planlamasına katkı sağladığında tahliye başarısını artırabilir. Planlamanın bir parçası olan halk, talimatlara daha kolay uyar, alternatif çözümler üretebilir, kaynak bulabilir, endişelerini ifade edebilir. Özellikle daha önce afet deneyimi olan insanlar planları ve süreci güçlendirir. Yapılan tahliye planlarının mümkün olduğunca fazla kişi tarafından biliniyor olması çok önemlidir. Planlar hakkında halka eğitim verilmesi ve tatbikat yapılması plandaki boşlukları, zayıf noktaları açığa çıkartarak düzeltme imkânı verecektir.(5) Potansiyel tahliye yolları, barınaklarla ilgili programlar halkın farkındalığını artırabilir. İyi eğitilmiş ve hazırlanmış bir halk, hayat kurtarma ve tahliye esnasında görevlilere yardımcı olabilir. Tahliye planları, düzenli aralıklarla gözden geçirilmeli ve gerekiyorsa yeniden düzenlenmelidir. Bu düzenlemeler, yeni elde edilen bilimsel veriler, yeni risk analizleri, altyapı, yol, yerleşim yerleri ve iletişim ağlarında değişiklik olması, idari yapıdaki değişiklikler, afet sonrası olan değişiklikler, tatbikat esnasında ortaya çıkan problem, boşluklara göre yapılmalıdır.

Tahliye planları üzerinde işaretli olması gereken yerler ve malzemeler, bulunulan nokta, acil telefonlar, yangın alarmları, ihbar butonları, yangın duman dedektörleri, yangın söndürücüleri ve dolapları, yangın kapıları, itfaiye girişi ve merdivenleri, birincil ve ikincil tahliye yolları, varsa engelliler için çıkış yolları, ilk kurtarılacak malzeme ve belgeler, afet çantası, malzemeleri, ilk yardım çantaları, su depoları, elektrik, gaz ve su vanaları veya kontrol panellerinin yerleri, parlayıcı ve patlayıcı maddelerin depolandığı veya bulunduğu yerler, acil durum aydınlatması, acil çıkış kapı ve pencereleri, sabit ve taşınabilir merdivenler, dışarıdaki acil durum toplanma noktaları, eş birimler ve mekânlardır.(6)

Tahliye esnasında mutlaka yanımızda bulunması ve planlamalarda göz önünde bulundurulması gereken malzemeler kimlik kartı, sağlıkla ilgili bilgiler, engelli ise engelli kartı, bağlantı kurulacak kişi listesini içeren acil durum belgeleri, talimatlar, en az bir haftalık ilaç, reçete kopyaları, el feneri, düdük, zil gibi işaret cihazları, küçük pilli radyo ve yedek piller, su ve yiyecek sayılabilir.

TAHLIYE PLANLARININ HUKUKI DAYANAĞI

Tahliye planı yapılırken *mevcut ulusal, uluslararası insan hakları hukuku ve yerel mevzuat dikkate alınmalıdır.* bu mevzuatlara göre karar vericilerin sorumlulukları, paydaşların rolleri, sorumlulukları, yetkileri belirlenir. tahliye edilenlerin hakları güvence altına alınır. uluslararası insan hakları hukukuna göre; afetten etkilenenlerin güvenliği ve sağlığı tahliyeyi gerektirmedikçe felaket durumlarında keyfi yer değiştirme yapılamaz, tahliyeyi ve olumsuz etkilerini en aza indirmek için yetkililer önlem almalıdır, tahliye sorumluluğunu üstlenen yetkililer, en geniş uygulama düzeyinde, tahliye edilmiş kişilere uygun barınma, tatmin edici güvenlik, beslenme, sağlık ve hijyen koşullarını sağlamalı ve ailelerin ayrılmasını önlemelidir, tahliye şartların gerektirdiğinden daha uzun olmamalıdır, tahliye olmuş kişilerin ülkenin başka bir yerinde yerleşmeyi talep etme ve yaşamlarının, güvenliklerinin, özgürlüklerinin ve/veya sağlıklarının risk altında olacağı herhangi bir yere zorla geri dönme veya yeniden yerleşime karşı korunma hakkı mevcuttur, tahliye olmuş kişilerin geride bıraktığı mal ve mülkler, yağma, keyfî ve yasa dışı el koyma, işgal veya kullanıma karşı korunmalıdır, yetkili makamlar, yasal haklarından yararlanabilmeleri için gerekli veya kaybolan belgelerin değiştirilmesini kolaylaştırmalıdır, yetkili makamlar, tahliye edilmiş kişilerin gönüllü bir şekilde, güvende ve onurlu olarak evlerine, sürekli oturma yerlerine geri dönmelerine ya da ülkenin başka bir kısmına yeniden yerleştirilmesine olanak tanıyan araçların sağlanması sorumluluğunu taşır.(7)

ROLLER VE SORUMLULUKLAR

Tahliye fazlaca katılımcının birlikte, uyum içinde çalıştığı büyük bir organizasyondur. Etkili bir tahliye yönetimi için daha planlama aşamasındayken rol ve sorumlulukların belirlenmesi gerekir. Hastane, okul, hapishane gibi yerler için daha özel tahliye planları hazırlanmalı ve sorumlular belirlenmelidir. Kitle tahliyesinin tüm aşamalarında karar alıcıların kim olduğu ve süreç belir-

lenmelidir. Bir acil durum sırasında günün her saatinde ulaşılabilen donanımlı bir merkez oluşturulmalı ve bunun sorumlusu belirlenmelidir. Resmî kurum ve yerel sivil toplum örgütlerinin rolü, tahliyeleri kolaylaştırmak ve o an için geçici barınmak sağlamaktır. Medya, tahliyenin her aşamasında halk için ana bilgi kaynağı oluşturması açısından önemli rol oynar. Uyarıların ve mesajların öncelikli olarak kamuoyuna duyurulmasını için medya ile anlaşmalar yapılmalıdır.(7)

AFET TAHLIYE BASAMAKLARI (4)

1. Olay öncesi hazırlık
2. Erken uyarı sistemi ve halkın bilgilendirilmesi
3. Tahliye kararı
4. Uyarı
5. Tahliye
6. Barınak
7. Kurtarma
8. Sürekli risk takibi ve iletişim
9. Koruma

ŞEKLİNDE SIRALANIR.

1.OLAY ÖNCESİ HAZIRLIK : Tehlikenin konumu, yoğunluğu, sıklığı, olasılığı göz önüne alınarak fiziksel, sosyal, sağlık, ekonomik ve çevresel açıdan bölgenin risk analizinin yapılması, bölgedeki iklim değişikliği, sel ve fırtına gibi bazı doğal afetlerin sıklığını ve şiddetininin göz önünde bulundurulması, planlaması yapılan bölgenin nüfus analizi, demografik özelliklerin tespiti, nüfus yoğunluğu yüksek, turistik, yoğun göç alan, zor ulaşılabilen, çocuk bakım evi, hastane, hapishane gibi sınırlı hareket yeteneğine sahip kurum içeren, daha önce afetten tahliye edilen insanları içeren bölgelerin tespiti, yaşlı, çocuk, engelli gibi özel gruplar için planlarda yer ayrılması ve bu gruplar için özel bakım eğitimi almış personelin tespit edilmesi kullanılacak ulaşım yöntemlerinin belirlenmesi, sorumluların belirlenmesi, kişi ya da kurumların yetki alanlarının tespiti, kişi ya da kurumlar arasında uyumlu, iş birlikçi çalışmanın sağlanması, erken uyarı sistemlerinin geliştirilmesi, güvenli birincil ve alternatif tahliye rotasının belirlenmesi, güvenli barınakların tespiti, barınaklarda, tahliye merkezlerinde insanların temel ihtiyaçlarının, güvenliklerinin, refahlarının sağlanması için tedbirlerin alınması, boşaltılan alanlarda mülkün korunması için tedbir alma, farklı senaryolar için plan geliştirme, eğitim, simülasyon çalışmaları ve tatbikatlarla yerel acil durum müdahale ekiplerinin ve halkın hazırlıklı olmasını sağlama olarak yapılmalıdır.

2.ERKEN UYARI SİSTEMİ VE HALKIN BİLGİLENDİRİLMESİ : Riskler kritik bir duruma gelmeden ve halkın hızlı ve güvenli bir şekilde hareket etme kabiliyeti varken koruyucu bir tedbir olarak erken uyarı sistemleri devreye girmelidir. Erken uyarı sistemi 4 kilit faktör içerir ; risk bilgisi, tehlikelerin tahmini, takibi, analizi, uyarı ve alarmların yayılması ve iletilmesi, alınan uyarılara uygun cevap verilmesidir. Başarılı bir tahliye için halk tarafından iyi anlaşılan, açık, güvenilir, net, doğru bilgilerin zamanında geniş kitlelere iletilmesi çok önemlidir. Kilit mesajlar, yetkililer tarafından hazırlanmalı, güncel bilgiler, tahliyenin tüm aşamaları boyunca, düzenli olarak mutlaka halka duyurulmalıdır. Bu bilgiler tehdit seviyesi, tehlike türü, zamanlama, kasırga, yağış gibi hava durumu ile ilgili bilgiler, etkilenen afet bölgesinin son durumu, verilen destek hizmetleri, afet bölgesinin durumu, evlere geri dönüş, başka bir yere taşınma veya yerleşme gibi bilgileri içerir. Bu bilgilerin mümkün olan en geniş kitleye ulaşması için radyo, televizyon, telefon mesajları, sirenler, sosyal medya, internet siteleri, e-postalar, gruplar, yüz yüze görüşmeler ve diğer yöntemler kullanılır.

3.TAHLİYE KARARI : Bir bölge bir afet tarafından tehdit edildiğinde ya da afet bir bölgeyi etkilediğinde bölgenin tahliyesi veya yerinde koruma ile ilgili resmî karar verilmelidir. Tehlikenin bir risk olduğu kanaatine varıldığında daha güvenli yer veya barınaklara tahliye kararını alınması yetkililerin sorumluluğu altındadır. Yetkililer yardıma muhtaç kazazedelerin zamanında ve güvenli tahliyesinden sorumludur.

4.UYARI : Tahliye kararı alındıktan sonra, uyarı mesajları tüm paydaşlara yayılmalı ve kararın alındığının farkındalığı oluşturulmalıdır.

5.TAHLİYE : Tahliye emrini verme yetkisine sahip kişi veya hükûmet organı, tahliye planının uygulamaya koyulması için gerekli süreci oluşturmalıdır. Planın devreye sokulması için tehlike haritalaması ve risk analizi gerekir. Zamanında alınan bilgiler karar vermeye yardımcı olur. Tahliye kararı verilirken tahliyenin gecikmesi nedeniyle olabilecek yaşam kaybı, gereksiz boşaltma nedeniyle yaşanacak tehlikeler, hem ev sahibi hem de afetzedeler için günlük yaşamın kesintiye uğraması, maddi kayıp ihtimalleri , yasalar, protokoller, kırılganlık analizi, tahliye için mevcut zaman, tahliye edilecek insan sayısı, çıkış, tahliye yolları, güvenlik, kaynaklar, çevresel ve sosyal faktörler, gündüz saatleri olması göz önünde bulundurulmalıdır.

Afet ve acil durumlar için 4 temel acil prosedür tanımlanmıştır :

Bina tahliyesi : Yangın, deprem, bomba gibi bina güvenliğini tehdit eden durumlarda

Bölge tahliyesi: Sahil şeridi ve yumuşak zeminli yerleşim, tsunami, geniş kapsamlı yangın, sel gibi durumlarda

Yerinde sığınma : KBRN madde sızıntısı, terör saldırılarında

Kilitlen/tecrit ol: Şiddet tehdidi durumlarda

Düzenli bir tahliye için "konuşma, itme, koşma, geri dönme" kuralına uymak gerekir. Tahliyede güvenli en yakın rota ve çıkış seçilmelidir. Tahliye kararı alındıktan sonra evlerini terk edecek kişiler uygun koruyucu giysilerini, sağlam ayakkabılarını giymeli, önceden hazırladıkları acil durum çantasını, ilaç, kimlik gibi kişisel eşyalarını yanına almalı, destek ağındaki kişilerle iletişime geçmeli, duyuruları takip ederek yönlendirmelere uymalıdır.Tahliye anında vakti ve imkânı varsa elektrik, su ve doğal gaz vanalarını kapatmalı, tanıdıklarına haber vermeli, hayvanları için önlem almalı ve evin kapısını kilitlemelidir. Tehlikenin geçtiği bilgisi gelene kadar binaya tekrar hiçbir nedenle girilmemelidir.

Eş sistemi, kontrollü bir tahliye sistemi oluşturabilmek için kullanılabilecek önemli yöntemlerden birisidir. Genellikle okul, iş yeri gibi toplu bulunulan yerler için kullanılır. Amaç, kişilerin veya birimlerin birbirleriyle eşleşip birlikte hareket etmesini ve tahliye olmasını sağlamaktır. Herkes kendi eşinin veya biriminin tahliyesinden sorumludur. Birim tamamen boşaldığında birimin/odanın kapısı kilitlemeden kapatılmalı ve boş olduğunu bildiren kart asılmalıdır. Toplanma alanına gelindiğinde eş birimler birbirinin yanında sıra olmalıdır.

Çok katlı binalar için her kata mutlaka bir tahliye sorumlusu atanır. Kalabalık binalarda özellikle öğrenci veya engelli bireylerin tahliyesinde el ele tutuşturup zincir oluşturarak tahliye uygulanabilir. İki tane tahliye çeşidi vardır: İç (kısmî) tahliye: Binanın bir kısmının etkilendiği hâllerde etkilenen alanın tahliye edilmesidir. İkiye ayrılır:a)Dikey (vertikal) tahliye: Sel, su baskınları gibi durumlarda bir alt kattan bir veya daha fazla üst kata veya üst kat ve çatının zarar gördüğü hâllerde daha alt kata tahliyedir. b) Yatay (horizontal) tahliye: Binayı kısmen etkilemiş, ancak kontrol altında olan yangın, patlama, çökme gibi durumlarda birkaç katta veya tüm blokta eş zamanlı uygulanan tahliyedir. Dış (Tam) Tahliye: Binanın tamamen kullanılamaz hâle geldiği veya tehdidin devam ettiği durumlarda binanın tamamen boşaltılmasıdır.

Mevcut ulaşım araçlarının belirlenmesi ve koordinasyonu başarılı bir tahliyenin vazgeçilmezidir. Özellikle kendi imkânları ile gidenler trafik sıkışıklığına neden olup kaynakların kullanılabilirliğini kısıtlayabileceği için düzenlemeler yapılmalı, ulaşım ağları önceden planlanmalı ve kurulmalıdır. Tahliye rotası seçilirken belirlenen güvenli bölgeye düzenlemeleri ile kapasite artırılmalı, iletişim için altyapı oluşturulmalı, en kısa, güvenli yol seçilmeli, riskli noktalar bilinmeli, yolların hasar durumu tespit edilmelidir. Herhangi bir problem ve acil durumda alternatif araçlar ve yollar belirlenmelidir.

Tahliye edilen, kayıtlı, doğrulanmış veya tahmini yardıma ihtiyacı olan kişi sayıları , tahliye merkezlerinin adı ve yeri, kişilerin yaş, cinsiyet gibi temel profilleri, özel ihtiyaçları olan bireyler, tahliye merkezine geliş tarihleri, temel ihtiyaçlara yönelik hizmetlere erişilebilirlikle ilgili verilerin toplanması kaydedilmesi, ihtiyaçların tanımlanması ve karşılanması haklarının korunması açısından önemlidir.

Zorla tahliye : İnsanlar resmî emirlere direnip evlerini terk etmeyi reddedebilir, teşvik çabaları etkisiz kalabilir. Bu durumda yetkililer insanların son çare olarak zorla tahliye edilmeleri gerekip gerekmediğini değerlendirir. Zorla tahliye keyfî veya hukuka aykırı olarak değerlendirilmez.

6.BARINAK : Güvenli , kullanılabilir, erişilebilir yerler barınak olarak belirlenir. Çoğu insan evine en yakın barınakları tercih eder. Tahliye edilen insanlarla ev sahipliği yapan insanların tanışması yaşamı daha kolay hâle getirecektir. Barınaklar, kişi sayısına uygun seçilir. Kalabalık olmayan barınaklarda düzenli yaşam daha kolay olabilir. Planlama esnasında barınaklarda uzun süre kalma ihtimali düşünülerek ihtiyaç listeleri hazırlanmalıdır. Barınaklarda insanların su, beslenme, temizlik, güvenlik, elektrik, iletişim, tıbbi destek gibi temel ihtiyaçları karşılanmalıdır. Temel ihtiyaçların yanında mali destek, rehberlik, kıyafet, yatak, örtü gibi malzemeler, bilgi sağlama, tercüme, yasal hizmetler, aile takibi gibi destek hizmetleri ile refah da sağlamalıdır. Huzurevi sakinleri, engelliler, sürekli tıbbi bakım gereken sağlık sorunları olanlar, akıl hastaları, mahkûm gibi özel gruplar için barınakların özel olarak düzenlenmesi gerekecektir. Okul, iş hayatı ve sosyal yaşam mümkün olduğunca devam ettirilmelidir. Çiftlik hayvanları, evcil hayvanlar gibi hayvanlar için de uygun barınaklar ayarlanmalıdır.

7.KURTARMA : Yasal olarak herkesin güven içinde gönüllülük esasına dayalı olarak geri dönme hakkı vardır ve bunun için yardım edilmelidir. Ancak bazen geri dönecek güvenli bir yer

olmayabilir ya da geri *dönüş afetzede tarafından istenmez ya da uygulanamaz. Bu durumda* tahliye bölgelerinde uzun süre kalmaları için uzun vadeli yardım veya başka yerlere yeniden yerleştirme gibi alternatif çözümler düşünülmelidir.

8.SÜREKLİ RİSK TAKİBİ VE İLETİŞİM : Tüm tahliye aşamaları boyunca değişen ihtiyaçların, hareketlerin ve risklerin sürekli olarak izlenmesi gerekir. Yardım tüm kişilere eşit ve tarafsız bir şekilde dağıtılmalı, tahliye bölgesinin esas halkının temsilcileri, yerel ve ulusal yetkililer, tahliye sorumluları arasında resmî bağlantılar kurulmalıdır. Tahliye merkezindeki tüm insanların güncel afet durumu, afet bölgesindeki durum, hava durumu, yardım faaliyetleri ve evlerine güvenli geri dönüş hakkında zamanında bilgilendirilmesi için gerekli düzenlemeler yapılmalı, doğru ve açık bilgilerin yokluğunda ortaya çıkan söylentiler tahliye merkezlerinde huzursuzluğa ve yanlış kararların alınmasına neden olabilir.

9.KORUMA : Koruma, yalnızca afetin fiziksel zararlarından koruma anlamına gelmez. Afet sırası ve sonrasında karşılaşılabilen sömürü ve istismarın her türünden korunma anlamına da gelir. Yaşlılar, engelliler, kadınlar, çocuklar (özellikle refakatsizler), azınlık grupları, mahkûmlar, okul grupları, turistler gibi bazı gruplar özellikle bu tür tehlikelere karşı savunmasız olarak kabul edilir ve bu kişilerin yetkililer tarafından gözetilme ve yardım alma hakkı vardır. Boşaltılan bölgelerdeki hırsızlık ve yağmanın engellenmesi için görevliler dışında bu bölgelere girişi engelleyecek tedbirler alınmalı, güvenlik kuvvetleri kendi hayatlarını riske atmadan görevlerini sürdürmelidir.

Şiddet, bağımlılık gibi strese maruz kalanlara psiko-sosyal destek sağlanmalı, cinsiyete dayalı şiddetin önlenmesi, raporlanması ve tedavisi için güvenli ve uygun mekanizmaların kurulmalı, parçalanmış aileler mümkün olduğunca birleştirilmeli, standart şikâyet formlarının oluşturulması, bu form dışında iletilen şikâyetlerin alınması, şikâyetçilerin açığa çıkartılmaması, birden fazla görevliye şikâyette bulunabilme verilen hizmetlerin iyileşmesi için önemlidir. Yasaklı silah bulundurma, suç işlendiği takdirde yasal karşılığı uygulanmalıdır. Şiddet, istismar, sömürü, ihmal, ev sahibi ile tahliye edilenler arasında çatışma suçlarına karşı tedbir alınmalıdır.

HASTANE TAHLIYESI

Bir afet tehdidi karşısında veya sırasında tahliye kararını vermek hastane afet planı başkanının yetkisindedir ve başkan tam yetkiye sahiptir. Hastane Afet Planlarını oluşturma ve uygulama süreci ile afetlere hazırlıklı hale gelmek önemlidir.(8) Hastanenin tahliye sürecini, afet komuta merkezi yönetim kurulu koordine eder. Tahliye kararını alırken valilik kriz masası ve il sağlık müdürlüğü gibi kuruluşlarla bilgi alışverişi sağlanmalıdır. Tahliyede, hızlı, düzenli ve güven içinde olunmalı, tahliyeyi sağlayan görevliler kendini tehlikeye atmamalı, gerekli koruyucu malzemeleri yanına almalı, en yakın çıkış noktası seçilmeli, gereksiz konuşmalar engellenmeli, tahliye rotasında sıkışıklığa ve kargaşaya meydan verilmemeli, talimatlara uyulmalıdır.(9)

HASTANEDE TAHLİYE GEREKTİREN DURUMLAR

2021 yılında yayınlanan T.C. Sağlık Bakanlığı Acil Sağlık Hizmetleri genel Müdürlüğü Hastane Afet ve Acil Durum Planı Hazırlama Klavuzu'na göre (10);

Tahliye kararının alınması ve uygulanması, insan gücü ihtiyacı, hastanenin ya da bölümün kullanım dışı kalması, tedavilerin ertelenmesi, hastalar, ziyaretçiler ve personel için yaralanma riskinin olması, diğer hastanelere, bölümlere, transport sistemine ek yük getirmesi bakımından çok dikkatli değerlendirilmesi gereken süreçlerdir.

Hastanede Tahliye : İç veya dış olumsuz etkiler nedeniyle hastaları ve hasta yakınlarını korumak, hasta bakımını sürdürmek ve personelin güvenliğini sağlamak amacıyla, hastanenin bir bölümünün veya tamamının boşaltılarak, hastaların, hasta yakınlarının, personeli, gerekli durumlarda ekipman, tıbbi kayıt ve ilaçların güvenli bölgelere nakledilmesidir.

Tahliye Yöntemleri: internal tahliye, hastaların hastane içinde güvenli başka bölümlere naklidir, kısmen (parsiyel) tahliyedir ; eksternal tahliye, hastaların hastane dışında güvenli bir yere naklidir, kısmen (parsiyel) ya da tamamen (total) tahliye olabilir.

Tahliye Triyajı Tahliye için hastalar yürüyebilirliklerine göre dört grupta kategorize edilir. T0 Yürüyebilen Hastalar: Sıra halinde bir öncü ve bir artçı personelle hızlı ve güvenli bir şekilde dışarı çıkarılabilen hastalardır. Tahliye önceliğinde ilk sırayı alırlar. T1 Tek Başına Yürüyemeyen Hastalar: Bir personel yardımıyla yürüyebilen hastalardır. Tahliye önceliğinde ikinci sırayı alırlar. T2 Yürüyemeyen Hastalar: Sedye ile iki veya daha fazla personelin taşıdığı hastalardır. Tahliye önceliğinde üçüncü sırayı alırlar. T3 Kompleks ve Obez Hastalar: Yatağı ve ekipmanıyla en az üç personelin tahliye edeceği hastalardır. Tahliye önceliğinde son sırayı alırlar. Güvenli yerler olayın türü dikkate alınarak belirlenir. Bu yerler; diğer hastanelere, sağlık kurumlarına nakil, hastane çevresi dışında güvenli bir yere nakil, aynı katta güvenli bir yere nakil: yatay (horizontal) tahliye, aynı binanın başka bir katındaki güvenli bir yere nakil: dikey (vertikal) tahliyedir.(11)

TAHLIYEDE GENEL İLKELER

Hastaların hangi hastanelere nakledileceği önceden belirlenmelidir. Ayrıca yoğun bakım, yanık, yenidoğan, psikiyatri, tutuklu ve hükümlü vb. hastalar için planlamalar ayrıntılı bir şekilde yapılmalı ve planda mutlaka yer almalıdır. Tahliye halinde, hastayı tanımayan personelin hastayı kolaylıkla tanıyabilmesinin sağlanması gerekmektedir. Hazırlanmış tanıtım kartları kullanmak basit ve etkili bir araçtır. Hastalar mümkün olduğu sürece dosyaları ile birlikte tahliye edilmelidir. Mümkün olmadığı takdirde hastalara, bekleme alanına tahliye edilirken ya da tahliye edildikten hemen sonra tanıtım kartları takılmalıdır. Bu kartlar; ad soyad, oda numarası, servisi, teşhis ve tedaviye ilişkin bilgileri ve hasta yakınına ait iletişim numaraları gibi önemli bilgileri içermelidir.

Hastanenin bir bölümünün, birkaç bölümünün veya tamamının tahliyesi gerektiğinde hastaların erken taburculuğuna yönelik ayrıca açık bir Standart Operasyon Prosedürü (SOP) bulunmalıdır. Söz konusu SOP, operasyonların sürekliliği, tahliye sırasında temel hizmetlerin sunumu (eğer hastane kapatılmamış ya da tamamen tahliye edilmemiş ise) ve tahliye edilenlere emniyetli bir şekilde kritik bakım sağlanmasına yönelik hazırlanmalıdır. Çevredeki diğer sağlık tesisleriyle önceden hazırlanmış protokollerin (karşılıklı nakil) geliştirilmesi önemle tavsiye edilmektedir. Bu protokoller, il düzeyinde kapasitenin verimli ve uygun kullanımı için mutlaka Türkiye Afet Müdahale Planı (TAMP) Yerel Düzey Sağlık Çalışma Grubu Operasyon Planı kapsamında değerlendirilmelidir.

Hastanenin fiziki koşulları uygun ve birden fazla tahliye yolu var ise tek yönlü trafik akışı planlanmalıdır. Bu yollardan dönüş yolu tahliye için geri dönen personele ayrılabilir. Koridorlarda ve basamaklarda trafik akışını organize etmek hayati öneme sahiptir, doğaçlama olarak yapılamaz. Olaya Özel Plan, tahliyeye yönelik haritalar/krokiler içermelidir. İki farklı bekleme alanı belirlemek tavsiye edilmektedir: Bir alan yaralı olmayanlar ve stabil hastalar için, diğeri acil tıbbi müdahale ve bakım sunumunda sürekliliğe ihtiyacı olan hastalar için olmalıdır. Olay Yönetim Ekibi, bu iki kategorideki hastaların ihtiyaçlarına göre personel tahsis etmelidir. Hastaları ayırma, bakım ve tıbbi bakım verilmesi gerektiğinde aşırı kalabalık oluşmasını önlemeyi ve ambulans/otobüs gibi diğer araçlarla ulaşımı kolaylaştırmayı amaçlamaktadır. Hastalar, dışarıda kötü hava koşullarında bekletilmeden, mümkün olan en kısa sürede geçici bir yere nakledilmelidir.

Kısmi tahliyeler, hastanenin çıkış yollarını engellemeden mümkün oldukça çıkışlara yakın olarak yapılmalıdır. Hastaları tesiste tutmak mümkün olmadığında hastane dışındaki alanlar hazırlanmalıdır. İtfaiye araçları büyük alana ihtiyaç duyduğundan harici bekleme alanları, kurtarma hizmetlerinin çalışmalarını engellemeyecek şekilde düzenlenmelidir. Dışarıdaki bekleme alanları, personele aşırı iş yükü oluşmasını önlemek için çok fazla sayıda olmamalıdır. Her hastanın gideceği yer açık bir şekilde yazılmalıdır. Ambulanslara alındıklarında ve kabul eden hastanede (nakil yapılan yer), hastalar ayrıca kayıt altına alınmalıdır. Tüm hastaların nakledildiğini ve nerede olduklarını bilmek için merkezi bir sistem oluşturulmalıdır. Kabul edecek tesise haber verilmediyse ve hastayı kabul etmeye hazır değilse kritik hastalar nakledilmemelidir. Hastane Afet ve Acil Durum Planı (HAP) Hazırlama Komisyonu personelin tahliyeye hazırlıklı olmasını sağlamak üzere eğitim ve tatbikat düzenlemelidir. Tatbikat senaryoları belirlenen riskler doğrultusunda ve kapsamlı olmalıdır.

OLAY YÖNETIM EKIBI TARAFINDAN TAHLIYENIN YÖNETIMI

Olay Yönetim Ekibi tahliye faaliyetlerinin yönetimini üstlenir. Tahliyenin gerekli olup olmadığına ve ne tür tahliye yapılması gerektiğine karar verir. Sarı renk kodu anonsu ile personele duyuru yapılır. İlgili tüm bölümlerin SOP'larını faaliyete geçirmeye karar verir. Hastaların nereye transfer edileceğine (tahliye önceliği dahil olmak üzere) karar verir. Hastanenin tamamının tahliye edilmesi durumunda hastaların taburcu edilmesinin gerekip gerekmediğine karar verir. Faaliyete geçirilen SOP'lar, sürekli tedaviye ihtiyaç duyan hastalar için temel bakım hizmetlerinin devamlılığını sağlamalıdır. Hastalar, hastane dışında bir yere tahliye edilirse, tahliye edilen hastaların yakınlarının, hastaların yeni yerleri konusunda nasıl bilgilendirileceğine karar verir. Hastaların hastane dışına tahliyesi gerekiyorsa, hangi ulaşım düzenlemelerinin gerçekleştirileceğine karar verir. Hastanenin tamamen tahliye edilmesi durumunda, 112 Acil çağrı Merkezi/İl Ambulans Servisi Başhekimliği Komuta Kontrol Merkezi/İl Sağlık Afet Koordinasyon Merkezi ile birlikte gerekli düzenlemeleri yapar.

TAHLIYE ILE ILGILI STANDART OPERASYON PROSEDÜRLERININ ESASLARI

Her bölümün ve birimin, tahliye için özel bir SOP'u olmalıdır. Bu SOP, gerekli tüm aşamaları açıkça belirtmelidir. Kritik görevlerdeki personel, kendi iş akış talimatlarına uymalıdır. Sadece büyük bir güvenlik problemi oluşması durumunda inisiyatif kullanılır. Tıbbi personel ve hasta bakım personeli, tahliyenin nedenine göre hastanın yanında taşınacaklara karar verir . Hasta, ziyaretçi ve personelin tahliye planı yapılır. Bu planda tahliye yolları kroki ile belirtilir. Tahliye yolları kullanılamaz duruma gelirse alternatif yol/yollar belirlenir. Diğer tesislere transfer edilmek üzere bekleyen hastalar için toplanma alanı belirlenir. Ekipmanların tahliye edilmesi gerektiği durumlarda taşıma ve muhafazaya yönelik kriterler belirlenir.Tüm hastaneye yönelik tedbir amaçlı tahliyeler, en son seçenek olmalıdır. Tedbir amaçlı tahliye yalnızca hastaların hayatını kurtarmanın ve personelin güvenliğini sağlamanın tek yolu olduğu durumlarda uygulanmalıdır.

Hastalar transfer edilirken dört gruba ayrılır. Kritik bakıma ihtiyacı olan ve bu nedenle derhal bir hastaneye ambulans ile nakledilmesi gereken, genellikle yatağa bağlı hastalar ; genellikle yatağa bağlı olan ve nakil için ambulansa ihtiyaç duyan, ancak tıbbi bakımı veya hasta bakımı aciliyet gerektirmeyen hastalar ; yürüyebilen ancak yakını tarafından evde bakılma ihtimali olmayan ve alternatif alana kabul edilmesi gereken hastalar; yürüyebilen veya destek ile yürüyebilen ve taburcu edilebilecek olan hastalar.

STANDART OPERASYON PROSEDÜRÜ KISMI TAHLIYE ÖRNEĞI

TEMEL FAALİYET : Tüm hasta ve hasta yakını ve personel ile şartlar uygun olduğunda tıbbi ekipman ve malzemenin tahliye edilmesini sağlamak.

HEDEFLER : Tahliye sırasında güvenlik gerekliliklerine tamamen uyulmasını sağlamak, tahliye sırasında tüm hastaların temel bakımının devamlılığını sağlamak, hasta bakım hizmetinin

sürekliliği için hasta tahliye alanlarında yeterli personelin ve kaynakların olmasını sağlamak, sürece dahil olan personelin bilgilendirilmesini ve herhangi bir tehlikeli durumdan korunmasını sağlamak, tıbbi bakım hizmetinin devamlılığını sağlamak için gerekli tedavi kayıtlarını hastalarla birlikte getirmek, gerekli durumlarda ve mümkünse, risk almadan kritik ve pahalı ekipmanları kurtarmaktır.

SIRASI İLE GERÇEKLEŞTİRİLECEK EYLEMLER : Tahliye kararının nedenini ve doğruluğunu Olay Yönetim ekibi'nden teyit edin, bölüm personeline, tahliye kararı alındığını bildirin, hastaları, tahliye edileceklerinden haberdar edin ve bakım hizmetinin devamlılığının ve güvenliklerinin sağlanacağı konusunda bilgilendirin, önceden belirlenen tahliye yollarını kullanın, önce hareket edebilen hastalar (t0) ve ziyaretçilerle başlayın ve hasta tahliye alanına gitmeleri için onlara refakat edin, yardımla yürüyebilecek hastalara (t1) eşlik edilmesini sağlayın, tekerlekli sandalye ve sedye ile taşınan hastalarla (t2) devam edin,yatak ile transferleri kolaylaştırmak için koridorları mümkün olduğunca açık ve temiz tutun, yatağıyla transfer edilmesi gereken hastalarla (t3) devam edin (başka türlü transferi hızlı ve güvenli bir şekilde gerçekleşemeye -cekleri yatağıyla birlikte transfer edin.) yatakların transfer edilemeyeceği bir acil durum meydana gelirse, hastaların daha güvenli bir yere taşınması için uygun transfer aracını (battaniye, branda vb.) kullanın, tüm temel tıbbi kayıtların güvenli bir şekilde transfer edilmesini sağlayın (mümkün olduğunda, kayıtları yatağa veya tekerlekli sandalyeye bağlayın) , tahliye sırasında bakım hizmeti alması gereken hastalar için yalnızca temel bakım hizmetini göz önünde bulundurun (damar yolunun açık kalmasını sağlayın vb.), hasta tahliye alanının güvenli hale getirilmesini sağlayın, mümkün olan en kısa süre içerisinde temel bakım hizmetinin sunulması için, tahliye alanında yeterli personel ve ekipmanın olmasını sağlayın, mümkün olduğunca tahliye edilen hastaların kaydını tutun (takip kaydı, tahliye formu vb.), kritik ekipman ve malzemeleri zarar görme ihtimaline karşı, yeterli süre varsa tahliye edin. olay yönetim ekibi (oye) talimat verdiğinde transfer işlemini her zaman teknik personel ve güvenlik personelinin gözetiminde, talimatlarına uygun olarak gerçekleştirin, transfer edilen malzeme ve ekipmanın kaydını tutun (nitelik ve nicelik, varış noktası).

İş Sağlığı ve Güvenliği Kuralları . Tahliye alanına yapılan nakiller, yalnızca Güvenlik Görevlisinin ve Operasyon Sorumlusunun yönetiminde gerçekleştirilmelidir. Tahliye tamamlandıktan sonra, Güvenlik Sorumlusunun izniyle iki kişilik bir ekip tüm odaları tekrar kontrol etmelidir ve kontrol edildiğini gösteren bir işaret konmalıdır. Ortaya çıkan herhangi bir güvenlik tehdidi değerlendirilmeli ve bu tehdit derhal Güvenlik Görevlisine veya Olay Yönetim Ekibi'ne rapor edilmelidir. Transfer edilmiş kritik ekipman ve malzemelerin, güvenli bir yere yerleştirilip yerleştirilmediği kontrol edilmelidir

KULLANILACAK MATERYALLER : Tekerlekli sandalyeler, Yataklar, Sedyeler, Battaniyeler, Krokiler, Hasta dosyaları, formlar.

Hizmet Niteliğini Değerlendirme Kriterleri Tahliye sırasında güvenlik gerekliliklerine uyulması, sürece dahil olan personelin bilgilendirilmesi, hastaların tahliye sırası ve sonrası tıbbi bakım hizmetinin devamlılığının sağlanması, kritik ekipmanların kurtarılması (hastaların tahliye edilmesinin ardından). zaman dilimi tahliye bildiriminin alınmasıyla başlar, olağan duruma geçilinceye kadar devam eder. diğer standart operasyon prosedürleri, ilgili iş akış talimatları ve paydaşlar ile koordinasyon , hastane içi yangın sop'u, tıbbi bakım hizmetinin devamlılığına ilişkin sop, departman/servis/birim müdahale prosedürü, güvenlik sorumlusu iş akış talimatı (işat) 'ı, departman sorumlusu işat'ı. formda ayrıca belitrillmiş olan konular : karşılaşılabilecek özel durumlar, sürece dahil kişiler, ekler, tahliye yollarına ilişkin krokiler, kayıtlar ve formlar, kontrol listesi. , eylemlerin kaydedilme şekli, izleme, güvenlik konuları

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HİPERTANSİF GEBE HASTAYA YAKLAŞIM

FETHİ AHMET ATILGAN[1]
1MALATYA EĞTİM ARAŞTIRMA HASTANESİ, ACİLTIP KLİNİĞİ, ACİL TIP UZMANI

GİRİŞ:

-TERMİNOLOJİ:

GRAVİDİTE; süre ve sonuçtan bağımsız, toplam gebelik sayısı

PARİTE; fetüs sayısından ve canlılığından bağımsız, doğumla sonuçlanan gebelik sayısı

PRETERM DOĞUM; 20 ila 37. gebelik haftası arasındaki gebelik sonlanımı

DÜŞÜK; 20. gebelik haftasından önce gebelik sonlanımı

TRİMESTER; 14 haftalık gebelik periyodu

-GEBELİKTE FİZYOLOJİK DEĞİŞİKLİKLER:

İkinci bir canlının yaşamsal ihtiyaçlarını karşılayabilmek adına annede; kan hacmi, kalp debisi, kalp hızı ,nabız basıncı artarken kan basıncı ve sistemik vasküler direnç azalır.

-*TANIMLAMALAR*:

HİPERTANSİYON; 2017 yılında değişen AHA/ACC tavsiyelerine göre, en az 6 saat arayla yapılan iki farklı ölçüm sonrasında SKB>129 mmHg ve DKB>79 mmHg tespit edilmesi durumudur.

-SKB 130-139, DKB 80-89: evre 1 HT

-SKB<160 ve DKB<109: Şiddetli olmayan (veya hafif/orta) HT

-Şiddetli HT; SKB 160 ve üstünde DKB 110 ve üstünde olan HT

GEBELİKTE HİPERTANSİYON tanımı tam olarak standardize edilmemiştir ancak "Gebelikte Yüksek Tansiyon Üzerine Ulusal Yüksek Tansiyon Eğitim Programı Çalışma Grubu" tavsiyesine göre şu anda SKB⩾ 140 mmHg ve/veya DKB⩾90 mmHg olarak kabul edilmektedir. Amerikan Kadın Hastalıkları ve Doğum Uzmanları ve Jinekologlar Koleji (ACOG), yeni yayınlanan tavsiyelerde, hipertansiyon tanımlarının Amerikan Kardiyoloji Koleji (ACC) ve Amerikan Kalp Derneği'nin (AHA) yakın zamanda değiştirilen tanı kriterleriyle çeliştiğini kabul etmiştir.

GEBELİĞE BAĞLI ÖLÜM; tüm gebelik süresi ve gebeliğin sonlanmasından 42 gün sonrasına kadar gerçekleşen ölüm

DOĞRUDAN ANNE ÖLÜMÜ; gebelikte yapılan müdahaleler, ihmaller, yanlış verilen bakım hizmeti ya da adı geçen olaylar zinciri sonucunda meydana gelen obstetrik komplikasyonlar nedeniyle meydana gelen ölüm

DOLAYLI ANNE ÖLÜMÜ; annede gebelik öncesinde var olan bir hastalık veya hastalıklar nedeni ile gebelik sırasında gelişen ama obstetrik kaynaklı olmayan ancak gebeliğin fizyolojik etkisi ile şiddetlenen nedenlerden meydana gelen kadın ölümleri

-SIKLIK:

Hipertansif hastalıklar gebeliğin en yaygın komplikasyonudur.

Önceden var olan (kronik) ve gestasyonel hipertansiyon, preeklampsi ve eklampsiyi içeren bir şemsiye terim olan hipertansif gebelik bozuklukları, gebeliklerin %10'unu komplike hale getirir ve maternal ve perinatal morbidite ve mortaliteyi önemli ölçüde arttırır.

Dünyada yıllık gebelik sayısı 210 milyon, günlük gebe ölümü yaklaşık 830

Ülkemizde gebe ölümlerinde HT, %18,4 ile 2.sırada yer almaktadır.

-RİSK GRUBU:

Gebeliğe bağlı hipertansiyon riski, 20 yaşından küçük kadınlarda en fazladır; Primigravida, nulliparite, ikiz veya molar gebelik, hidrops fetalis, pregestasyonel diyabet, hiperkolesterolemi veya obezite, ailesinde veya kendisinde gebeliğe bağlı hipertansiyon/preeklampsi öyküsü, son gebeliğinin üzerinden <2 yıl veya >10 yıl geçmiş olanlar, renal hastalık, kollajen doku hastalığı, 35 yaş üstü gebelik veya adolesan gebelik, trombofili (antifosfolipid sendromu, faktör V Leiden mutasyonu, aktive protein C direnci)

Literatürde, migren, ilk trimesterde SSRI kullanımı, siyah ırk, sınırlı sayıda sperm ile ilişki gösterilen yayınlar mevcuttur.

GENEL BAŞLIKLAR

KRONİK HİPERTANSİYON

Gebelik öncesinde var olan veya gebeliğin 20.haftasından önce gelişen ve lohusalık döneminden sonra da devam eden kan basıncı yüksekliğidir.Gebelikte şiddetlenerek preeklampsi ve eklampsi tablosunun oluşmasına yol açabilir.

Doğurganlık çağındaki her 5 kadından birinde meydana gelir ve görülme sıklığı yaş, etnik köken, diyabet ve obezite gibi faktörlerle ilişkilidir.

Daha çok 40 yaşın üzerindeki gebelerde görülür. Preeklampsi riski %15 ila 40 arasında değişmektedir. Beyaz önlük HT öyküsü olanların da yaklaşık yarısında gestasyonel HT görülür.

GESTASYONEL HİPERTANSİYON

Önceden normal tansiyon değerleri olan kadınlarda, 20. gebelik haftasından sonra gelişen ve proteinürinin eşlik etmediği kan basıncı yüksekliğidir. Kan basıncı postpartum 12. haftadan önce normale döner. Preeklampsiye dönüşebileceği gibi (%25-40) kronik hipertansiyona da dönüşebilir.

KRONİK HT ZEMİNİNDE GELİŞEN PREEKLAMPSİ

20. gebelik haftasından sonra hipertansif gebede yeni başlangıçlı proteinüri (0.3gr/gün proteinüri) veya 20. gebelik haftasından önce hipertansiyonu ve proteinürisi olan gebede proteinüri ya da kan basıncında ani artma ya da trombosit sayısının 100.000' in altına inmesi durumudur.

Kronik hipertansif gebelerin neredeyse dörtte birinde preeklampsi gelişmektedir. Kronik hipertansiyonu olan gebelerde kan basıncının kontrol altında olması, preeklampsi gelişim riskini azaltmaz.

PREEKLAMPSİ

Gestasyonel HT veya Kronik HT zemininde gelişebilir. Halk arasında gebelik zehirlenmesi olarak ifade edilir. Proteinüri (>0,3gr /gün), ödem ve organ disfonksiyonlarına bağlı semptom ve bulgular eşlik eder. Ödem generalizedir ve sabah kalktıktan sonra kaybolmaz (yüzük parmağı sıkıyorsa dikkat).

Akut böbrek hasarı (kreatinin ⩾1 mg/dL), karaciğer tutulumu (yüksek ALT ve AST; >40 IU/L), sağ üst kadran veya epigastrik karın ağrısı, nörolojik komplikasyonlar (eklampsi, mental durum değişikliği, körlük, felç, klonus, hiperrefleksi, şiddetli baş ağrıları ve kalıcı görsel skotomlar gibi), hematolojik komplikasyonlar (trombosit sayısında <150.000/μL azalma, DIC, hemoliz) görülebilir.

Uteroplasental disfonksiyon (fetal büyüme geriliği, anormal umbilikal arter doppler dalga formu analizi veya ölü doğum gibi) bulguları görülebilir.

HELLP sendromu, yüksek maternal morbidite ile ilişkili şiddetli bir preeklampsi şeklidir (Weinstein,1982,gebeliğin en ağır tablosu).

ŞİDDETLİ PREEKLAMPSİ

Şiddetli preeklampsi, masif proteinüri (>2g/gün) veya serebral ödem gibi çoklu organ tutulumu, görme problemleri, oligüri (<500ml/gün), akciğer ödemi veya HELLP sendromu ile karşımıza çıkar. En az 4-6 saat ara ile yapılan 2 ölçümde SKB>160 ve/veya DKB>110 tespit edilir. Karaciğer enzimlerinde anlamlı yükselme, trombositopeni (plt < 100bin), dirençli baş ve karın ağrısı, artmış intrakranial hemoraji riski, IUGR görülebilir.

HELLP SENDROMU

Hemolysis of red cell, elevated liver enzyme, low plataletes. Dr. Weinstein tarafından 1982'de tanımlanmıştır. Bir laboratuvar tanısıdır ve preeklampsinin en ağır sonuçlarını temsil

eder. Hızlı ve doğru müdahale edilmezse mortal seyreder.

EKLAMPSİ

Preeklampsi tanılı gebede, başkaca bir sebep yokken nöbet gelişmesidir, çok sık görülmez (%1-4) ancak prognozu ağırdır. Jeneralize konvülsiyon veya koma ile sonuçlanır. Eklampsi, preeklampsi tanısı henüz konmamışken veya proteinüri olmaksızın sadece sınırda kan basıncı artışı olan gebede beklenmedik bir biçimde ortaya çıkabilir.

ETİYOLOJİ:

Preeklampsinin kesin nedeni bilinmemekle birlikte olası nedenler; beslenme bozukluğu, immünolojik yetmezlik, genetik yatkınlık, plazma kan hacminde değşiklik veya sıvı dengesizliği, vazopressör ve vazodilatör mekanizmalarda dengesizlik,anjiyotensin sisteminde bozukluk, damar direncinde bozulma, vücut sıvılarının yer değiştirmesi olarak sayılabilir.

PATOFİZYOLOJİ:

Preeklampsi, gebeliğin multisistemik bir bozukluğudur. Kesin nedeni belirsizdir ve birkaç mekanizma suçlanmıştır. Hastalığın, henüz tam olarak belirlenemeyen sebeplerle, perfüzyonu uygun olmayan şekilde azaltan plasentadan kaynaklandığı düşünülmektedir.

Bazı hastalarda intravasküler hacmin azalması ve endotelyal vasküler sızıntının sonucunda interstisyel hacmin artması, interstisyel protein sızıntısı ve vazokonstriksiyon sonucu hipoperfüzyon ve multiorgan etkileri ortaya çıkar.

Uterin duvarla temas halinde olan fetal koryonik villusler, sitotrofoblastik sütunlar oluştururlar. Dış tabaka olan sinsityotrofoblastlar, aktif biçimde uterus duvarını invaze ederek endoteli bozarlar. Başlangıçta 10-12. gebelik haftasında spiral arterlerin desidual bölümlerine, 15-16. haftalarda myometriumda derin invazyonlar yaparlar. Plesantanın ekstravillöz trofoblastik hücreleri normalde myometriuma yerleşmede başarısız olurlar ve plesantal hipoperfüzyon görülür. Böylece plesanta yeterince gelişemez ve fetüsün ihtiyaçlarını anneden yeterince karşılayamaz.

Anneden daha fazla faydalanmak için bazı mediatörler salınır ve sistemik dolaşıma geçmesi ile vazospazma neden olurlar ve preeklampsi görülür. Plasentanın doğumu ile akut klinik semptomların düzelmeye başlaması, preeklampsinin patogenezinde plasentanın esas rolü oynadığı iddialarını güçlendirmektedir.

İlk trimesterin başlarından başlayarak, sistemik vazodilatasyona yol açan östrojen, progesteron ve relaksin (progesteron gibi nitrik oksit salınımına aracılık eden hormon) dalgalanmaları vardır. Aynı zamanda, renin-anjiyotensin-aldosteron sistemi tuz ve su tutulmasına neden olacak şekilde artar ve plazma hacminde bir genişlemeye yol açar.

KOMPLİKASYONLAR:

Annede; DIC, pulmoner ödem, solunum yetmezliği, karaciğer ve böbrek yetmezlikleri, kafa içi kanamalar, abruptio plasenta

Bebekte; IUGR, preterm doğum, prematurite, ölü doğum, neonatal ölüm görülebilir.

TANI VE TEDAVİ:

Tam kan, tam idrar, kreatinin, karaciğer enzimleri, LDH, 24 saatlik idrarda protein düzeyi (kronik HT üzerine gelişen preeklampside ürik asit eklenmelidir) ve koagulasyon profili (PT, PTT, fibrinojen) görülmelidir. Anormal laboratuvar testleri en geç 12 saatte bir tekrarlanmalı, düzelme yoksa derhal doğum önerilmelidir. NST,USG ve Doppler ile fetal değerlendirme yapılmalıdır.

İdrar tahlilinde proteinüri 1+ veya daha fazla ise, aksi kanıtlanmadıkça hipertansif hamile bir kadın preeklampsi olarak kabul edilmelidir.

Ürik asit seviyelerindeki yükselme derecesinin preeklampsinin şiddeti ile ilişkili olduğu gösterilmiştir. Yüksek laktat dehidrojenaz (LDH) seviyeleri hemolizi gösterir ancak karaciğer tutulumunun bir sonucu da olabilir. Şiddetli preeklampsi veya beklenen doğum durumlarında kan grubu/cross match çalışılmalıdır.

Gebe HT tedavisinde amaç normal bir TA değeri sağlamak değil, kontrollü bir biçimde 140/90 mmHg'nın altına düşürmek olmalıdır. Ani ve agresif kan basıncı düşürülmesi, pek çok tabloda olduğu gibi organ perfüzyonları üzerinde strok gibi ciddi olumsuz etkiler oluşturabilir.

Hafif-orta şiddette HT durumunda KV komplikasyon riski düşüktür, ayaktan takiple ve farmakolojik tedavi dışı önerilerle regülasyon sağlanabilir ancak; özellikle doğuma yakın dönemlerde tuz kısıtlaması önerilmez. Obez gebelerde diyet veya kilo kaybı yerine, kilo alımının vücut kitle indeksine göre kontrolü önerilmektedir.

Aktivite kısıtlaması , yatak istirahati önerilebilir; istirahat kan basıncını düşürür, diürezi arttırır, prematüre doğum riskini azaltır ancak preeklampsiyi önlemez.

Ciddi hipertansiyonlu gebeler hastaneye yatırılmalıdır.

Bazı çalışmalar yeterli kanıt olmamakla birlikte, günde 1 gram kalsiyum takviyesinin, preeklampsi riskini yarı yarıya azalttığını göstermiştir. Yine özgeçmişinde 28. haftadan önce preeklampsi öyküsü olan gebelerde, profilaktik olarak düşük doz asetil salisilik asit önerilmektedir.

Ancak SKB >150 veya DKB > 95 için (160/105), klavuzlarda antihipertansif tedavi başlanması önerilmektedir. Preeklampsi gelişme riski nedeniyle 37-38. haftalarda doğum önerilir.

Şiddetli Gestasyonel Hipertansiyon (TA ≥ 160/110 mmHg) şiddetli Preeklampsi gibi kabul edilmelidir; maternal perinatal morbidite artmaktadır. Hastanede yatırılarak takip edilmeli ve antihipertansif tedavi başlanmalıdır. 34. haftanın altındaki gebelerde steroid verilir, 34. haftadan sonra doğum gerçekleştirilir.

Preeklampside kesin tedavi gebeliğin sonlandırılmasıdır.

MEDİKASYON:

Kan basıncını azaltan ilaçlar; hızlı etki etmeli, kan basıncını kontrollü azaltmalı, kardiyak debiyi düşürmemeli, uteroplasental vasküler kontraksiyonu korumalı, anne ve fetüse yan etki yapmamalıdır.

Kronik hipertansiyonu olan gebeler, ACE inhibitörleri, ARB ve direkt renin inhibitörleri gibi kesinlikle kontrendike ilaçlar dışında kullanmakta oldukları ilaçlara devam edebilirler.

Gestasyonel hipertansiyonda beta blokerler (özellikle oxyprenolol, pindolol ve labetolol), alfa metildopa, prazosin, hidralazin, nifedipin ve isradipin kullanılabilir.

Eklampside nöbetlerin tedavisi ve profilaksisinde **MGSO4** tercih edilir, antihipertansif etki için kullanılmaz. 6343 hastada plasebo ve diğer antikonvülzanlar ile karşılaştırıldığında en etkilisi MgSO4 bulunmuştur. MgSO4; böbreklerden atıldığından idrar çıkışı yakından takip edilmelidir (>30ml/saat olmalı veya 4 saatte 100ml altında olmamalı).Antidotu kalsiyumdur. Yenidoğanda vücuttan atılımı 48 saat sürer. Solunum, kan basıncı ve derin tendon refleksler, yakından takip edilmelidir; TA düşmesi, solunum sayısının <14 olması ve patella refleks kaybı toksisite belirtisidir. İki uygulama yöntemi tanımlanmıştır:

-Zuspan ve Sibai Protokolu; İntravenöz Uygulama: Yükleme dozu: 4 -6 gr / 5-15 dakikada IV infüzyon, İdame dozu : 2 -3 gr/ saat IV infüzyon

-Pritchard Protokolu; İntramuskuler Uygulama: Yükleme dozu : 4 gr/ 3-5 dakikada IV + 10 gr IM (5 gr X 2 gluteal) , İdame dozu : 5 gr/ 4 saat IM

Eğer dozlar arasında 6 saatten fazla zaman geçmiş ise yükleme dozu tekrarlanmalıdır. Tedaviye doğumdan sonra da 12 -24 saat süre ile devam edilmelidir.

Acil durumlarda intravenöz **LABETALOL** veya oral **NİFEDİPİN** ile farmakolojik tedaviye başlanmalıdır. Labetolol; 20 mg IV, takiben 20 – 30 dakikada 20–80 mg, idame 1 – 2 mg/dk, maksimum total kümülatif doz 300 mg olacak şekilde uygulanabilir. Maternal astım ve kalp hastalıklarında kaçınılmalıdır. Nifedipin, 10–20 mg oral, her 20 dakikada bir tekrarlanabilir, bir defada maksimum doz 50 mg, günlük maksimum 180 mg olacak şekilde önerilmektedir.

Diüretiklerden kaçınılmalıdır zira plasentaya giden kan akışını yavaşlatırlar.

SODYUM NİTROPRUSSİT; Hipertansif krizlerde 0,25-5.0 µg/kg/ dk dozlarda infüzyon şeklinde verilebilir.

NİTROGLİSERİN; Akciğer ödeminde tercih edilir ve 5 µg/dk dozda infüzyon şeklinde verilir. Gerekirse doz 3-5 dakikada bir artırılarak 100 µg/dk'ya kadar çıkarılabilir.

HİDRALAZİN artık tercih edilmemekle birlikte 5 mg IV, takiben eğer gerekli ise 5 – 10 mg / her 20 dakikada, maksimum doz 30 mg olacak şekilde uygulanabilir. Maternal hipotansiyona dikkat edilmelidir.

Şiddetli Preeklampsi durumunda gebelik haftası; 24. haftanın altında (fetus viabilite sınırının altında) veya 34. hafta ve üzerindeyse yada maternal veya fetal durum "acil" ise gebelik haftasına bakılmaksızın annenin durumu stabil olur olmaz doğum başlatılmalıdır. 24-25. hatfalarda klinik özellikler ve yarar-zarar dengesine göre aile ile birlikte karar verilmelidir. 34. haftanın altındaki gebelerde ise maternal ve fetal durum stabil ise antenatal steroid yapılmalı ve 48 saat geçince doğum için erişkin ve neonatal yoğun bakım ünitesi bulunan merkeze nakil sağlanmalıdır. 25-34. haftalarda seçilmiş olgularda bekleme ve izlem tedavisi planlanabilir.

Eklampside kesin ve tek tedavi doğumdur. Konvülsiyonlar ve hipertansiyon kontrol altına alınmalı, annenin durumu stabilleştikten hemen sonra doğum gerçekleştirilmelidir.

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İLAÇ VE MADDE YOKSUNLUĞUNA BAĞLI ACİL BAŞVURULARI, HASTA VE YAKINLARIYLA İLETİŞİM

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İLAÇ

Fizyolojik sistemleri ve patolojik durumları değiştirmek, incelemek veya bir hastalığın oluşmasını önlemek amacıyla kullanılan madde veya ürünlerdir. Farmakolojik aktivite gösterirler.

BAĞIMLILIK YAPICI MADDE

Farmakolojik aktivite gösteren ancak ilaç olarak kullanılmayan ve bağımlılık oluşturma potansiyeli bulunan ürünlerdir.

TOLERANS, BAĞIMLILIK VE YOKSUNLUK

İstenilen etkinin oluşması için alınan ilaç ya da maddenin dozunda sürekli olan artışa tolerans denir. Bir maddenin amacı dışında, o maddeye karşı gelişen tolerans sonucu gittikçe artan miktarlarda alınması, kişinin yaşamında sorunlara neden olmasına rağmen kullanımının sürdürülmesi, madde alımı azaltıldığında ya da bırakıldığında yoksunluk belirtilerinin ortaya çıkması ile giden tablo bağımlılıktır. Uzun bir süreden beri düzenli olarak kullanılan bir ilaç ve maddenin birden kesilmesi veya miktarının azaltılması sonucunda oluşan maddeye özgü bir sendrom ise yoksunluk olarak tanımlanır.

ACİL SERVİS BAŞVURULARI

Hastane acil servisleri insan yaşamını tehlikeye sokan durumlarda sağlık gereksinimlerini karşılamak üzere organize edilmiş ve bunun için donatılmış birimlerdir. Acil sağlık hizmetlerinin temel amacı yeterli, güvenli ve uygun olan en kısa zamanda sağlık hizmetini sunabilmektir.

Madde kullanım bozukluğu, ömür boyu sürebilen kronik bir hastalıktır. Bağımlılık yapan maddeler alkol, esrar, opioidler, amfetamin grupları, kokain sentetik kannabinoidler olarak sayılabilir. Madde kullanım bozukluğu, Türkiye'de ve dünya genelinde herkesi biyolojik, zihinsel ve sosyal yönden etkileyen ciddi bir sağlık sorunudur. ***İlacın yanlış kullanımı veya kötüye kullanımı ve yasadışı uyuşturucu kullanımı da dâhil olmak üzere madde kullanım sorunları nedeniyle her yıl ABD›de yaklaşık 6 milyon kişi acil servise müracaat etmektedir.***

Maddenin kötüye kullanımı ile ilgili acil servis ziyaretleri artış göstermektedir. İlacın kötüye kullanımı 2004'ten 2011'e iki kattan fazla, yasa dışı uyuşturucu kullanımı ise 2009'dan 2011'e kadar %25 artış ***göstermiştir.*** Benzer şekilde, alkol ile ilgili acil servise müracaatlar 2006'dan 2011'e %34 oranında artmıştır. Ayrıca madde kullanımına bağlı olarak düşmeler, yanıklar ve motorlu taşıt kazaları gibi nedenler sonucunda da hastalar acil servislere gelmektedir.

Madde bağımlısı kişilerle ilgili en çok sorun yaşanan yer acil servislerdir. Bu sorunların başında; madde bağımlısı kişinin gösterdiği şiddet davranışı, farklı maddelere bağlı olarak ortaya çıkan ve birbirinden farklı klinik yaklaşım gerektiren entoksikasyon ve yoksunluk tabloları ve alkol ve madde kullanımı ile ilgili yeterli sorgulamanın bazen yapılamaması gelmektedir.

ABD'de 2008 yılında madde kullanım bozukluğuna bağlı olarak 12 yaş üstü yaklaşık 374.000 kişi acil servislere başvurmuştur. Bu sayı aynı yıl içindeki madde kullanım bozukluğuna bağlı tüm başvuruların %85'ini oluşturmaktadır. Bu verilere bakılacak olunursa madde bağımlıları ile en sık olarak karşılaşanların acil servis çalışanları olduğu anlaşılmaktadır. Alkol ve madde kullanım bozuklukları saldırganlık, şiddet ve intihar gibi tabloların ortaya çıkmasında rol oynamakta, aynı zamanda birçok psikiyatrik hastalığa da eşlik edebilmektedir.

HASTA VE HASTA YAKINLARI

Alkol ve madde kullanım bozukluklarında hastayı acil olarak değerlendiren hekimin dikkat edeceği iki önemli nokta şunlardır;

- hasta madde etkisi (entoksikasyon) altında mı?

- hasta maddenin kesilmesine bağlı olarak yoksunlukta mı?

Madde etkisi altındaki hastaya karşı hekimin dikkat etmesi gerektiren hususların başında yansız, yüksüz ve yargısız olarak hastaya yaklaşmaktır. Hastaya karşı tutarlı, nazik ve ödün vermeyen bir tutum takınılması, ileride kurulacak tedavi ilişkisinin temelini oluşturmaktadır. Hastalar mutlaka çok eksenli olarak değerlendirilmeli, diyabet, kalp yetmezliği gibi başka rahatsızlıklara da sahip olabilirler. Hastanın öyküsü alınmalı, fizik muayenesi yapılmalı, özgeçmiş ve soygeçmişi ile ilgili bilgiler, hastanın kullandığı maddeler ve bunların miktarı sorgulanmalıdır. Sorgulamada hastanın doğruyu söylememe ihtimali de akılda tutulmalıdır. Zira hastalar, çoğu zaman kullandıklarından daha az miktarda alkol aldıklarını veya eroin gibi yasa dışı maddeleri kullanmadıklarını söyleyebilir.

Dikkat edilmesi gereken önemli hususlardan birisi de saldırgan ve tehlikeli hastayı değerlendirirken göz önünde bulundurulması gereken prensiplerdir. Böyle bir hasta ile görüşürken öncelikle güvenlik görevlilerinden yardım istenmelidir. Görüşme yaparken hasta ile tartışmaktan kaçınılmalı, hastaya dostça, arkadaşça ve sakin bir şekilde yaklaşılmalıdır. Görüşme yapılacak ortamda kırılacak eşya ya da çevredekilere zarar verebilecek kesici eşyalar olmamalıdır. Ayrıca yine görüşme yapılan yerin geniş ve ferah bir yer olmalıdır. Hastanın saldırgan davranışları sürüyorsa hastanın klinik tablosu da dikkate alınarak hasta tespit edilebilir. Medikal tedavide ise en önemli esas, hastanın hızla denetim altına alınmasıdır. Sakinleştirme, ajitasyonu giderme kendisi ve çevresine zarar vermesini engelleme ilk hedeflerdir. Bu anlamda hastanın durumuna göre antipsikotikler ve benzodiazepinler yalnız başlarına ya da kombine olarak uygulanabilir.

İLETİŞİM

Madde kullanımının yaygınlaşması ile acil servise madde kullanımı nedeni ile gelen kişi sayısında önemli derecede artış meydana gelmiştir. Klinisyenlerin acil servislere yoksunluk, entoksikasyon, adli kanallar ve ailenin zorlaması gibi kendi istekleri dışındaki nedenlerle gelen madde kullanan kişilerle zaman zaman iletişim kurmada güçlük yaşadıkları bilinmektedir. Bu güçlük klinisyenin optimal tedavi düzenlenmesini engellemekle beraber sorunların ortaya çıkmasına da neden olabilmektedir. Madde kullanımı nedeni ile başvuran bireyler ve yakınları ile sağlıklı iletişim için sosyodemografik özellikleri, mevcut psikolojik durumu ve kişilik özellikleri gibi davranışlarını etkileyen faktörleri bilmesi gerekmektedir.

Madde kullanım riskini artıran etmenler; ailede alkol-madde kullanan birinin varlığı, parçalanmış aile, aile içinde şiddet görme, okulda disiplin cezası ve davranış sorunları, adli sorunlar ve göç sonrası şehir yaşamına adaptasyonda güçlük olarak karşımıza çıkmaktadır.

Madde kullanımının insan vücudu üzerinde yaptığı etkiler, yoksunluk belirtilerinin yol açtığı duygudurum ve madde kullanan kişilerin genel özellikleri kişinin engelleme eşiğinin düşmesine yol açabilmektedir. Engelleme eşiğinin düşüklüğü kişinin diğer bireylere karşı tahammülünün az olmasına, mevcut sıkıntısına katlanabilme gücünün düşmesine dolayısı ile ani ve aşırı tepkiler vermesine neden olabilmektedir. Aynı zamanda maddenin beyin üzerindeki anlık etkisi veya maddenin uzun süreli kullanımına bağlı gelişen bilişsel işlevsellerin azalması, bireyin olayları tam ve sağlıklı değerlendirmesinin ve yargılamasının bozulmasına neden olabilmektedir. Dolayısı ile klinisyen bu ihtimalleri göz önünde bulundurarak hasta ile iletişim kurmalı, hastanın beklenilenden farklı tepkiler verebileceğini göz ardı etmemelidir.

Acil servise madde kullanımı ile gelen hasta değerlendirilirken açık, tutarlı, kararlı ve dürüst olunmalıdır. Hastayı etiketlemek, yargılamak, öğüt vermek, tehdit etmek, utandırmak, ders vermek, sorunları ahlaki ve dini pencereden açıklamak sıkça yapılan yanlışlardır. Hastanın kendisini ifade edebilmesi ve sorunları tam olarak anlatması için aktif dinleme ve empati yapılması, sorunların çözümü ve tedavi için seçenekler sunulması, hastayı destekleyici olunması, dürüst ve samimi olunması ve hastaya yardım arayışına yanıt bulabileceğinin hissettirilmesi gerekmektedir.

Madde kötüye kullanımı bulunan hastaları değerlendirmek genellikle zordur. Hastalar tedavi konusunda kararsızlık yaşamaktadır. Zaman zaman aile ve çevrenin baskısı ile tedaviye başvurabilmektedirler. Hastalar güvenliklerinden endişe ettiklerinden ya da bazen daha çok ilaç temin edebilmek için madde kullanıp kullanmadıkları, ne kullandıkları, ne miktarda kullandıkları gibi konularda doğru bilgi vermeyebilirler. Bu nedenle aile gibi başka kaynaklardan da bilgi edinmek önemlidir. Hasta ve yakınlarının acil serviste alacakları tedaviye ilişkin beklentileri yüksek ve gerçekçi olmayabilir. Bu durum klinisyenin hastanın acil müdahale gerektiren tıbbi durumlarını değerlendirerek gerekli tıbbi müdahale yapmasında güçlük oluşturabilmektedir.

Hasta yakınları ile görüşmeler hastadan izin alınarak ve/veya hastanın eşliğinde yapılmalıdır. Hasta yakınları endişeli veya öfkeli olabilirler. Bağımlılığın kronik ve tedavi edilebilir bir beyin hastalığı olduğunu söylemek, hasta yakınlarının endişe ve öfkesini azaltmakta işe yarayabilir. Aynı zamanda bağımlılığın ahlaki bir bozukluktan ziyade tıbbi bir durum olduğunu söylemek hasta yakınlarının hastaya gösterdikleri tepkileri azaltabilir. Hastalık hakkında kısa bilgilendirme yapıldıktan sonra ALO 191, danışma merkezleri, psikiyatri poliklinikleri ve AMATEM'lerden yardım alabilecekleri bilgisi hasta ve yakınına verilmelidir.

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ACİLDE SEZARYEN

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Sezaryen ile doğum, en eski cerrahi prosedürlerden biridir. MÖ 800'e kadar uzandığı bilinmektedir. Bu doğum yöntemi sonunda Julius Caesar'ın doğum şekline atfedildiğinden "Sezaryen" olarak anılmıştır. Antik kültürlerde orta çağın sonuna kadar sezaryen, ceninin annesinden ayrı defnedilmesini zorunlu kılan kral hukuku, babanın mirasına ilişkin yasal haklar ve yeni doğanın vaftiz edilmesini zorunlu kılan dini motiflerden dolayı yapılırmış. 1980'lerdeki ek vaka raporları, annenin hayatta kalmasını iyileştirmek için kullanımını tanımladı(1).

Gebenin kardiyak arrest ve resüsitasyonu nadirdir. Hamilelik sırasında gerçek kardiyak arrest insidansının yaklaşık 30.000 gebelikten biri olduğu tahmin edilmektedir. Yapılan çalışmalarda 1986'dan önce sadece 188 vaka bildirilmiş. 1986›dan 2004›e kadar, Amerika Birleşik Devletleri›nde sadece 38 ek vaka bildirilmiştir. Bunların çoğu acil servis ortamında gerçekleştirilmiştir ve ara sıra raporlar hastane öncesi senaryoları belgelemektedir. Kısıtlı olan veriler, başarılı maternal resüsitasyonlarla fetal hayatta kalma oranının %70'e kadar çıkabildiğini göstermiştir(2). Hamilelik sırasında kardiyak arrestin nadir görülmesi nedeniyle, perimortem sezaryen nadir görülen bir işlemdir. En yaygın olarak, hamilelik sırasında arrest, obstetrik anesteziye ve daha nadiren travmaya bağlanır(3).

Perimortem sezaryen (PMCS); Fetüsün annenin ölümü sırasında veya ölümüne yakın bir zamanda gerçekleştirilen cerrahi doğumudur. Hem anneye hem de fetusa perfüzyonu yeniden sağlama girişiminde aortakaval kompresyonu ortadan kaldırmak için kullanılır. Endikasyonlarının bilmek ve prosedürü uygulamak önemlidir. Böylece hem anne hemde yenidoğanın hayatta kalma şansı artar(3). İlk temel yaşam desteği ve ileri kardiyak yaşam desteği müdahaleleri, kardiyak arrestin ardından 4 dakika içinde maternal dolaşımı geri getiremezse, uterusun ≥24 haftalık olması koşuluyla perimortem sezeryan önerilir. Perimortem doğum için hazırlıklar, prosedürün uygun şekilde yürütülmesi için resüsitasyon ekibi tarafından en iyi şekilde yürütülmelidir(4). Resüsitatif histerotominin amacı öncelikle annenin hayatını kurtarmayı amaçlamalıdır. Uterusun yaptığı aorta-kaval basınç ortadan kalkar, annenin akciğer rezervi artar. Fetal dolaşım ortadan kalktığından oksijenin tamamı anneye gider. Böylece annenin hayatta kalmasını iyileştirir(5). Pre- arrest veya arrest olan bir hamile endikasyon dahilinde sezaryen planlanıyorsa, anne ve bebeğin en yüksek hayatta kalma olasılığı, profesyonel bir ekiple erken müdehale ile olur. Bu durumda acil tıp doktorları, kadın doğum, pediatrist, neonatolog, anestezi, gerekli ise ilgili branş travma uzmanları ve eğitilmiş hemşirelik personelinden oluşan bir ekip ile iş birliği içinde yapılmalıdır(6). PMCS gerçekleştirilirse, 24 haftadan sonra %20 ila %30 fetal hayatta kalma olasılığı vardır. Daha yeni teoriler, resüsitatif histerotominin birincil amacı annenin resüsitasyonu olduğundan, 24 hafta kuralını tartışır. Hastanın gebelik yaşı bilinmeyebilir ve ultrason kullanımı pratik değildir. Fundal yüksekliğin hızlı bir değerlendirmesi, gebelik yaşının tahmin edilmesine yardımcı olabilir. Uterus fundus göbekte görülebiliyorsa, gebelik yaşı yaklaşık 20 hafta olarak kabul edilebilir. Resüsitatif histerotomi, arrestin ilk dört dakikasında yapılmalıdır. Çünkü bu süre, bebek için anoksik yaralanmadan sonra nörolojik iyileşmede ani bir düşüşün olacağı zamandır. Amerikan Kalp Derneği (AHA) CPR ve Acil Kardiyovasküler Bakım kılavuzları, 2 döngü CPR'dan sonra resüsitatif histerotomiye başlamayı önermektedir(3).Perimortem sezaryen yapan hekim ideal olarak en cerrahi deneyime sahip kişi olmalıdır. Tercih edilen başlangıç yaklaşımı orta hat dikey insizyondur. İlk insizyon uterus fundus seviyesinden pubik simfizine kadar başlamalıdır. Spontan geri dolaşım elde edilene kadar annede resütasyona devam edilmelidir ve elde edilirse ameliyathanede daha fazla kapatmaya devam edilmelidir(7). 24 haftadan küçük gebeliklerde ve kısa resüsitasyon sonrası spontan dolaşımın geri döndüğü hastalarda perimortem sezeryan düşünülmemektedir. Resüsitasyonunun bir parçası olarak kabul edildiğinden, bilgilendirilmiş onam formu gerekli değildir.

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AKILLI TRİYAJ YAZILIMLARI VE ACİL SERVİS UYGULAMA ÖRNEKLERİ

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Acil servise başvuran hastaların sayısı gün geçtikçe artmaktadır. Hasta sayısındaki bu artış hastaların bekleme sürelerinin de artasına neden olmaktadır. Bekleme süresinin artması gerçekten acil durumu olan hastaların tanı ve tedavilerinde gecikmeye neden olabilmektedir (1). Bu nedenle hastaların triajının dikkatli bir şekil yapılması gerekir.

Triaj sistemi genellikle fazla sayıda hasta ya da yaralı olduğu durumlarda hastaların klinik durumlarının sınıflanması esasına dayanır. Tarihsel olarak ilk defa 1804-1814 arasında Fransa'da imparator Napolyon Bonaparte döneminde uygulanmıştır. Napolyon'un baş cerrahı Dominique Jean Larrey, savaş sırasında tıbbi kaynakların iyi bir şekilde yönetilmesi amacıyla ağır yaralı askerlere herhangi bir müdahalede bulunmayıp hafif yaralı askerlere uygun tedaviler sağlayarak savaşa dönüş yapmaları için triyaj uygulamıştır (2). Daha sonrasında savaşlarda triaj işlemine devam edilmiştir. Ancak sivil triaj uygulaması ilk defa 1963'de Amerika Birleşik Devletleri (ABD) Yale Newhaven Hastanesi acil servisinde uygulanmış ve 1964'de Weinermann ve arkadaşları ilk sivil triyaj uygulamasını yazılı olarak bildirmiştir (3). Daha sonraki yıllarda tirjaj sistemlerinde uyarlamalar yapılarak kullanılmaya devam edilse de amaç her zaman acil hastaların öncelik-lenmesi olmuştur.

Acil serviste hastanın aciliyet durumunun değerlendirildiği ilk nokta triyaj aşamasında yer alır. Triyaj sistemleri, sağlık profesyonelleri tarafından, tedavi aciliyetine göre hastalara öncelik seviyeleri atamak için kullanılır. Bununla birlikte, kritiklik göstergesi olarak kolayca tanınmayan semptomlar gösteren kritik hastalar olabilir. Bu hastalar zamanında teşhis edilmezlerse tıbbi gözlem için uzun süre beklemek zorunda kalabilir. Bu durum mortalite ve morbidite riskinin artmasına neden olabilir. Bu nedenle günümüzde sağlık profesyonelinin zamanında ve doğru karar vermesine yardımcı olacak etkin bir triyaj sistemine olan ihtiyaç hayati önem kazanmaktadır.

Günümüzde teknolojik gelişmelerin artması, yapay zekanın hayatımızın her alanında yer alması sonucunda triaj sistemleri de yapay zeka ile tanıştı. Karar verme destek sistemleri (KDS) veya basit karar destek sistemleri (B-DSS), karar vericilere yardımcı olmak ve bir kullanıcının karar verme sürecinin tüm aşamalarını etkileşimli olarak desteklemek için tasarlanmış bilgi sistem-leridir (4). Yapay zekanın karar verme sistemlerine entegre olması sonucunda akıllı karar destek sistemleri (I-KDS) ortaya çıktı. I-KDS, insan müdahalesi olmaksızın yeni verilere ve bilgilere hızlı ve başarılı bir şekilde yanıt verebilir, kafa karıştırıcı ve karmaşık durumlarla başa çıkabilir, önceki deneyimlerden ders alabilir, çevreyi anlamak için bilgiyi uygulayabilir, çevredeki farklı unsurların göreceli önemini kabul edebilir.

Klinik ortamda KDS, klinik karar destek sistemleri (CDSS) olarak adlandırılır ve klinisyenlere ya da diğer sağlık profesyonellerine, hastaya özel bilgi ve öneriler sağlar. CDSS genellikle doğru teşhislerin sağlanması, önlenebilir hastalıkların zamanında taranması, advers ilaç olaylarının önlenmesi gibi klinik ihtiyaçların ele alınması için kullanılır (5). Bununla birlikte, CDSS potansiyel olarak verimliliği artırabilir, maliyetleri azaltabilir. Bu tür sistemlerin amacı, karar vericilerin – klinisyenlerin, hastaların ve sağlık kuruluşlarının – yerini almak değil, karar verme süreçlerinde ilgili bilgi ve desteği sağlamaktır.

Akıllı tıraj sistemleri birçok avantaja sahiptir. Sağlık profesyonelinde yetersizlik, artan sağlık maliyetleri, tıbbi kaynakların daha iyi kullanılmasını sağlamak gibi nedenler dijital çözümlere ihtiyaç duyulmasına neden olmaktadır. Ayrıca hastaların doktorlara ve sağlık hizmetlerine 7/24 mobil, hızlı ve kolay erişim beklentileri, hasta merkezli çözümlerin geliştirilmesini sağlar. Kalabalık odalarda beklemek zorunda kalmadan uzaktan veya evde triyaj, teşhis ve tedavi edilme ihtiyacı (COVID-19 pandemisinde olduğu gibi) akıllı triaj sistemlerinin gerekliliğini artırmaktadır. Bu ihtiyaçların çeşitliliği akıllı triaj sistemlerde de farklı modeller geliştirilmesini sağlamıştır. Örneğin Isabel Healthcare sistemleri çoğunlukla tıp doktorları için tasarlanmıştır. Kullanıcının bazı demografik bilgileri ve semptomları girmesine izin verir ve tüm olası teşhislerin bir listesini önerir, bunları olasılığa göre sıralar ve potansiyel olarak tehlikeli olanları kırmızı olarak işaretler. Ayrıca, potansiyel tanının daha fazla araştırılması için birçok literatür ve web kaynağı görüntüler (UptoDate gibi özel tıbbi kaynaklar). ADA sistemi ise hastalar için geliştirilmiştir. Benzer bir başlangıç noktası vardır, ancak daha sonra hastayla ilk girilen semptom ve ek semptomların varlığı hakkında ek bilgi toplamak için uzun bir diyaloga girer. Diyaloğun sonunda, ADA, durumun aciliyeti hakkında genel ve üst düzey bir özet sağlar ve en olası tanıların bir listesini gösterir (aynı semptomları olan 10 kişiden n'sinde bu durum vardı gibi). Görüntülenen her teşhis için, "bu durum genellikle evde yönetilebilir", "tıbbi yardım alın", "acil bakım arayın" gibi ilişkili bir öneri vardır (6).

Akıllı triaj sistemlerinini incelendiği bir çalışmada akıllı triaj sistemlerinin çoğunlukla klinisyenin doğru karar vermesinde pozitif yönde etkili olduğundan bahsederken bazı durumlarda gereksiz ayrıntılar vererek yanlış karar verme eğilimine de neden olduğundan bahsedilmiştir (7). Sağlık profesyonelinin yaptığı triajda hastanın şikayetleri, semptom ve bulguları, vital bulguları, medikal geçmişi sorgulanırken sağlık profesyonelinin bellibir deneyim ve donanaıma sahip olması gerekir ancak akıllı triaj sistemleri daha algoritmik bir değerlendirme yetisine sahip olduğu için hata yapma riski daha azdır (8). Bunun yanında hasta hakkında karar vermede etkili olan sezgisel karar verme yetisinden mahrum olan, analitik düşünme üzerine kurulu akıllı triaj sistemleri pediatrik ya da geriatrik hasta grupları gibi özellikli hasta gruplarında hata yapabilir. Farklı alt gruplardaki hasta özellikleri arasındaki yüksek heterojenlik nedeniyle, acil servisteki tüm hasta tipleri için sonucu tahmin etmek için tek bir model kullanmak zor görünmektedir (9).

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9. Lee, J. T., Hsieh, C. C., Lin, C. H., Lin, Y. J., & Kao, C. Y. (2021). Prediction of hospitalization using artificial intelligence for urgent patients in the emergency department. Scientific reports, 11(1), 1-8.

SEPSİS VE AKCİĞER YARALANMASI

Doç. Dr. Ali GÜR
Atatürk Üniversitesi - Acil Tıp AB

SEPSİS REHBERLERİ

- Surviving Sepsis Campaign guidelines for management of severe sepsis and septic shock: 2004
- Surviving Sepsis Campaign: international guidelines for management of severe sepsis and septic shock: 2008
- Surviving sepsis campaign: international guidelines for management of severe sepsis and septic shock: 2012
- Surviving Sepsis Campaign: International Guidelines for Management of Sepsis and Septic Shock: 2016
- The Japanese Clinical Practice Guidelines for Management of Sepsis and Septic Shock 2020 (J-SSCG 2020)
- Surviving sepsis campaign: international guidelines for management of severe sepsis and septic shock: 2021

Sepsis, enfeksiyona karşı düzensiz konak yanıtının neden olduğu yaşamı tehdit eden organ disfonksiyonudur.

Sepsis ve septik şok, her yıl dünya çapında milyonlarca insanı etkilemektedir.

Multiple organ disfonksiyonuna neden olmaktadır.

Etkilediği kişilerin 1/3 ile 1/6 sını öldüren önemli bir sağlık sorunudur.

KLİNİK

Hipotansiyon

Taşikardi

Ateş

Ciddiyet arttıkça şok bulguları, siyanoz, organ yetmezliği

En sık Akciğer yaralanması (%25-%42)

- Akut olarak hastalanan, yüksek riskli hastalar için sepsis taraması ve tedavi için standart operasyon prosedürlerini içeren, sepsis için bir performans iyileştirme programının kullanılması - Recommend (Güçlü)
- Sepsis veya septik şok için tek bir tarama aracı olarak SIRS, NEWS(Ulusal Erken Uyarı Skoru) veya MEWS'(Değiştirilmiş Erken Uyarı Skoru)'na kıyasla qSOFA'nın kullanılmaması - Recommend (Güçlü)
- Ne SIRS ne de qSOFA, sepsis için ideal tarama araçları değildir ve başucu klinisyenlerinin her birinin sınırlamalarını anlaması gerekir.
- Sepsis olduğundan şüphelenilen yetişkinler için kan laktat ölçümü yapılması (1.6 to 2.5 mmol/L,) – Suggest (Zayıf)
- Yükselmiş veya normal laktat düzeyinin varlığı, sepsis şüphesi olan hastalarda nihai sepsis tanısı olasılığını sırasıyla önemli ölçüde artırır veya azaltır. Bununla birlikte, tek başına laktat, tanıyı kendi başına ekarte edecek veya ekarte edecek kadar hassas veya spesifik değildir.

BAŞLANGIÇ RESÜSİTASYONU

- Sepsis ve septik şok tıbbi acil durumlardır ve tedavi ve resüsitasyonun hemen başlanması – Recommend (En iyi uygulama)
- Sepsis kaynaklı hipoperfüzyon veya septik şoklu hastalar için resüsitasyonun ilk 3 saati içinde en az 30 mL/kg intravenöz (IV) kristaloid sıvı verilmesi – Suggest (Zayıf öneri)
- Kapiller dolum süresinin kullanılması - Suggest (Zayıf öneri)
- Sıvı resüsitasyonuna rehberlik etmek için, fizik muayene veya tek başına statik parametreler yerine dinamik ölçümlerin kullanılması - Suggest (Zayıf öneri)
- Laktat düzeyi yükselmiş hastalarda serum laktat düzeyini kullanmama yerine serum laktatını azaltmanın resüsitasyona rehberlik etmesi - Suggest (Zayıf öneri)

ORTALAMA ARTER BASINCI

- Vazopresör kullanan septik şoklu yetişkinler için, daha yüksek ortalama arter basıncı (MAP) hedeflerine kıyasla 65 mm Hg'lik bir başlangıç hedef MAP - Recommend (Güçlü Öneri)

YOĞUN BAKIMA KABUL

- Yoğun bakım ünitesine kabul edilmesi gereken sepsis veya septik şoklu yetişkinler için, hastaların 6 saat içinde yoğun bakım ünitesine kabul edilmesi - Suggest (Zayıf öneri)

ENFEKSİYON- TANISI

- Sepsis veya septik şok şüphesi olan ancak enfeksiyonu teyit edilmemiş yetişkinler için, sürekli olarak yeniden değerlendirmeyi ve alternatif tanıları araştırmayı ve alternatif bir hastalık nedeni gösteriliyorsa veya kuvvetli bir şekilde bundan şüpheleniliyorsa ampirik antimikrobiyallerin kesilmesi – Recommend (En iyi uygulama)

ANTİBİYOTİK ZAMANI

- Olası septik şoku olan veya sepsis olasılığı yüksek olan yetişkinler için antimikrobiyalleri hemen, ideal olarak 1 saat içinde uygulama- Recommend (Güçlü Öneri)
- Şok olmaksızın olası sepsisi olan yetişkinler için, akut hastalığın bulaşıcı olmayan nedenlerine karşı bulaşıcı olma olasılığının hızlı bir şekilde değerlendirilmesi - Recommend (En iyi uygulama)
- Zaman ve enfeksiyon endişesi devam ederse, sepsisin ilk tanındığı zamandan itibaren 3 saat içinde antimikrobiyallerin verilmesi - Suggest (Zayıf öneri)
- Enfeksiyon olasılığı düşük olan ve şoku olmayan yetişkinler için, hastayı yakından izlemeye devam ederken antimikrobiyallerin ertelenmesi - Suggest (Zayıf öneri)

ANTİBİYOTİK BAŞLANMASINDA BİYOBELİRTEÇLER

- Sepsis veya septik şok şüphesi olan yetişkinler için antimikrobiyallere ne zaman başlanacağına karar vermede, tek başına klinik değerlendirmeye kıyasla, prokalsitonin artı klinik değerlendirmenin kullanılması – Suggest against (Zayıf öneri)

ANTİBİYOTİK SEÇİMİ

- Metisiline dirençli Staph. aureus (MRSA) açısından yüksek risk taşıyan sepsis veya septik şoklu yetişkinler için, MRSA kapsamı olmayan antimikrobiyallerin kullanılması yerine MRSA kapsamına sahip ampirik antimikrobiyallerin kullanılması – Recommend (En iyi uygulama)
- MRSA riski düşük olan sepsis veya septik şoklu yetişkinler için, MRSA kapsamı olmayan antimikrobiyallerin kullanımına kıyasla MRSA kapsamına sahip ampirik antimikrobiyallerin kullanılması – Suggest against(Zayıf öneri)
- Çoklu ilaca dirençli (MDR) organizmalar için yüksek risk taşıyan yetişkinler için, bir gram-negatif ajan yerine ampirik tedavi için gram-negatif kapsama sahip iki antimikrobiyal kullanılması - Suggest (Zayıf öneri)
- MDR organizmaları için düşük riski olan yetişkinler için, ampirik tedavi için bir gram-negatif ajanla karşılaştırıldığında iki gram-negatif ajan kullanılması – Suggest against (Zayıf öneri)
- Etken patojen ve duyarlılıklar bilindikten sonra çift gram-negatif kapsamın kullanılması - Suggest against(Zayıf öneri)
- Fungal enfeksiyon riski yüksek olan sepsis veya septik şoklu yetişkinler için, antifungal tedavi vermemek yerine ampirik antifungal tedavinin başlanması- **Suggest (Zayıf öneri)**
- Fungal enfeksiyon riski düşük olan sepsis veya septik şoklu yetişkinler için antifungal tedavinin ampirik kullanımı- **Suggest against (Zayıf öneri)**
- Sepsis veya septik şok tanısı olan ve yeterli kaynak kontrolü yapılan, optimal tedavi süresinin belirsiz olduğu hastalarda, antibiyotik tedavisinin sonlandırılmasında tek başına klinik değer-

lendirme yerine prokalsitonin ve klinik değerlendirmenin birlikte kullanılması- **Suggest (Zayıf öneri)**

HEMODİNAMİK YÖNETİM – SIVI YÖNETİMİ

- Resüsitasyon için birinci basamak sıvı olarak kristaloidleri kullanımı- Recommend (Güçlü Öneri)
- Resüsitasyon için normal salin yerine dengeli kristaloid kullanılması - Suggest (Zayıf öneri)
- Büyük hacimlerde kristaloid alan hastalarda, tek başına kristalloidler yerine albümin kullanılması - Suggest (Zayıf öneri)
- Resüsitasyonda nişasta kullanılması - Suggest against (Güçlü öneri)
- Septik şok hastalarında, ilk seçenek olarak noradrenalin kullanılması- Recommend (Güçlü Öneri)
- Norepinefrin tedavisi altında yetersiz MAP seviyelerine sahip septik şoklu yetişkinlerde, norepinefrin dozunu artırmak yerine vazopressin eklenmesi- Suggest (Zayıf öneri)
- Septik şoku olan ve norepinefrin ve vazopressine rağmen MAP düzeyleri yetersiz ise Epinefrin eklenmesi - Suggest (Zayıf öneri)
- Septik şoklu yetişkinler için terlipressin kullanılma - Suggest against (Zayıf öneri)
- Yeterli volüm durumu ve arteriyel kan basıncına rağmen inatçı hipoperfüzyonlu septik şok ve kardiyak disfonksiyonu olan yetişkinler için, ya dobutamin norepinefrine eklenebilir ya da tek başına epinefrin kullanılması -Suggest (Zayıf öneri)
- Yeterli volüm durumu ve arteriyel kan basıncına rağmen septik şok ve kardiyak disfonksiyonu olan ve inatçı hipoperfüzyonu olan erişkinler için levosimendan kullanılması - Suggest against (Zayıf öneri)

ISOLATED TUBAL TORSION: A RARE CAUSE OF ACUTE ABUSE IN ADOLESCENT PERIOD

Mustafa Tuşat, Aksaray University Medical School Department of Pediatric Surgery, AksarayTürkiye
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INTRODUCTION:

Isolated tubal torsion (ITT) is one of the rare causes of acute abdomen in pediatric patients admitted to the emergency department. It is most commonly observed in the reproductive period and its incidence is reported to be 1/1,500,000. Since it is difficult to diagnose in the preoperative period, the diagnosis is usually made during surgery, and tubal-sparing surgery cannot be performed due to delay in diagnosis, and ultimately it may affect fertility.

METHOD-MATERIALS:

A 15-year-old girl with regular menstrual cycles applied to our emergency department with complaints of sudden onset of pain, nausea and vomiting in the left lower quadrant of the abdomen 8 hours ago. In the examination of the patient, whose history was unremarkable, there was tenderness and defense in the left lower quadrant. In the laboratory examination, the patient's white blood cell count was 16,000, and other blood parameters were normal. No pathology was found in ADBG. In the abdominal ultrasonography of the patient, it was reported that both ovaries were normal and the blood supply was normal, and a 65*55 mm diameter cystic lesion without blood supply was detected in the left adnexal lodge. The patient, whose pain worsened during the follow-ups, was operated for acute abdomen. On exploration, it was observed that the left ovary, uterus and right adnexal structures were normal, and the left tuba uterina and the paratubal cyst distal to it were 720° torsioned and necrotic (Figure 1). The pathology report of the case who underwent left salpingectomy with the cyst due to the severely necrotic appearance of the tubal was reported as gangrenous paratubal cyst and tuba uterina. The patient, who did not develop any postoperative complications, was discharged on the 3rd day of her hospitalization.

RESULTS:

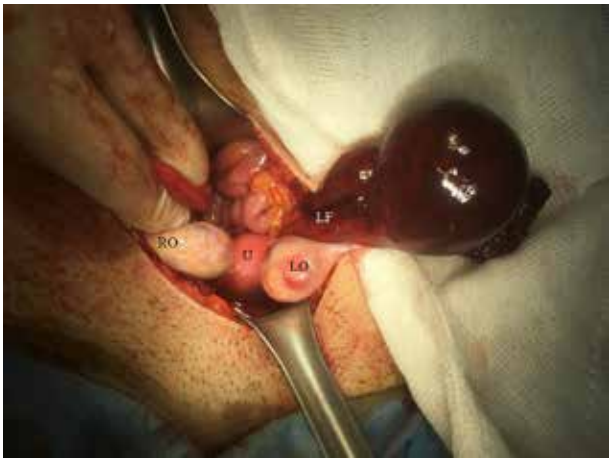
Although the exact cause of ITT, which is one of the very rare causes of acute abdomen in children and adolescents, is not known, hydrosalpinx, paratubal and ovarian cysts, ectopic pregnancy, sudden body movements, congenital anomalies, previous surgery and related adhesions are among the reasons accused. It was stated that ITT is common on the right, and the reason for this is that the sigmoid colon restricts the movements of the left tuba and the patient who presented with suspected right lower abdominal pain was operated on with the suspicion of appendicitis and was diagnosed with ITT. The clinical manifestations are acute lower quadrant pain, nausea and vomiting. The pain may intensify over time and spread to the groin. Although leukocytosis is a common condition, it may not always be observed. Although natural-looking ovaries with dilated fallopian tube or adnexal cystic mass on sonographic examinations are helpful in the diagnosis, the diagnosis is often made during surgery. Salpingectomy is performed in cases where tubal necrosis is observed or blood supply does not return after tubal detorsion.

CONLUSION:

Absence of specific clinical and radiological findings associated with ITT and not considering ITT in the differential diagnosis cause diagnostic delay. The diagnosis of ITT should be considered primarily in children and adolescents presenting with acute lower abdominal pain and an adnexal cystic mass in which both ovaries are normal and without blood supply on USG. Early diagnosis and surgical treatment are very important as tubal damage can affect future fertility.

KEYWORDS: Acute abdomen, adolescent, isolated tubal torsion

Figure 1



AKUT KALP YETMEZLİĞİNDE RİSK DEĞERLENDİRİLMESİ

Mustafa Safa Pepele
Turgut Özal Üniversitesi Tıp Fakültesi

TANIM

Akut kalp yetmezliği, hastanın yeterince şiddetli bir şekilde hızlı veya kademeli olarak kalp yetmezliği semptomlarının başlaması ve acil tıbbi yardım istemesi, plansız hastaneye yatışının gerekmesi anlamına gelir.

AKY'li hastalarının tedavilerinin planlanması için acil değerlendirilmesi gerekir

AKY, 65 yaş üstü kişilerde hastaneye yatışların önde gelen nedenidir.

Yüksek mortalite ve tekrarlayan hastaneye yatış oranları mevcuttur.

Hastane içi ölüm oranı %4 ila %10 arasında değişmektedir.

Taburculuk sonrası 1 yıllık ölüm oranı %25-30, ölüm veya tekrar yatış oranları %45'ten fazladır.

AKY'NİN EN SIK TETİKLEYİCİ FAKTÖRLERİ

Atriyal fibrilasyon,

Akut MI veya iskemi,

İlaç alımının (diüretik) kesilmesi,

Artmış sodyum yükü,

Miyokard fonksiyon bozukluklarına sebep olan ilaçlar

Aşırı fiziki efordur.

Önceden var olan kardiyak disfonksiyonu olan hastalarda spesifik dış faktörler (anemi, gis kanama, enfeksiyon vb.) Aky'yi hızlandırabilir

KLİNİK

Hastalar ağır solunum sıkıntısı ile gelir

Köpüklü pembe veya beyaz balgam

Dinlemekle raller s3 s4 duyulabilir

Genellikle taşikardi ve hipertansiyon

AF ve VES gibi disritmiler yaygındır

Efor dispnesi, ortopne, paroksismal nokturnal dispne

Sağ ventrikül yetmezliği olanlarda ekstiremitede ödem ve juguler venöz dolgunluk, hepatomegali ve hepatojuguler refleks olabilir Kalp yetmezliği olan hastaların %80'i acil servisten taburcu olur Tersine acil serviste akut kalp yetmezliği olan hastaların %80'i hastaneye yatırılır.

Bazı hastalar hastaneye yatıştan açıkça fayda görse de, acil serviste AKY olan hastaların %50'ye varan kısmı taburcu edilebilir veya müşahede altına alınabilir.

Acil servisten hastaneye yatan hastaların çoğunda kan basıncı >140 mmHg ve B tipi natriüretik peptit <1000 pg gibi daha düşük risk özellikleri gösterir.

Bunun sebebi acil hekimi tarafından acil servisten taburcu ettiği hastalarda olumsuz bir olay yaşaması ve bunun yüksek risk olarak algılanmasıdır

Hastanın yatmasının koruyucu etki sağladığına ve hasta sonuçlarının gidişatını değiştirdiğine inanabilirler ama akut kalp yetmezliğinin iyileştiren bir tedavi yoktur

Ayrıca acil serviste akut kalp yetmezlikli düşük riskli hastaları güvenli ve erken taburculuğunu belirlemek için herhangi bir araç veya skorlama yoktur

Bu nedenlere bağlı olarak acil hekimlerinin hastaneye yatış konusunda tereddütte düşmesi normaldir

Şüphesiz ki risk sınıflandırması karşılanmamış bir ihtiyaç olmaya devam etmektedir

Risk değerlendirilmesi için kullanılan sensitivitesi ve spesifitesi yüksek kullanımı kolay herhangi bir skorlama sistemi olmamakla birlikte dünya genelinde kullanılan birkaç skorlama sistemi vardır.

AKY RİSK SKORLAMA ARAÇLARI

Acil Kalp Yetersizliği Mortalite Risk Derecesi (EHMRG)

Ottawa Kalp Yetmezliği Risk Ölçeği (OHFRS)

MEESSI-AKY RİSK MODELİ

STRATIFY ÖLÇEĞİ

Acute Heart Failure Index (Auble)

ACİL KALP YETERSİZLİĞİ MORTALİTE RİSK DERECESİ (EHMRG)

Acil Kalp Yetersizliği Mortalite Risk Grubu (EHMRG), acil serviste 7 günlük mortaliteyi tahmin etmek için kullanılmak üzere tasarlanmıştır (7 gün içinde mortalite riski yüksek olanlar için başvuru önerilir).

ACİL KALP YETERSİZLİĞİ MORTALİTE RİSK DERECESİ EHMRG'de EKG ve BNP değerleri bakılmaz?

RİSK ÖLÇEĞİ (OHFRS)

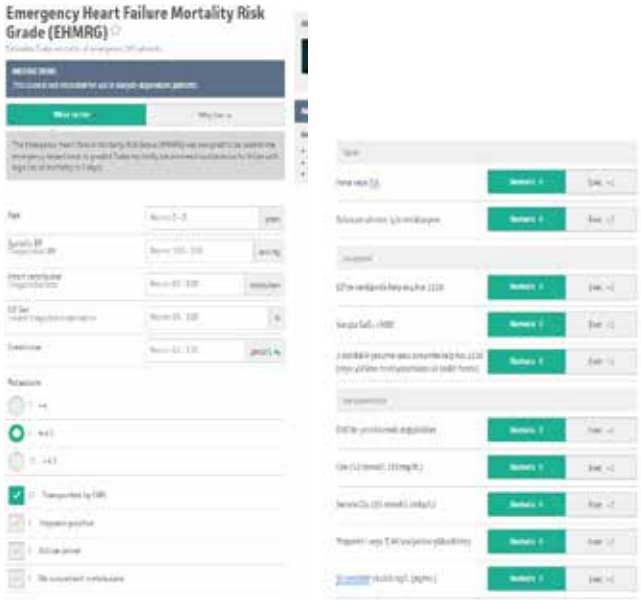
Acil servise KY alevlenmesi ile başvuran ve tedaviye yanıt veren hastalarda kullanılır

Ottawa Kalp Yetmezliği Risk Ölçeği (OHFRS), ölüm, MI, yoğun bakım ünitesi/entübasyon ihtiyacı dahil olmak üzere ciddi advers olaylar (SAE) açısından yüksek risk altındaki kalp yetmezliği olan acil servis hastalarını tanımlar.

Acil serviste tedaviye yanıt veren KY alevlenmesi ile başvuran acil servis hastaları için en uygunudur.(çalışmada, OHFRS ilk acil servis tedavisinden 2-8 saat sonra değerlendirilmiştir).

Doğruluktan önemli ölçüde ödün vermeden NT-proBNP kullanılamıyor olsa bile kullanılabilir.

RİSK ÖLÇEĞİ (OHFRS)



RİSK ÖLÇEĞİ (OHFRS)

Şu durumlarda kullanmayın:

- normal ev O_2'de oda havasında >20 dakika süreyle dinlenmesine rağmen <%85
- Varışta kalp atış hızı >120.
- Varışta sistolik KB <85 mmHg.
- Karışıklık, oryantasyon bozukluğu veya bunama.
- Varışta nitrat gerektiren iskemik göğüs ağrısı.
- EKG'de ST segment elevasyonu.
- Kronik hastalıktan haftalar içinde beklenen ölüm.
- Huzurevi veya kronik bakım tesisi sakini.
- Kronik hemodiyalizd

MEESSI-AKY RİSK MODELİ

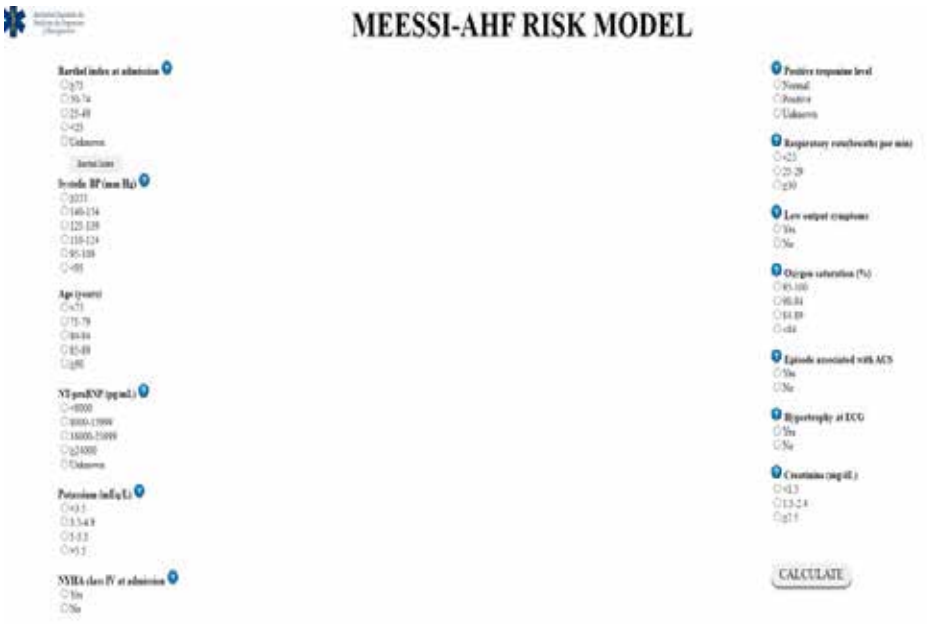
Akut Kalp Yetmezliği (AHF) tanısı ile Acil Servislere (ED) başvuran hastalarda 30 günlük mortaliteyi tahmin etmek için bir risk modelidir.

Acil Servise varışta hazır bulunan 13 değişkeni içerir .

DÜŞÜK RİSK (30 günlük mortalite: < %2) olarak sınıflandırılan hastaların %40'ı , ilk tedaviye yeterli yanıt alındıktan sonra hastaneye yatırılmadan Acil Servisten erken taburcu edilebilecek potansiyel adaylar olarak düşünülmelidir.

ÇOK YÜKSEK RİSK (30 günlük mortalite: >%2) olarak sınıflandırılan hastaların %10'u hastaneye yatıştan açıkça fayda görebilir.

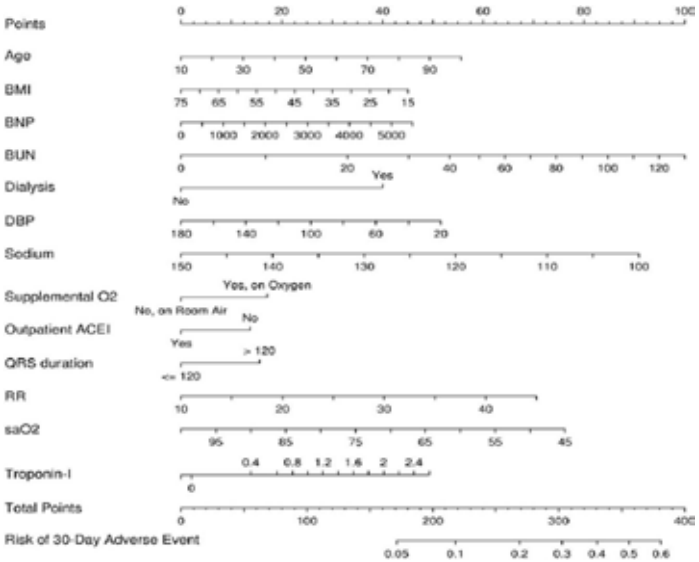
MEESSI-AKY RİSK MODELİ



BARTHEL SKORU

STRATIFY

STRATIFY, hazır değişkenleri kullanarak 30 günlük advers olaylar açısından düşük risk altında olan AKY'li acil servis hastalarını belirlemek için prospektif olarak türetilmiş ilk acil servise dayalı karar aracıdır.



ACUTE HEART FAİLURE INDEX (AUBLE)

Table. Risk Instruments to Identify Low Risk for ED Discharge

Study	Year	Sample Size	Country	Variables	Risk Stratification Goal	External Validation	Clinical Validation
Stiell et al[7] Ottawa Heart Failure Risk Scale	2017	1100	Canada	History of stroke or TIA History of intubation for respiratory distress Heart rate on ED arrival ≥110 Room air Sao_2<90% on EMS or ED arrival ECG has acute ischemic changes Urea ≥12 Serum CO_2 ≥35 Troponin I or T elevated to MI level NTproBNP ≥5000 During walk test, Sao_2<90% on room air or usual O_2, or HR ≥100 during 3-min walk test, or too ill to walk	30-day serious adverse events	Yes	Maybe: clinicians told not to solely base their decision on OHFRS
Miro et al[8] MEESSI	2018	4711	Spain	Barthel index at admission Systolic blood pressure Age NTproBNP Potassium Troponin NYHA at admission Respiratory rate Low-output symptoms? Oxygen saturation Episode associated with ACS? Hypertrophy on ECG? Creatinine	30-day mortality	Yes	No
Lee et al[9] EHMRG	2018	1983	Canada	Age Arrival by ambulance Systolic blood pressure (triage) Heart rate (triage) Oxygen saturation (triage) Potassium Creatinine Troponin Active cancer Metolazone use before ED arrival ST depression on 12-lead (30-day model)	7- and 30-day mortality	Yes	No
Collins et al[10] STRATIFY	2015	1033	USA	Age BMI BNP Diastolic blood pressure BUN Sodium Respiratory rate Oxygen saturation Troponin Dialysis On supplemental oxygen On outpatient ACEI QRS duration	5- and 30-day hierarchical adverse events	No	No

Study	Year	Sample Size	Country	Variables	Risk Stratification Goal	External Validation	Clinical Validation
Auble et al[11] Acute Heart Failure Index	2008	8284	USA	Sex History of (h/o) MI h/o angina h/o PTCA h/o diabetes mellitus h/o lung disease Heart rate Respiratory rate Systolic blood pressure Temperature Sodium Potassium BUN Creatinine Glucose WBC count Arterial pH ECG findings: MI ECG findings: ischemia CXR: pulmonary congestion CXR: pleural effusion	Death or serious medical complication before discharge. Secondary: inpatient death alone and 30-day mortality alone	Yes	No

Önümüzdeki on yılda, acil serviste güvenli bir şekilde eve taburcu edilebilecek AKY'li hastaların oranını artırmak için büyük fırsatlar var. Bu tür gerekli ilerlemenin, acil servisteki göğüs ağrısı gibi diğer kardiyovasküler süreçlerdeki dispozisyon karar verme durumuyla eşleşmesi pek olası olmasa da, ACUTE (Acute Congestive Heart Failure Acil Bakım Değerlendirmesi) gibi çalışmalar sahada gerekli bir adımdır.

Diğer AKY kuralları, acil servisteki optimal rollerini belirlemek için benzer harici testler ve uygulama çalışmaları gerektirir.

Bu tür sürekli ilerlemeler, erken tedavide daha fazla iyileştirmeye ve hızlı ayaktan hasta takibi için yerel desteğe yardımcı olacaktır: AKY'li hastaların daha büyük bir bölümünü güvenli bir şekilde taburcu etmek için gerekli çalışmalar yapılmalıdır.

ÇAKMAK GAZI İNHALASYONU SIRASINDA PATLAMA 4 VAKA SERİSİ

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ÖZET:

Birçok ülkede uçucu madde kötüye kullanımını azaltmak için yasal engeller ve eğitim kampanyaları düzenlenmiş ve bunlar uçucu madde kullanımı yaygınlığında azalmaya yol açmış olabilir; ancak yine de tüm dünyada yaygın bir kullanıma sahiptir (1) . Bütan gazının kötü niyetli solunması sırasında patlama yanıkları eskiden nadiren olurken, son zamanlarda özellikle gençler arasında sosyal bir sorun haline geldi (2) . Bizim bildireceğimiz 4 'lü vaka serisinde hastalarımızın hepsi erkek olup ortalama yaşları 18,5' tur. Hastalarımız çakmak gazı inhalasyonu sırasında patlama sonucu yanık oluşması ile hastanemize başvurdu. Bu 4 hastanın tedavileri yanık ünitesi ve yanık yoğun bakım da olmak üzere yatarak tedavi olmak zorunda kaldılar. Bütan gazının kötü niyetli solunması sırasında meydana gelen patlama yanıkları, ölüm yanı sıra majör yanık yaralanmaları, cerrahi müdahaleler ve uzun süreli hastane yatışı ve bakımı ile sonuçlanabilmekte. (2)

GİRİŞ:

Yanığın birçok nedeni vardır. Yanıklar ısı, kimyasal, elektrik , radyasyon, soğuktan olmak üzere birçok nedenden oluşabilir. Flaş ve patlama yanıkları tipik olarak yanıcı gazın tutuşmasından kaynaklı en sık endüstriyel yanıklarda görülür. Terörist saldırıların neden olduğu veya savaşta alınan patlama yaralanmaları literatürde geniş çapta tanımlanmıştır, ancak uçucu madde kullanımına bağlı gaz patlaması yanıkları ile ilgili çok az şey vardır(3,4,5).

Bütan gazı, evlerde ve piknik alanlarında yemek pişirmek için popüler bir yakıt kaynağı olarak kullanılmakta ve ülkemizde birçok mağazadan rahatlıkla satın alınabilmektedir. Pişirme ve ısınma için yakıt olarak kullanılan bütan gazı bunların yanında çakmak gazı, soğutucu, deodorant itici ve endüstriyel olarakta kullanılmakta (4-11). Günlük hayatta birçok kullanımı olduğu için bütan gazı, herhangi bir yasal kısıtlama olmaksızın mağazalarda yaygın olarak bulunmaktadır (4-12) . Bundan dolayı ulaşılması kolay olduğundan inhalar istismarı önemli bir halk sağlığı sorunu haline gelmektedir (7,8,12). Çakmak ve bütan yakıt gazlarının ana uçucu bileşenleri n-bütan ve izobütandır [19]. Bütan, kandaki oksijenin yerini alan bir boğucu olarak hareket ederek toksisiteye neden olan oda sıcaklığında düz zincirli bir alifatik hidrokarbon gazıdır [20]. Kokusuzdur ve havadan daha ağırdır, eksi 408C'lik bir küllenme noktası ve %1,8 ile %8.4 arasında bir hacimde alevlenebilirlik sınırı vardır [21]. Bütan kanda stabildir ve bilinen metabolitleri yoktur, bu nedenle yapısında değişiklik olmaksızın atılır.

Bütan gazına bağlı olarak bildirilen yanıklar genellikle kamp gazının patlaması, motorlu taşıt yakıt ikmali sırasında kaza veya gazın kötü niyetli solunması nedeniyle olmuştur (3-5,10-18). Kapalı alanda bütan gazı buharı son derece yanıcı hale gelir ve en ufak bir kıvılcımda alev alır. (4,5,17) Bizim vaka serimizde de bu şekilde olmuş kapalı bir odada çakmak gazı inhalasyonu sırasında bir kişinin sigara için çakmak yakması ile patlama sonucu yanık ile başvurmuşlardır.

VAKALAR:

Çakmak gazı inhalasyonu esnasında arkadaşlarından birinin sigara yakması ile etrafta bulunan tüplerin patlaması sonucu yanık nedeniyle 4 adet hastamız aynı anda hastanemize başvurdu. Bu hastalarımızın sırası ile fizik muayene ve labaratuvar sonuçları şöyle idi.

1. Hastamızın Ateş:36.4 °C , Nabız : 113/ dk Tansiyon :130/70 mmHg SpO2 %95 glaskow koma skalası(GKS): 15; saç, kirpikler, her 2 kaş, yüz, burun kıllarında yanık, sırttın tamamına yakını 1-2. derece yanık, gövde ön yüz sol yarım 1-2. derece yanık, sağ tüm kol yer yer sirküler büllöz lezyonlar içeren 2. derece yanık, sol tüm kol yer yer sirküler büllöz lezyonlar içeren 2. derede yanık, her 2 elde 2. derece büllöz lezyonlar ödem mevcut, her 2 ayak ön yüzde 2. derece büllöz yanık olup toplam %40 oranında yüzdenin çoğunluğunu 2. derece yüzeyel ve derin yanıkların oluşturduğu yanık yüzdesi hesaplandı. Hastaya gelir gelmez yanık yüzdesine göre sıvı replasmanı hesaplanarak uygun sıvı replasmanı başlandı. Hastaya tetanoz, anlajezik, antibiyoterapi ve yanık pansumanı yapıldı hastanın PA akciğer grafisi normal idi. Kan gazında pH: 7.28 pO2 83 mmHg, pCO2 32 mmHg, HCO3 15 mmol/L, Laktat 2.17 mmol/L, COHb 5.8 Etanol:0,03 promil (100 mg/dL Etanol=1 Promil Etanol) , Hb: 15,9 g/dL, WBC: 19,84 K/uL , plt: 373 K/uL, üre:32 mg/dL, kreatinin: 1,2 mg/dL, AST: 33 U/L, ALT: 24 U/L, CRP: 2,2 mg/L, Na: 138,6 mmol/L, K: 3,59 mmol/L, INR:0,98. Hastanın yanık yüzdesi fazla olmasından dolayı hastayı yanık yoğun bakımı olan yanık merkezine sevk edildi.
2. Hastamızın Ateş:36.6 °C , Nabız : 120/ dk Tansiyon :150/100 mmHg, SpO2 %97 Glaskow Koma Skalası(GKS): 15 ; sağ, her 2 kaş,i her 2 ki,rpik burun kılları ve yüzde yanık kulaklarda yanıKk sırtta yer yer 2. Derece olan neredeyse tüm sırtı kaplayan 1-2 . Derece yanık; sol koltuk altı dahil tüm kol yer yer sirküler 1-2. Derece yanık büllöz lezyonlar içeren yanık; sağ tüm kol yer yer sitrküler 1-2. Derece büllöz lezyonlar içeren yanık ;her 2 elde 2. Derece büllöz lezyon içeren yanık; gözde ön yüzde 1-2. Derece yanık; her 2 ayak bileğinde sirküler 2. Derece büllöz yanık olup toplam %55 oranında yüzdenin çoğunluğunu 2. derece yüzeyel ve derin yanıkların oluşturduğu yanık yüzdesi hesaplandı. Hastaya gelir gelmez yanık yüzdesine göre sıvı replasmanı hesaplanarak uygun sıvı replasmanı başlandı. Hastaya tetanoz, anlajezik, antibiyoterapi ve yanık pansumanı yapıldı. Hastanın PA akciğer grafisi normal idi. Kan gazında pH: 7.43 pO2 64 mmHg, pCO2 33 mmHg, HCO3 21.9 mmol/L, Laktat 3.61 mmol/L, COHb 5; Etanol:0,03 promil (100 mg/dL Etanol=1 Promil Etanol) , Hb: 16,1 g/dL, WBC: 16,5 K/uL , plt: 253 K/uL, üre:33,9 mg/dL, kreatinin: 1,25 mg/dL, AST: 32 U/L, ALT: 13 U/L, CRP: 0,5 mg/L, Na: 137,8 mmol/L, K: 3,49 mmol/L, INR:1,13. Hastanın yanık yüzdesi fazla olmasından dolayı hastayı yanık yoğun bakımı olan yanık merkezine sevk edildi.
3. Hastamızın Ateş:36.7 °C, Nabız : 108/ dk Tansiyon :160/90 mmHg,SpO2 %97 Glaskow Koma Skalası(GKS): 15; saç, her 2 kaş, her 2 kirpik burun kıllarında yanık, yüzde kulak kepçesinde yanık; her 2 dürsekten aşağı kol ve her 2 elde 1-2. Derece yanık ellerde büllöz lezyonlar ve ödem mevcut; sırtta yer yer 1-2. Derece yanık; her 2 ayak bileğinde sirkülere yakın büllöz 2. Derece yanık olup toplam %20 oranında yüzdenin çoğunluğunu 2. derece yüzeyel ve derin yanıkların oluşturduğu yanık yüzdesi hesaplandı. Hastaya gelir gelmez yanık yüzdesine göre sıvı replasmanı hesaplanarak uygun sıvı replasmanı başlandı. Hastaya tetanoz, anlajezik, antibiyoterapi ve yanık pansumanı yapıldı. Hastanın PA akciğer grafisi normal idi. Kan gazında pH: 7.50 pO2 60 mmHg, pCO2 30 mmHg, HCO3 23.7 mmol/L, Laktat 2,27 mmol/L, COHb 0,9 ; Etanol:0,03 promil (100 mg/dL Etanol=1 Promil Etanol) , Hb: 13,7 g/dL, WBC: 11,2 K/uL , plt: 284 K/uL, üre:33,3 mg/dL, kreatinin: 1,11 mg/dL, AST: 35 U/L, ALT: 28 U/L, CRP: 1,5 mg/L, Na: 136 mmol/L, K: 3,66 mmol/L, INR:1,01. Hastanın yanık yüzdesi fazla ve sirküler yanıkları olmasından dolayı hastayı yanık ünitesi olan yanık merkezine sevk edildi.
4. Hastamızın Ateş:36.4 °C, Nabız : 102/ dk, Tansiyon :140/80 mmHg, SpO2 %97 Glaskow Koma Skalası(GKS): 15; her 2 kulak kepçesi ve yüzde birinci derece yanık; saçlarda her 2 kaş ve her 2 kirpikte yanık; sağ el veön kolda dirsek üzerine kadar çıkan yer yer büllöz 1-2. Derecede yanık; sol ön kolda 1-2. Derecede yanık; sağ gluteal bölgede superiorda büllöz lezyon içeren 2. Derece yanık olup toplam % 19 oranında yüzdenin çoğunluğunu 2. derece yüzeyel ve derin yanıkların oluşturduğu yanık yüzdesi hesaplandı. Hastaya gelir gelmez yanık yüzdesine göre sıvı replasmanı hesaplanarak uygun sıvı replasmanı başlandı. Hastaya tetanoz, anlajezik, antibiyoterapi ve yanık pansumanı yapıldı. Hastanın takipleri sırasında yüzündeki birinci derece yanık tamamen büyük büllü ve ikici derece derin yanık mşeklini aldı. Hastanın PA akciğer grafisi normal idi. Kan gazında pH: 7.41 pO2 52 mmHg, pCO2 38 mmHg, HCO3 24,5 mmol/L, Laktat 2,43 mmol/L, COHb 2,6 ; Etanol:0,03 promil (100 mg/dL Etanol=1 Promil Etanol) , Hb: 14,6 g/dL, WBC: 19,8 K/uL , plt: 389 K/uL, üre:34,5 mg/dL, kreatinin: 1,07 mg/dL, AST: 60 U/L, ALT: 23 U/L, CRP: 12,9 mg/L, Na: 137,2 mmol/L, K: 5,38 mmol/L, INR:1,01. Hastanın yanık yüzdesi fazla ve yüzündeikinci derce derin yanıkları olmasından dolayı hasta yanık ünitesi olan yanık merkezine sevk edildi.

TARTIŞMA:

Bütan gazı inhalasyondan yaklaşık 5 dakika sonra vücudu etkiler ve etkisi 15± 45 dakika sürer [22]. Bütan gazının yanıcılığı dışında inhalasyonla oluşan birçok yan etkisi bulunmaktadır. Genel olarak, konuşma normalden daha yavaş olur, ancak düşünme süreci daha hızlı ve daha kolay hale gelir. Hızla takip eden illüzyon ve halüsinasyon ile birkaç ruh hali değişimi vardır [23]. İnhalasyonun erken aşamasında, inhaler öfori, yutkunma hissi, baş dönmesi, geveleyerek konuşma, artan güç hissi ve halüsinasyon hisseder. Bu belirtiler, diğer insanlara saldırmak gibi dürtüsel eylemlere neden olabilir. Yapılan bir çalışmada bütan gazının kötü niyetli solunması ile ilişkili yanık hastalarının 14 ila 20 yaşları arasında erkek olduğunu bildirdi (4) . Suk-Joon Oha ve arkadaşlarının yaptığı çalışmada hastalarının çoğu öğrenci ve kaçak gençlerdi. Kapalı bir alanda grup olarak toplanıp gaz kutusunun ağzını dişlerinin arasına sıkıştırarak doğrudan bütan gazını solumak suretiyle veya buharlaşan gazı bir plastik veya kağıt torbadan soluyarak bütan gazını inhale etmişler. Sık sık bütan gazı inhalasyonu sonrası sigarayı yakmaya çalıştıklarında ateşlenen gazın patlaması nedeniyle yanık yaralanmaları yaşanmış (2) . Tıpkı bizim vaka serimizde olduğu gibi. Tüm bunların ışığında bütan gazının etkisi ile yanıcı ile yaklaşılmaması gereken bir ortama kullanıcılar yanıcı bir made ile yaklaşıp patlamalara, yangılara sebebiyet verebilirler. Bunun sonucu hastalarda sadece bütan gazının inhalasyonu ile oluşan etkiler değil aynı zamanda yanığa bağlı lezyonlarda oluşabilir. Bütan gazının kötü niyetli solunması sırasında meydana gelen patlama yanıkları, ölüm yanı sıra majör yanık yaralanmaları, cerrahi müdahaleler ve uzun süreli hastane yatışı ve bakımı ile sonuçlanabilmekte. (2)

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EFFECT OF CRATAEGUS ON DOXORUBICIN-INDUCED EXPERIMENTAL CARDIOTOXICITY

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ABSTRACT

AIM: Heart failure is a complex syndrome with high morbidity and mortality. Oxidative stress is an important cause in the pathophysiology of heart failure due to cardiotoxicity. Antioxidant compounds can be used to inhibit oxidative stress and thus prevent myocyte damage. In our experimental study, cardiotoxicity was induced by doxorubicin and the effects of crataegus, a natural antioxidant, were investigated.

MATERIAL AND METHODS: 28 Sprague Dawley male rats were divided into four groups, namely Control Group, Doxorubicin Group, Crataegus Group and Crataegus + Doxorubicin Group, which will be 7 in each group. In the Crataegus groups, 520 mg of crataegus extract was given orally for each rat. Doxorubicin 10 mg / kg single dose was administered by intraperitoneal injection method in the doxorubicin group on the 28th day of the test. All subjects were followed for 35 days. Day 35 Rats were decapitated and blood serum and heart tissue were removed. NT-proBNP, CK, CK-MB levels in blood serum were studied. Histopathologically, myocyte disorientation, myocyte hypertrophy and fibrosis were observed in the heart.

RESULTS: Myocardial destruction was significantly more biochemical and histopathologically in the non-recipient group than in the groups with rats having cardio-toxicity enhanced doxorubicin by cardiotoxicity. There was a significant decrease in the severity of heart failure in the crataegus recipient group. The heart tissue of the only doxorubicin-receiving group was significantly damaged compared to the group receiving doxorubicin and crataegus.

CONCLUSION: Our study has shown that crataegus can be used for cardioprotective purposes in cardiotoxicity situations.

KEYWORDS: Crataegus oxyacantha, Cardiotoxicty, Hearth failure, Doxorubicin

INTRODUCTION

The prevalence of heart failure is increasing rapidly, which clearly indicates that heart failure in cardiovascular medicine is the most important public health problem (1). Chronic heart failure, one of the most common causes of morbidity and mortality, is the result of many cardiovascular diseases. Heart failure may develop due to ischemic, infective, inflammatory, immunological, pregnancy, metabolic, genetic and neoplastic causes. Chemotherapeutics used in the treatment of cancer can cause serious cardiotoxic side effects. Anthracyclines are chemotherapeutic drugs commonly used in the treatment of leukemia, lymphoma and other solid tumors. Despite being a very effective treatment option, especially cardiac side effects are prominent. Cardiac side effects are the most important cause of morbidity and mortality (2). Irreversible myocyte damage, decreased myocardial mass and progressive fibrosis are the causes of cardiac dysfunction (3). Doxorubicin is an antracancer-derived antibiotic and the first-found anticancer member of its group. It is widely used in solid tumors and hematological malignancies due to wide spectrum antineoplastic effect (4-5). The most important and negative features of doxorubicin and other anthracyclines that limit its use in cancer treatment are cardiotoxic side effects (6-7). The mechanism most responsible for doxorubicin cardiotoxicity is increased intracellular oxidative stress (8-9-10-11) due to the formation of reactive oxygen radicals and lipid peroxidation. Congestive heart failure rate in patients receiving anthracycline treatment; treatment protocol, diagnosis, age and duration of follow-up. Lefrak et al. (12) suggest that the risk of developing cardiomyopathy and congestive heart failure increases if the cumulative anthracycline dose is above 500 mg / m². Antioxidant substances continue to be studied to prevent oxidative damage and reduce their effects.

In Crataegus fruit, flowers and leaves, chlorogenic acid, pentacyclic triterpenoid acids, aromatic amines, phenolic acids, quercetin, hyperacid, vitexin and vitexin 4-rhamnoside, luteolin, luteolin-3-7 diglucoside, flavon glycosidase, apigenin, apigenin, it has been determined that flavonoids and their mixtures are contained in 1-2%, such as -7-O-glycoside and rutin (13). Crataegus is a plant used in the treatment of heart diseases. This success in heart disease has been determined to be due to the flavonoids present in the composition (14). It has been proven that the flavonoid complexes of the recipient are responsible for the cardiac effects, helping the metabolism enzymes by increasing the use of oxygen in the heart, decreasing the heart burden by expanding the vessels, providing relaxation and lowering the blood pressure (15-16-17). Rietbrock et al. 88 patients with NYHA Class II Heart Failure; a standardized fresh Crataegus fruit extract was applied and increased quality of life and exercise tolerance were reported in these patients (18). In our study, we aimed to investigate the effects of crataegus, who is thought to have many antioxidants, antiinflammatory, antiatherosclerotic, antihyperlipidemic and antiarrhythmic properties, in primary and secondary prevention of heart failure.

MATERIAL AND METHODS

Study Orders and Subjects:Our study was carried out on 28 male Sprague Dawley male rats, who were 3-4 months old. Hawthorn Bery capsules, which contains 520 mg Crataegus Oxyacantha from Solgar, was used as crataegus extract. Subjects were placed in each cage with a maximum of 7 Rats. Rats were fed with standard meals and in equipment in which they can reach unlimited water. Room temperature was kept constant at 22 ± 0.5 ºC. No subjects were lost during the study and 7 rat hearts were studied in each group. Seven rat serums were studied in each group for biochemical parameters.

Control Group (Group I, n = 7): Placebo and standard diet was applied. Doxorubicin Group (Group II, n = 7): Standard diet was applied. On the 28th day, 10 mg / kg dose of doxorubicin was administered by intraperitoneal injection. Crataegus Group (Group III, n = 7): Subjects were fed with 1 standard (520 mg) crataegus for each rat for 35 days with standard feeding. Crataegus + Doxorubicin Group (Group IV, n = 7): Subjects were fed with 1 standard (520 mg) crataegus for each rat for 35 days with standard feeding. On the 28th day, a single dose of doxorubicin 10 mg / kg was administered by intraperitoneal injection. All subjects were followed for 35 days. On the 35th day, Rats were decapitated.

Obtaining and Preparing the Samples: After the rats were decapitated, the extracted heart tissue was weighed and placed in 10% formaldehyde. After fixation, the heart was transversally cut at 1 cm intervals to the ground to the the apex.Sections taken at 3-4 µm thickness were stained with hematoxylin eosin and masson trichrome.

Histopathological Evaluation: Myocyte disorientation and hypertrophy were evaluated in sections stained with hematoxylin eosin. Fibrosis was assessed in sections stained with Masson trichrome. Histopathologically, myocyte disorientation, myocyte hypertrophy and fibrosis were rated as 0: No, +1: Mild, +2: Moderate, +3: Serious.

Assessment of Biochemical Parameters: During the decapitation of the rats, 5 cc of blood was taken to the straight string. The blood was allowed to stand for 10 minutes, then coagulated, and then centrifuged at 5000 rpm for 3 minutes. The serum obtained after centrifugation was stored at -20 ° C in ependorph until the day it was going to be studied.Serum samples were examined in the Biochemistry laboratory of Fırat University Medical Faculty. Creatinine Kinase (CK), CK-MB and glucose values were studied with the OLYMPUS 2700 (Japan) brand autoanalyzer. The NT-pro BNP value was examined using the Immunity 2000 (USA) brand device.

Statistical assessment: Statistical analysis was performed using the SPSS 12.0 (Statistical Package for Social Sciences) program. Parametric data were expressed as mean ± standard deviation, as nonparametric data (%). In the comparison of parametric data, Oneway Anova test and Pearson correlation test were used in examining the relations between parameters. The distribution normality was assessed by the Kolmogorov-Smirnov test. The continuous variables 'Mann-Whitney U' and 'Kruskal Wallis' were compared with the one-way analysis of variance and the qualitative variables were compared with the chi-square test. Logarithmic transformations were applied to the parameters that did not exhibit normal distribution characteristics before statistical analysis. The results were evaluated in a confidence interval of 95% and a significance level of $p < 0.05$.

RESULTS

SERUM BIOCHEMICAL EVALUATION IN STUDY GROUPS

In terms of NT-pro BNP levels, there was no statistically significant difference between the control group and doxorubicin group, but serum levels were higher in doxorubicin group (p: 0,477). There was a statistically significant difference between the control group and the crataegus group (p: 0.028). In addition, a statistically significant difference was also observed between the Doxorubicin group and the crataegus group (p: 0,020) (Table 1, 2).

Table 1. Biochemical data of the groups

Biochemical Parameters	Control Group (n=7)	Doxorubicin Group (n=7)	Crataegus Group (n=7)	Crataegus + Doxorubicin Group (n=7)
NT-proBNP(pg/ml)	29,6±13,6	40±22,8	18,75±2	41,2±41,4
CK (U/L)	524,5±115,1	2149,4±424,9	547,5±225,1	381,1±252
CK-MB (U/L)	50,2±5,4	209,2±42,6	83,5±31,7	103±7,4

NT-pro BNP : N-terminal fragment brain natriuretic peptides, CK : Creatin Kinase, CK-MB : Creatin Kinase Miyocardial Band

Table 2. Statistical p value in group comparisons of biochemical parameters

Compared Groups	NT-proBNP	CK	CK-MB
(Control Group) – (Doxorubicin Group)	p:0,477	p:0,002	p:0,002
(Control Group) – (Crataegus Group)	p:0,028	p:0,748	p:0,040
(Control Group) – (Crataegus+Doxorubicin Group)	p:0,948	p:0,063	p:0,002
(Doxorubicin Group) – (Crataegus Group)	p:0,020	p:0,002	p:0,002
(Doxorubicin Group) – (Crataegus+Doxorubicin Group)	p:0,472	p:0,002	p:0,002
(Crataegus Group) – (Crataegus+Doxorubicin Group)	p:0,087	p:0,180	p:0,073

NT-pro BNP : N-terminal fragment brain natriuretic peptides, CK : Creatin Kinase, CK-MB : Creatin Kinase Miyocardial Band

There was a statistically significant difference between the control group and the doxorubicin group (p: 0.002) when the creatine kinase levels were examined. When compared to the doxorubicin group, CK levels were lower in the Crataegus group and in the Crataegus and Doxorubicin groups and a statistically significant difference was observed (p: 0,002, p: 0,002).

There was a statistically significant difference (p: 0,002, p: 0,040 and p: 0,002) in the Doxorubicin group, the Crataegus group and the Crataegus + Doxorubicin group in terms of the CK-MB levels examined. When compared to the doxorubicin group, CK-MB levels were lower in the Crataegus group and in the Crataegus + Doxorubicin group and a statistically significant difference was observed (p: 0,002, p: 0,002) (Table 1, 2).

HISTOPATHOLOGICAL EVALUATION

There was a statistically significant difference in the group of Doxorubicin, Crataegus Group and Crataegus + Doxorubicin group compared to the control group (p: 0,003, p: 0,005, p.0,001). When compared to the doxorubicin group, there was no statistically significant difference in the group of Crataegus and Crataegus + Doxorubicin, but lesser extent of myocyte disorganization was observed in the Crataegus group and Crataegus + Doxorubicin group (p: 0,099, p: 0,059) (Table 3).

When compared to the control group, there was a statistically significant difference in the Doxorubicin group and Crataegus + Doxorubicin group (p: 0,003, p: 0,020) in the assessment of Myocyte Hypertrophy. When compared to the doxorubicin group, there was no statistically significant difference in the group of Crataegus and Crataegus + Doxorubicin, but lesser extent of myocyte hypertrophy was observed in the Crataegus group and Crataegus + Doxorubicin group (p: 0,102, p: 0,261). (Table 3).

Table 3. Histopathological evaluation p values between groups

Compared Groups	Myocyte Disorientation	Myocyte Hypertrophy	Fibrosis
(Control Group) – (Doxorubicin Group)	p:0,003	p:0,003	p:0,018
(Control Group) – (Crataegus Group)	p:0,005	p:0,061	p:0,127
(Control Group) – (Crataegus+Doxorubicin Group)	p:0,001	p:0,020	p:0,127
(Doxorubicin Group) – (Crataegus Group)	p:0,099	p:0,102	p:0,280
(Doxorubicin Group)–(Crataegus+Doxorubicin Group)	p:0,059	p:0,261	p:0,280

A statistically significant difference was observed between the control group and the doxorubicin group in the evaluation of fibrosis (p: 0.018). When compared to the doxorubicin group, there was no statistically significant difference in the group of Crataegus and Crataegus + Doxorubicin group but lesser amount of fibrosis was observed in the group of Crataegus and Crataegus + Doxorubicin group (p: 0,280, p: 0,280) (Table 3).

DISCUSSION

Heart failure is a complex syndrome that is still not fully understood. Myocardial damage due to various causes leads to decreased ventricular dysfunction and peripheral organ perfusion. Heart failure is a dynamic phenomenon involving structural and functional remodeling. The underlying events that lead to restructuring start with hypertrophy, apoptosis, interstitial fibrosis in myocytes and cause dilation in heart chambers, deterioration in systolic and diastolic functions. Heart failure may develop due to ischemic, infective, inflammatory, immunological, pregnancy, metabolic, genetic and neoplastic causes. Cardiotoxicity due to chemotherapeutic drugs used in cancer treatment is among these reasons. Doxorubicin in the anthracycline group causes cardiotoxicity due to the formation of reactive oxygen radicals and increased intracellular oxidative stress due to lipid peroxidation. Experimental studies have tried several agents (antioxidant vitamins, herbal antioxidants, desferroxamine, ovine, CAPE, bosentan, etc.) to prevent cardiotoxicity of doxorubicin, but none have introduced to clinical use (19-20).

Oxidative stress biomarkers are positively correlated with the severity of heart failure independent of the underlying underlying heart failure (21). The prevention of oxidative stress that can develop for any reason will help to prevent damage to myocytes. Oxidative effects of antioxidant substances are being tried to be avoided. Natural antioxidant sources are generally 'plant phenolic substances' (22,23). Plant phenolics include simple phenols, flavonoids, phenolic polymers, phenolic acids (benzoic and cinnamic acid derivatives), hydrolyzed and condensed tannins, lignans and lignins (24,25,26). Crataegus is a natural antioxidant plant with strong antioxidant properties. Crataegus oxyacantha and Crataegus monogyna are the two most well known and used medicinal species. In a study conducted by Shanthi et al. using a Crataegus oxyacantha tencture, it was reported that Crataegus increased lipid peroxidation, decreased in liver, aorta and heart α-tocopherol levels in experimental atherosclerosis-induced rats (27). In another study conducted by Jayalakshmi et al., the effects of alcoholic extracts of Crataegus oxyacantha on alcoholic myocardial infarction were investigated in mice during the experiment, mitigation of mitochondrial lipid peroxidative damage and isoproterenol-induced krebs enzyme activity in the mouse heart were reported to be associated with mitochondrial antioxidant status (28) . It has been determined in a study conducted by Hwang HS et al. in rats that the Crataegus application regulates left ventricular changes, preventing myocardial abnormalities and heart rate increases induced by pressure increases in the early phase (29). Similarly, in our experimental study in which we investigated the effect of Crataegus on cardiotoxicity, in rats with doxorubicin-induced cardiac failure, the doxorubicin-treated group had significantly more biochemical and histopathologically significant myocardial destruction, while the Crataegus group had significantly decreased cardiac failure severity. The heart tissue of the only doxorubicin-receiving group was significantly damaged compared to the group receiving doxorubicin and crataegus. The use of doxorubicin is supported by our study of the use of Crataegus in order to prevent the development of consequent heart failure or any etiology.

CONCLUSION

In our study, it is mentioned that Crataegus may have protective effects on mortality and morbidity of cardiomyopathies secondary to idiopathic sequestration or any etiopathogenesis and myocyte protective properties in cases of risk of developing cardiomyopathy. Our study has also shown that Crataegus can be used for cardioprotective purposes in cardiotoxicity situations.

Key words:Heart failure, crataegus, cardiotoxicity, doxorubicin, antioxidant

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