

# ÜST GASTROINTESTINAL SİSTEM KANAMALARINA YAKLAŞIM

UZM. DR. ŞEREF EMRE ATİŞ

S.B.Ü. OKMEYDANI EĞİTİM VE UYGULAMA HASTANESİ

## SUNUM PLANI

- GİRİŞ
- EPIDEMIOLOJİ
- ETİYOLOJİ
- KANAMANIN BELİRLENMESİ
- FİZİK MUAYENE
- LABORATUVAR
- TANI
- TEDAVİ
- RISK SKORLAMASI
- ÖZET

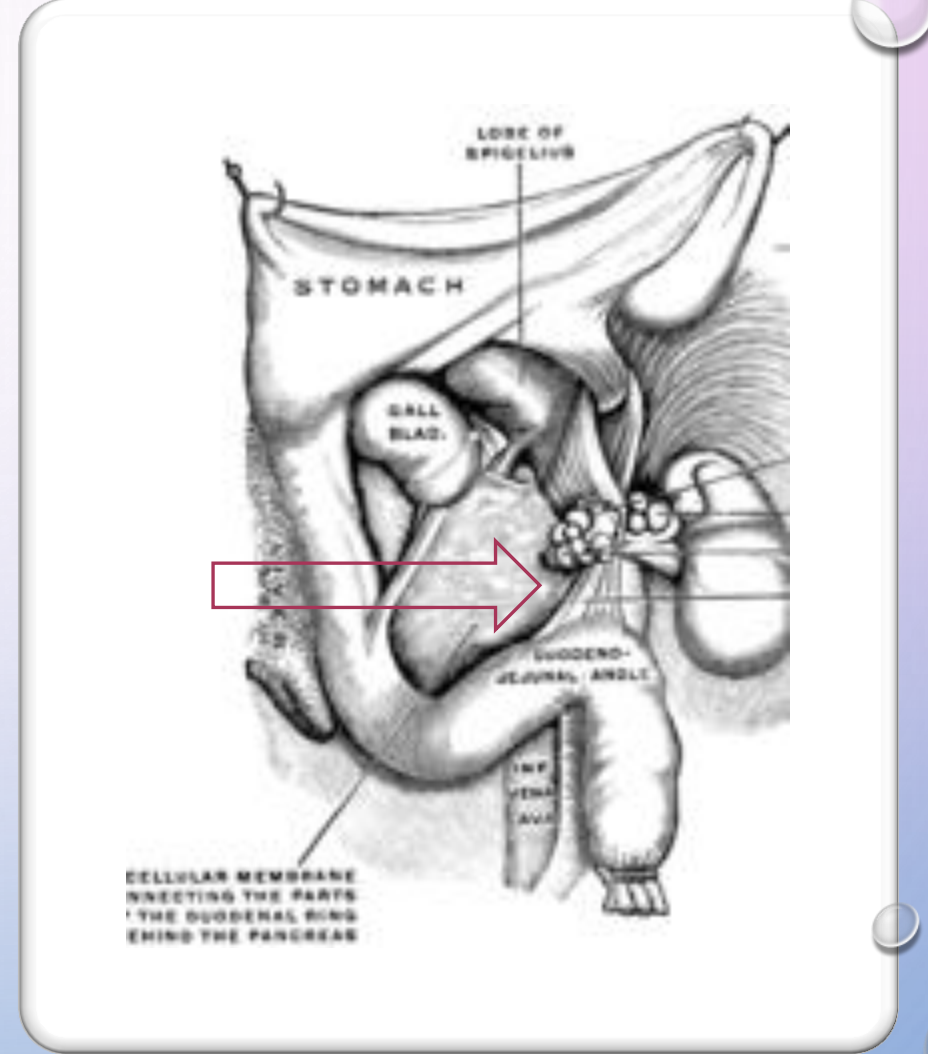
Medscape

UpToDate®

PubMed

# GİRİŞ

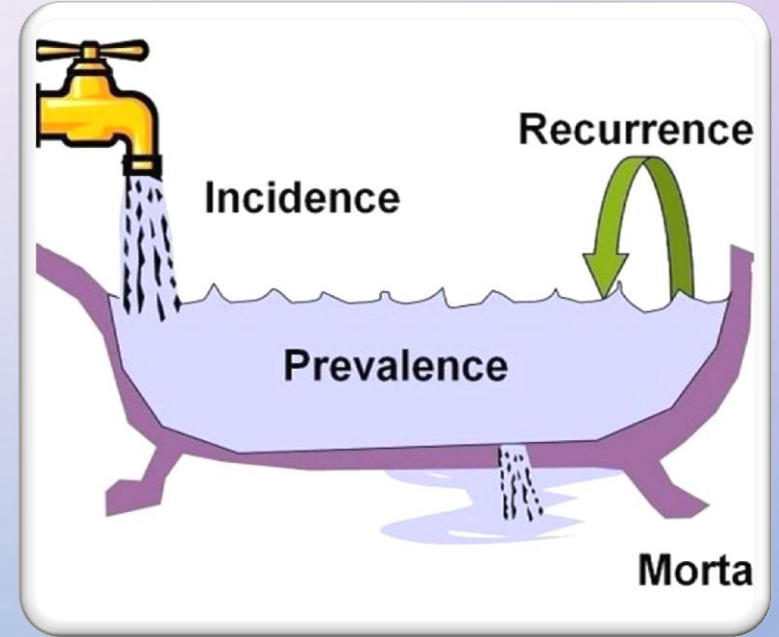
- Üst GİS kanamaları (ÜGİK) hayatı tehdit edici bir abdominal acildir
- Terim olarak Treitz ligamanından daha proksimal
- Kendisi dışında ana ölüm sebebi komorbid hastalıklardır
- Kanamanın mekanizması
  - Arteriyel
  - Düşük basınçlı venöz
  - Telenjektazi
  - Anjioektazi
  - Portal basıncın artışı



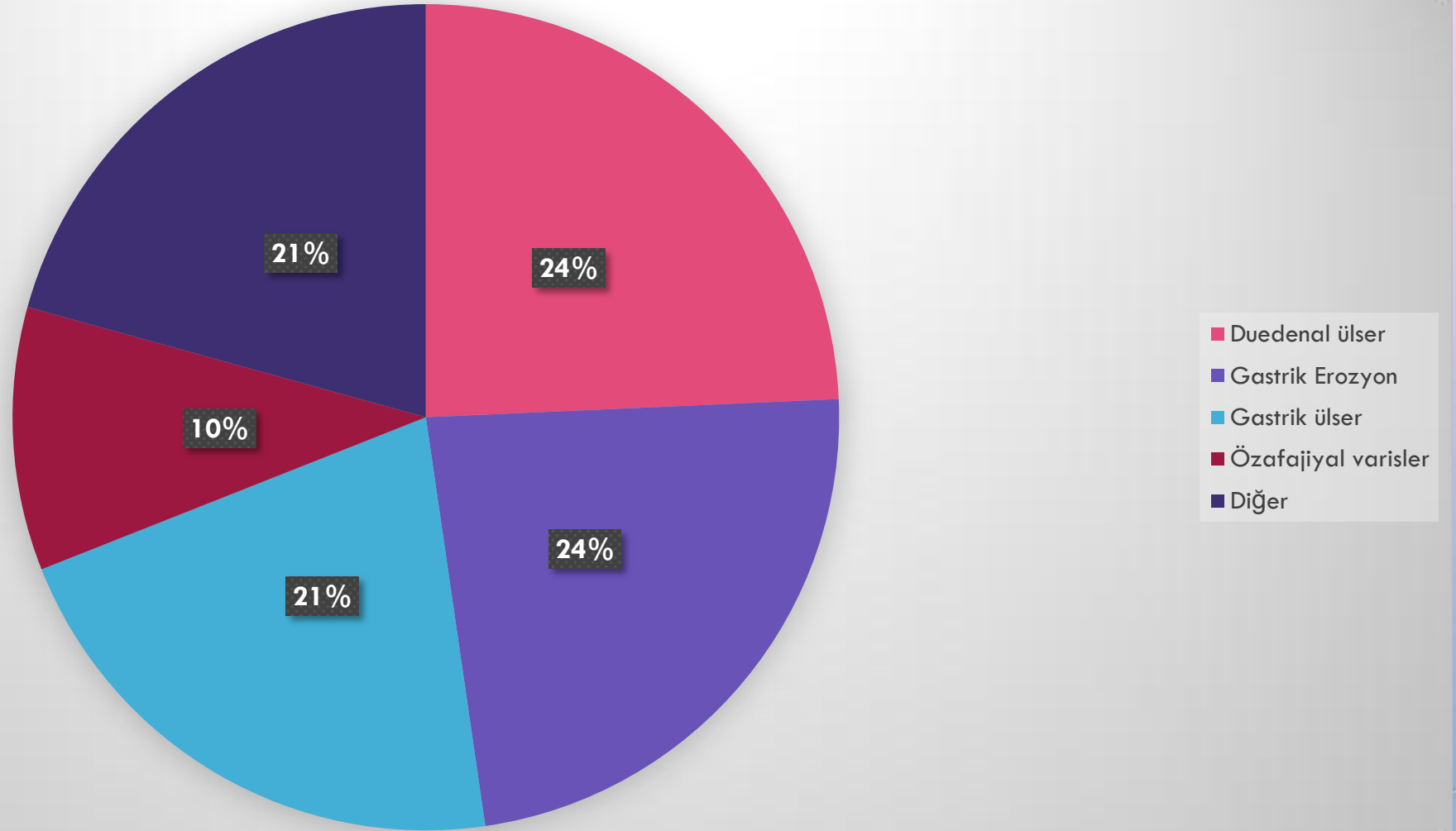


# EPIDEMIOLOJİ

- ABD 100.000/YIL HASTA, İNGİLTERE 70.000/YIL HASTA BAŞVURUSU MEVCUT (ÇOĞU VARIS DIŞI KANAMA OLMAK ÜZERE)
- İNSIDANSI ERKEKLERDE KADINLARDA İKİ KAT FAZLADIR
- MORTALİTE ORANLARI EŞİTTİR
- ÜGİK HASTA POPÜLASYONUN ORTALAMA YAŞI GİTTİKÇE ARTMAKTADIR



# ETIYOLOJİ



# PEPTİK ÜLSER VE ÜGİK

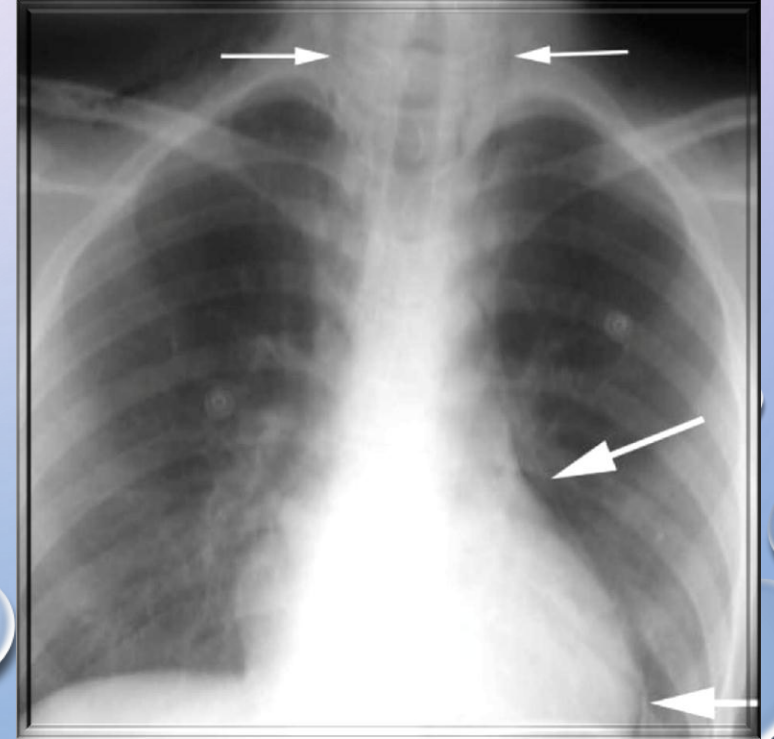
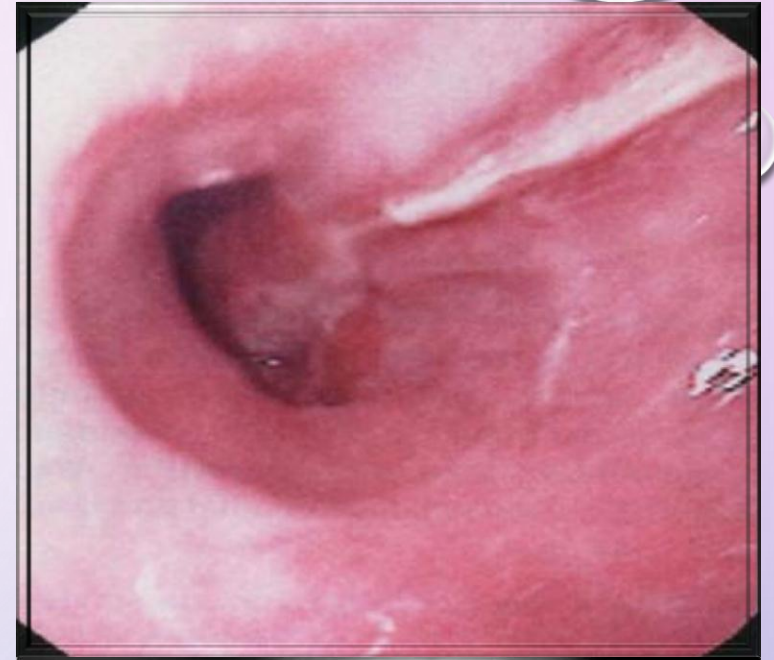
- ÜGİK İÇİN EN ÖNEMLİ NEDEN
- DAMAR ÇAPı VS KANAMA (X4)
- GÜÇLÜ BİR ŞEKİLDE *HELICOBACTER PYLORI* ENFEKSİYONUNA BAĞLIDIR
- DİĞER RISK FAKTÖRLERİ AŞIRI ALKOL TÜKETİMİ, BÖBREK YETMEZLİĞİ VE NSAİİ
- DUEDONAL ÜLSERLER > PEPTİK ÜLSER (KANAMA ORANLARI EŞİT)
- %80'İ SPONTAN DURMAKTADIR
- TEKRAR KANAMA FAKTÖRLERİ;
  - ŞOK TABLOSU
  - > 60 YAŞ
  - AKTİF PULSATIL KANAMA
  - KOAGÜLOPATİ
  - KARDİYOSAKÜLER HASTALIK



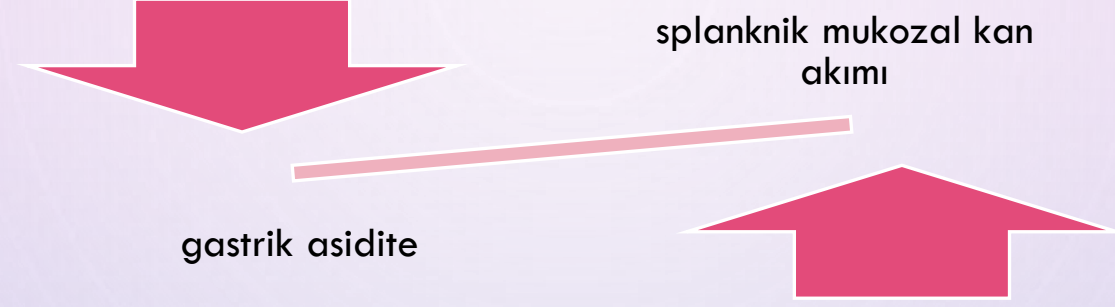


# KUSMA İLE İLİŞKİLİ ÜĞİK (MALLORY-WEISS)

- TERSİNE PERISTALTİZM → ALT ÖZAFAGUS VEYA ÜST GASTRİK MUKOZAL YIRTIKLAR
- KENNETH MALLORY VE SOMA WEISS (1929)
- ÖĞÜRME, KUSMA VE ÖKSÜRME
- %80-90 DISTAL GATRO-ÖZAFAJIAL BİRLEŞME ALANINDA
- YIRTIĞIN DERİNLİĞİ KANAMANIN CİDDİYETİNİN BELİRLER
- NADİR DE OLSA KUSMA ÖZAFAGUSTA YIRTIK +
  - MEDIASTINAL HAVA
  - SOL PLEVRAL EFÜZYON
  - SOL PULMONER INFILTRASYON (BOARHAVE SENDROMU)



# AKUT STRESE BAĞLI ÜGİK

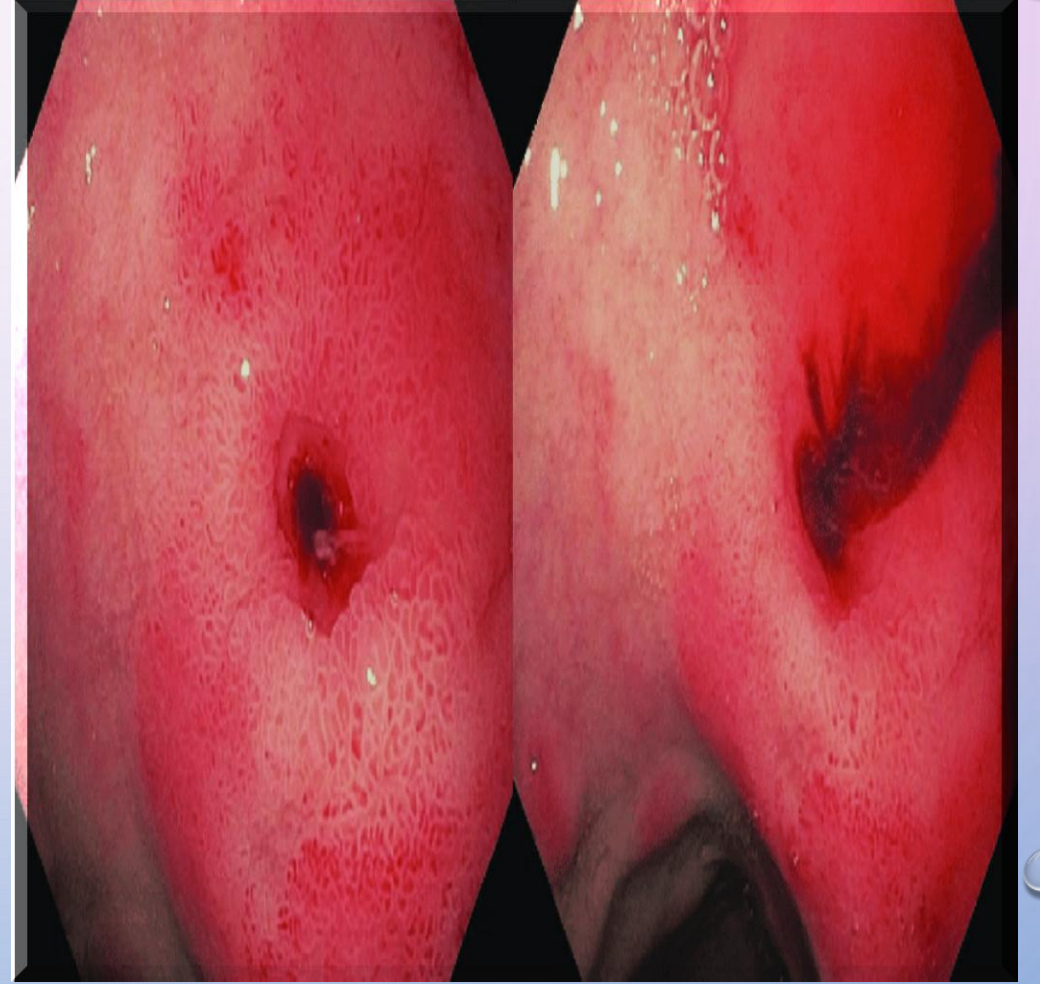


- ŞOK
- MULTIPL TRAVMA
- ARDS
- SISTEMİK RESPIRATUAR DISTRES SENDROMU
- ABY
- SEPSIS



# DIEULAFOY LEZYONA BAĞLI ÜGİK

- 1986'DA TANIMLANDI
- GENELLİKLE KÜÇÜK KURVATUR İLE GASTROÖZAFAJİYAL BİRLEŞKENİN İLK 6 CM'İ İÇİNDE GÖZÜKEN VASKÜLER MALFORMASYONLAR
- ENDOSKOPIK OLARAK SUBMUKOZAL GENİŞ ÜLSERE DAMAR GÖRÜNTÜSÜ
- DAMAR ÇAPININ BÜYÜK OLMASI SEBEBİYLE KANAMA MASIF OLABILIR
- ALKOL ALIMI İLE İLİŞKİLENDİRİLEN ÇALIŞMALAR MEVCUTTUR



# KANAMANIN BELirlENMESl

- HEMATOKEZYA VE MELENA - 90-98%
- MELENA - 70-80%
- HEMATEMEZ - 40-50%
- PRE-SENKOP - 43.2%
- EPIGASTRIK AĞRI- 41%
- RETROSTERNAL YANMA - 21%
- HEMATOKEZYA - 15-20%
- DISPEPSİ - 18%
- SENKOP - 14.4%
- KILO KAYBI - 12%
- DIFFÜZ ABDOMINAL AĞRI- 10%
- SARILIK - 5.2%
- DISFAJİ - 5%

Klinik indikatör	ÜGİK	AGİK
Hematemez	Çoğunlukla	Olası değil
Melena	Çoğunlukla	Çok nadir
Hematokezya	Olası	Çoğunlukla
Gaita kan bulaşı	Olası değil	Neredeyse her zaman
GGK	Olası	Olası

# KANAMANIN BELirlENMESl

- HEMATEMEZ TREITZ LIGAMANININ PROKSIMALINDEN
  - TAZE KAN DEVAM EDEN ORTA/CIDDI BIR KANAMA
  - KAHVE TELVESI RENGİ İSE KENDİNİ SİNİRLANDIRMIŞ
- HERŞEYDEN ÖNCE MELENA GERÇEKTEN MELENA Mı? BIZMUT, İSPANAK, DEMİR????
  - MELENA %90 İHTİMALLE TREITZ'İN PROX KAYNAKLANMAKLA BİRLİKTE ORO/NAZOFARENKS, İNCE BARSAK VEYA ASENDAN KOLON
  - EN AZ 50 ML KANAMA İLE GÖRÜLMEMEYE BAŞLAR
- HEMATOKEZYA ÇOĞUNLUKLA ALT GİS
  - TİPİK OLARAK MASİF ÜGİK KAYNAKLI DA ORTAYA ÇIKAR (ORTOSTATİK HIPOTANSİYON)



- CİDDİ KANAMA İÇİN ŞÜPHELENDİREN SEMPTOMLAR

- ANJINA
  - KONFÜZYON
  - ORTOSTATİK HIPOTANSİYON
  - CİDDİ ÇARPINTI
  - SOĞUK EKSTREMITELER
- 
- EPIGASTRIK AĞRI (PEPTİK ÜLSER)
  - ODİNOFAJİ, GÖRH, DISFAJİ (ÖZAFAJİYAL ÜLSER)
  - KUSMA, ÖĞÜRME, ÖKSÜRME (MALLORY-WEISS YIRTIĞI)
  - SARILIK, ASİT Mİ (VARİS KANAMASI)
  - ERKEN DOYMA, DISFAJİ, KILO KAYBI, KAŞEKSI (MALİGNİTE)

# GEÇMİŞ TIBBİ HİKAYESİ



- **KOMORBİD**

- KAH, PULMONER HASTALIKLAR (ANEMİNİN YAN ETKİLERİ)
- KKY, BÖBREK YETMEZLİĞİ (KAN VE SIVI REPLASMANI)
- KOAGÜLOPATİ, TROMBOSİTOPENİ, YNOA, HEPATİK DISFONKSİYON (KANAMANIN KONTROLÜNDE ZORLUK)
- DEMANS, HEPATİK ENSEFALOPATİ (ASPIRASYON – ENTÜBASYON ??)

- **POTANSİYEL KANAMA ODAĞINI**

- KC HASTALIĞI VE ALKOL TÜKETİMİ (VARİS KANAMASI)
- OPERE ABDOMİNAL AORT ANEVİZMASI (AORTO-ENTERİK FİSTÜL)
- BÖBREK YETMEZLİĞİ, AORT DARLIĞI, HEREDİTER HEMORAJİK TELENJEKTAZİ (ANJİODİSPLAZİ)
- H.PYLORI ENFEKSİYONU, NSAİİ, ASPIRİN, SİGARA KULLANIMI (P.ÜLSER KANAMASI VE MALİGNİTE)
- GASTROANTERİK ANASTOMOZ AMELİYATI GEÇİRENLER (MARJİNAL ÜLSER)

# FIZIK MUAYENE

- HEMODINAMIYI BELİRLEMEK İÇİN ANA KOMPONENT FIZIK MUAYENEDİR
- VITAL BULGULAR
- ORTA-CIDDI HIPOVOLEMİ →DİNLENME HALİNDE TAŞIKARDİ
- %15 SIVI KAYBI → ORTOSTATİK HIPOTANSİYON
- %40 KAYIPTA → SUPIN POZİSYONDA HIPOTANSİYON

	Evre 1	Evre 2	Evre 3	Evre 4
Kan kaybı %	<750 %15	750-1500 %15-30	1500-2000 %30-40	>2000 >%40
Nabız	<100	>100	>120	>140
Kan basıncı	Normal	Normal	Azalmış	Azalmış
Nabız basıncı	Normal Artmış	Azalmış	Azalmış	Azalmış
Sıvı tedavisi	Kristaloid	Kristaloid	Kristaloid ve gruba özgü kan	Kristaloid ve O Rh - Kan

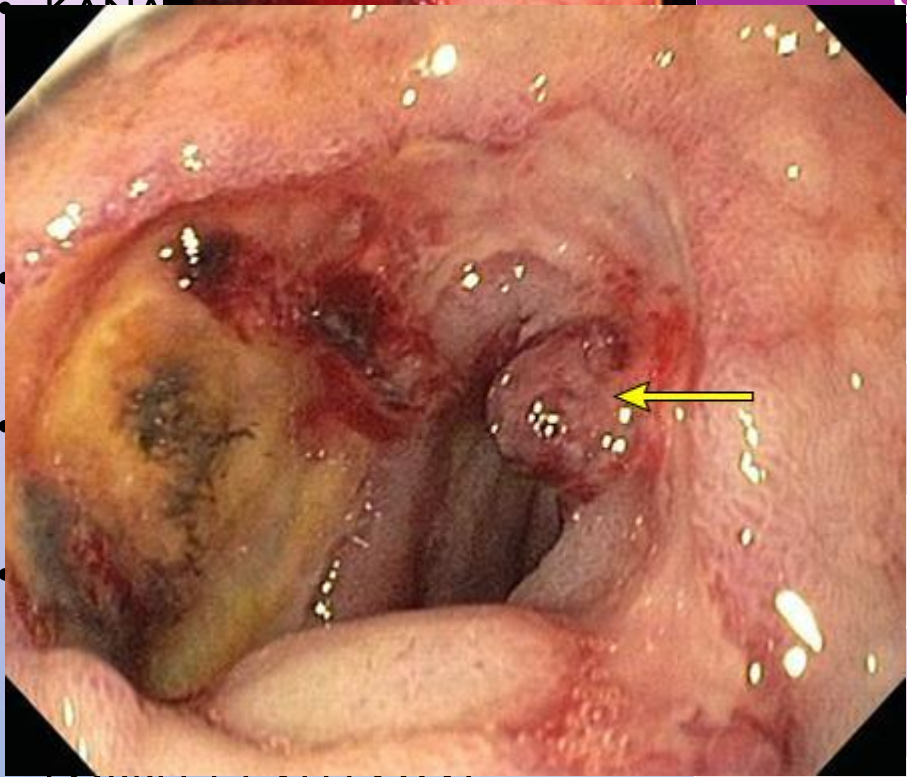


# LABORATUVAR

- HEMOGRAM, KAN GRUBU, KOAGÜLASYON TESTLERİ, KISA BIYOKIMYA PANELİ
- KARDİYAK RISK VARSA; SERİ EKG ÇEKİMİ VE TROPONİN DEĞERLERİ DE ALINMALIDIR.
- İLK HGB DÜZEYİ HER ZAMAN HASTANIN BAZAL HGB'DIR. (ERKEN DÖNEMDE – HASTA HER ZAMAN BÜTÜN KAN KAYBI YAŞAR)
- 24 SAAT SONRA EKSTAVASKÜLER ALANDAN SIVI GEÇİŞİ – VERİLEN SIVILARLA HGB DÜŞER
- AŞIRI SIVI YÜKLENMESİNİN HGB DÜZEYLERİNİ DEĞİŞTİRECEĞİ AKILDA TUTULMALIDIR
- KANAMA CİDDİYETİNE BAĞLI OLARAK HGB DÜZEYİ 2-8 SAAT SIKLIKLA TAKIP EDİLMELİDİR
- ANEMİ VAR İSE NORMOKROM NORMOSİTERDİR (ÜGİK'E BAĞLI)



# ENDOSKOPI



• FORREST SINIFLAMASI

Sınıf

Anlamı

Tekrarlama oranı %

1a

Fışkırır tarzda kanama

90-100

1b

Sızıntı şeklinde kanama

80-85

2a

Kanamayan görünür

40-50

2b

2c

3





# Hemostatic powder spray: a new method for managing gastrointestinal bleeding

Kinesh Changela, Haris Papafragkakis, Emmanuel Ofori, Mel A. Ona, Mahesh Krishnaiah, Sushil Duddempudi and Sury Anand

*Ther Adv Gastroenterol*  
1–11  
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1756283X15572587  
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## **Abstract**

Gastrointestinal bleeding is a leading cause of morbidity and mortality in the United States. The management of gastrointestinal bleeding is often challenging, depending on its location and severity. To date, widely accepted hemostatic treatment options include injection of epinephrine and tissue adhesives such as cyanoacrylate, ablative therapy with contact modalities such as thermal coagulation with heater probe and bipolar hemostatic forceps, noncontact modalities such as photodynamic therapy and argon plasma coagulation, and mechanical hemostasis with band ligation, endoscopic hemoclips, and over-the-scope clips. These approaches, albeit effective in achieving hemostasis, are associated with a 5–10% rebleeding risk. New simple, effective, universal, and safe methods are needed to address some of the challenges posed by the current endoscopic hemostatic techniques. The use of a novel hemostatic powder spray appears to be effective and safe in controlling upper and lower gastrointestinal bleeding. Although initial reports of hemostatic powder spray as an innovative approach to manage gastrointestinal bleeding are promising, further studies are needed to support and confirm its efficacy and safety.

The aim of this study was to evaluate the technical feasibility, clinical efficacy, and safety of hemostatic powder spray (Hemospray, Cook Medical, Winston-Salem, North Carolina, USA) as a new method for managing gastrointestinal bleeding.

In this review article, we performed an extensive literature search summarizing case reports and case series of Hemospray for the management of gastrointestinal bleeding. Indications, features, technique, deployment, success rate, complications, and limitations are discussed.

The combined technical and clinical success rate of Hemospray was 88.5% (207/234) among the human subjects and 81.8% (9/11) among the porcine models studied. Rebleeding occurred within 72 hours post-treatment in 38 patients (38/234; 16.2%) and in three porcine models (3/11; 27.3%). No procedure-related adverse events were associated with the use of Hemospray.

Hemospray appears to be a safe and effective approach in the management of gastrointestinal bleeding.



# DIĞER TANı TESTLERİ

- BARYUMLU GRAFİLER KONTENDİKEDİR
- ANJIYOGRAFI
- DERİN İNCE BARSAK ENTEROSKOPI
- İNTRAOPERATİF ENTEROSKOPI
- KABLOSUZ KAPSÜL ENTEROSKOPI
- KOLONOSKOPI???



# Capsule endoscopy in acute upper gastrointestinal hemorrhage: a prospective cohort study

## Authors

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## Institutions

Institutions are listed at the end of article.

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## Bibliography

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**Background and study aims:** Capsule endoscopy may play a role in the evaluation of patients presenting with acute upper gastrointestinal hemorrhage in the emergency department.

**Patients and methods:** We evaluated adults with acute upper gastrointestinal hemorrhage presenting to the emergency departments of two academic centers. Patients ingested a wireless video capsule, which was followed immediately by a nasogastric tube aspiration and later by esophagogastroduodenoscopy (EGD). We compared capsule endoscopy with nasogastric tube aspiration for determination of the presence of blood, and with EGD for discrimination of the source of bleeding, identification of peptic/inflammatory lesions, safety, and patient satisfaction.

**Results:** The study enrolled 49 patients (32 men, 17 women; mean age  $58.3 \pm 19$  years), but three patients did not complete the capsule endoscopy and five were intolerant of the nasogastric tube. Blood was detected in the upper gastrointestinal tract significantly more often by capsule endoscopy

(15/18 [83.3%]) than by nasogastric tube aspiration (6/18 [33.3%];  $P=0.035$ ). There was no significant difference in the identification of peptic/inflammatory lesions between capsule endoscopy (27/40 [67.5%]) and EGD (35/40 [87.5%];  $P=0.10$ , OR 0.39 95%CI 0.11–1.15). Capsule endoscopy reached the duodenum in 45/46 patients (98%). One patient (2.2%) had self-limited shortness of breath and one (2.2%) had coughing on capsule ingestion.

**Conclusions:** In an emergency department setting, capsule endoscopy appears feasible and safe in people presenting with acute upper gastrointestinal hemorrhage. Capsule endoscopy identifies gross blood in the upper gastrointestinal tract, including the duodenum, significantly more often than nasogastric tube aspiration and identifies inflammatory lesions, as well as EGD. Capsule endoscopy may facilitate patient triage and earlier endoscopy, but should not be considered a substitute for EGD.



# TEDAVI

- ABC (AIRWAY, BREATHING, CIRCULATION)
- ANA HEDEF ŞOKUN VE SIVI KAYBININ YÖNETİMİDİR
  - ORAL ALIMIN DURDURULMASI
- 2 BÜYÜK PERİFER DAMAR YOLU AÇILMALI VEYA SANTRAL VENÖZ KATETER TAKILMALI.
  - ENTÜBASYON ???





# Association of prophylactic endotracheal intubation in critically ill patients with upper GI bleeding and cardiopulmonary unplanned events



Umar Hayat, MD,<sup>1</sup> Peter J. Lee, MBChB,<sup>2</sup> Hamid Ullah, MD,<sup>1</sup> Shashank Sarvepalli, MD,<sup>1</sup> Rocio Lopez, MS,<sup>3</sup> John J. Vargo, MD, MPH<sup>2</sup>

Cleveland, Ohio, USA

Daha fazla entübasyon = fazla beklenmedik kardiyak olay + pnömoni???

**Background and Aims:** Prophylactic endotracheal intubation (PEI) is often advocated to mitigate the risk of cardiopulmonary adverse events in patients presenting with brisk upper GI bleeding (UGIB). However, the benefit of such a measure remains controversial. Our study aimed to compare the incidence of cardiopulmonary unplanned events between critically ill patients with brisk UGIB who underwent endotracheal intubation versus those who did not.

**Methods:** Patients aged 18 years or older who presented at Cleveland Clinic between 2011 and 2014 with hematemesis and/or patients with melena with consequential hypovolemic shock were included. The primary outcome was a composite of several cardiopulmonary unplanned events (pneumonia, pulmonary edema, acute respiratory distress syndrome, persistent shock/hypotension after the procedure, arrhythmia, myocardial infarction, and cardiac arrest) occurring within 48 hours of the endoscopic procedure. Propensity score matching was used to match each patient 1:1 in variables that could influence the decision to intubate. These included Glasgow Blatchford Score, Charleston Comorbidity Index, and Acute Physiology and Chronic Health Evaluation scores.

**Results:** Two hundred patients were included in the final analysis. The baseline characteristics, comorbidity scores, and prognostic scores were similar between the 2 groups. The overall cardiopulmonary unplanned event rates were significantly higher in the intubated group compared with the nonintubated group (20% vs 6%,  $P = .008$ ), which remained significant ( $P = .012$ ) after adjusting for the presence of esophageal varices.

**Conclusions:** PEI before an EGD for brisk UGIB in critically ill patients is associated with an increased risk of unplanned cardiopulmonary events. The benefits and risks of intubation should be carefully weighed when considering airway protection before an EGD in this group of patients. (Gastrointest Endosc 2017;86:500-9.)



# NAZOGASTRIK LAVAJ

## Impact of nasogas

Edward S. Huang, MD,  
Marc Makhani, MD, Br

Boston, Massachusetts; Le

**Background:** Nasogastric l  
practice assumes that NGL r

**Objective:** We performed a  
measures and outcomes in C

**Design:** Propensity-matched

**Setting:** University-based Ve

**Patients:** A total of 632 pati

**Main Outcome Measurem**  
surgery, and time to endosc

**Results:** Patients receiving  
admitted to intensive care,  
present on weekdays. After  
confidence interval [CI], 0.3  
CI, 0.42-5.43), or transfusion  
endoscopy (hazard ratio 1.4  
2.69; 95% CI, 1.08-6.73).

**Limitations:** Retrospective c

**Conclusions:** Performing N  
clinical outcomes. Performin  
will be needed to confirm th

► Additional material is  
published online only. To  
view please visit the journal  
online (<http://dx.doi.org/10.1136/jim-2016-000375>)

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Federation for Medical  
Research

## Randomized pragmatic trial of nasogastric tube placement in patients with upper gastrointestinal tract bleeding

Don C Rockey,<sup>1</sup> Chul Ahn,<sup>2</sup> Silvio W de Melo Jr<sup>3</sup>

### ABSTRACT

The value of nasogastric (NG) tube placement in patients with upper gastrointestinal tract bleeding (UGIB) is unclear. We therefore aimed to determine the usefulness of NG tube placement in patients with UGIB. The study was a single-blind, randomized, prospective, non-inferiority study comparing NG placement (with aspiration and lavage) to no NG placement (control). The primary outcome was the probability that physicians could predict the presence of a high-risk lesion (ie, requiring endoscopic therapy). 140 patients in each arm were included; baseline clinical features were similar in each group. The probability that there would be a high-risk lesion in the control arm was predicted to be 35% compared with 39% in the NG arm (after NG placement)—a probability difference of -4% (95% CI -12% to 3%), which confirmed non-inferiority of the 2 arms ( $p=0.002$ ). All patients underwent endoscopy and all patients with high-risk lesions had endoscopic therapy. Physicians predicted the specific culprit lesion in 38% (53/140) and 39% (55/140) of patients in the control and NG (after NG placement) groups, respectively. The presence of coffee grounds or red blood in the NG aspirate did not change physician assessments. Pain, nasal bleeding, or failure of NG occurred in 47/140 (34%) patients. There were no differences in rebleeding rates or mortality. In patients with acute UGIB, the ability of physicians to predict culprit bleeding lesions and/or the presence of high-risk lesions was poor. Routine NG placement did not improve physician's predictive ability, did not affect

### Significance of this study

#### What is already known about this subject?

- The use of nasogastric (NG) tubes in patients with gastrointestinal (GI) bleeding has been part of the practice of medicine for many years.
- NG tubes are cumbersome and their value has been debated.
- Few studies have evaluated the clinical utility of routine placement of NG tubes in patients with upper GI tract bleeding (UGIB).

#### What are the new findings?

- This study demonstrated that using an NG tube in patients with routine UGIB did not improve the ability of clinicians to triage care.
- NG tube placement in patients with typical UGIB had no impact on outcomes.
- The placement of NG tubes was often unsuccessful, or associated with discomfort.

#### How might these results change the focus of research or clinical practice?

- The study findings indicate that NG tubes are of limited value in patients with UGIB.
- The results suggest NG tubes should not be routinely used in patients having UGIB.

# SIVI VE KAN ÜRÜNÜ RESÜSİTASYONU

- HIPOVOLEMİK ŞOK EVRELERİ??
- AKTİF KANAMASI OLAN HASTALARA 500 ML KRİSTALLOİD (KAN ÜRÜNLERİNİN HAZIRLANDIĞI SİRADA)
- SIVI YÜKLENMESİ OLABİLECEK HASTALARDA DİKKATLİ OLUNMALIDIR.
- GEÇİCİ DE OLSA İNOTROP DESTEK
- HGB DEĞERİNİN 7 G/DL NİN ÜSTÜNDE (ASLINDA HER HASTA İÇİN FARKLI KARAR)
- KO-MORBİD HASTALIĞI OLAN HASTALARDA (ANEMİ, KAH VS) HGB DÜZEYİ 9 G/DL NİN ÜZERİNDE
- HERHANGİ BİR TEMEL YAŞ DEĞERİ YOKTUR
- PLT 50.000 ALTINDA AKTİF KANAMASI VARLIĞI OLANLARA PLT TX YAPILMALI
- TDP İNR 1.5 (KC HASTALIĞI HARIÇ) ÜSTÜ
- ENDOSKOPI HEMODİNAMİSİ SAĞLANMIŞ AMA HALA TRANFÜZYONU DEVAM İNR <3
- ANTIPLATELET AJANLAR KONSÜLTASYON???



# Restrictive versus liberal blood transfusion for gastrointestinal bleeding: a systematic review and meta-analysis of randomised controlled trials

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## Summary

**Background** Acute upper gastrointestinal bleeding is a leading indication for red blood cell (RBC) transfusion worldwide, although optimal thresholds for transfusion are debated.

**Methods** We searched MEDLINE, Embase, CENTRAL, CINAHL, and the Transfusion Evidence Library from inception to Oct 20, 2016, for randomised controlled trials comparing restrictive and liberal RBC transfusion strategies for acute upper gastrointestinal bleeding. Main outcomes were mortality, rebleeding, ischaemic events, and mean RBC transfusion. We computed pooled estimates for each outcome by random effects meta-analysis, and individual participant data for a cluster randomised trial were re-analysed to facilitate meta-analysis. We compared treatment effects between patient subgroups, including patients with liver cirrhosis, patients with non-variceal upper gastrointestinal bleeding, and patients with ischaemic heart disease at baseline.

**Findings** We included four published and one unpublished randomised controlled trial, totalling 1965 participants. The number of RBC units transfused was lower in the restrictive transfusion group than in the liberal transfusion group (mean difference  $-1.73$  units, 95% CI  $-2.36$  to  $-1.11$ ,  $p < 0.0001$ ). Restrictive transfusion was associated with lower risk of all-cause mortality (relative risk [RR]  $0.65$ , 95% CI  $0.44$ – $0.97$ ,  $p = 0.03$ ) and rebleeding overall ( $0.58$ ,  $0.40$ – $0.84$ ,  $p = 0.004$ ). We detected no difference in risk of ischaemic events. There were no statistically significant differences in the subgroups.

**Interpretation** These results support more widespread implementation of restrictive transfusion policies for adults with acute upper gastrointestinal bleeding.

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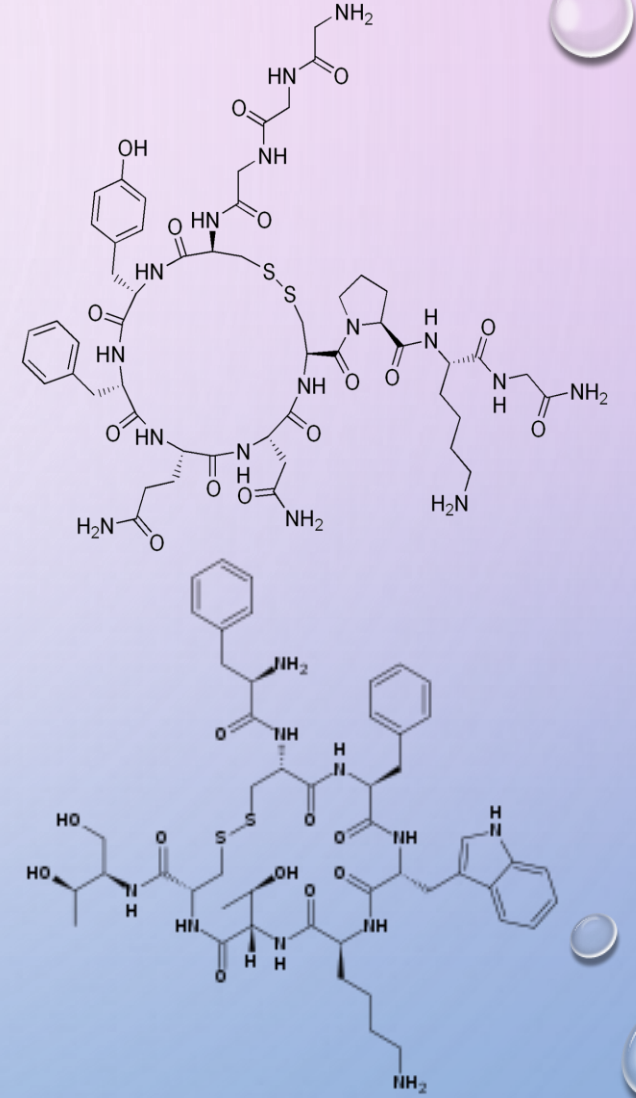
# İLAÇLAR

- **ASİD SÜPRESYONU:**
- AMPIRİK OLARAK IV ESOMEPRAZOL (80 MG IV BOLUS VE SONRASINDA 8 MG/S IV INF VEYA 2X40 MG IV)
- ENDOSKOPI ÖNCESİ/SONRASI??
- **PROKINETİKLER:**
- ERITROMISIN VE METOKLORPROPAMİD
- ERITROMISIN MOTİLİN RESEPTÖR AGONİZMASI İLE GATRİK BOŞALIMI HIZLANDIRIR
- EĞER MİDEDE CİDDİ MİKTARDA KAN VEYA PİHTI BİRİKİMİ OLDUĞU DÜŞÜNÜLEN HASTALAR VARSA ERITROMISIN ÖNERİLEBİLİR (3 MG/KG 2-30 DK - ENDOSKOPİDEN 30-90 DK ÖNCE)



# İLAÇLAR

- 3-5 GÜN
- **VAZOPRESSIN:**
- MORTALITE ÜZERINE ETKİSİ YOKTUR
- EKSTRASPLANKNİK VAZOKONSTRIKSİYON (NADIR KULLANIM)
- 0.4 U BOLUS- 04-1 U/DK INF
- **TERLIPRESSIN** (TRIGLİSENİL LİZİL VAZOPRESSİN)
- HİPONATREMİ
- 2MG IV BOLUS /4 SAATTE 1 VE KANAMA KONTROLÜ SAĞLANINCA 1 MG / 4 SAATTE BİR
- **SOMATOSTATİN VE OKTREOTİD:**
- GLUKOAGON SALINIMINI ÖNLEYEREK İNDİREKT YOLDAN SPLANKNİK VAZOKONSTRIKSİYON
- 250 MCG IV BOLUS VE 250 MCG/S INF
- OKTEROTİD 50 MCG IV BOLUS VE 50 MCG/S IV INF.





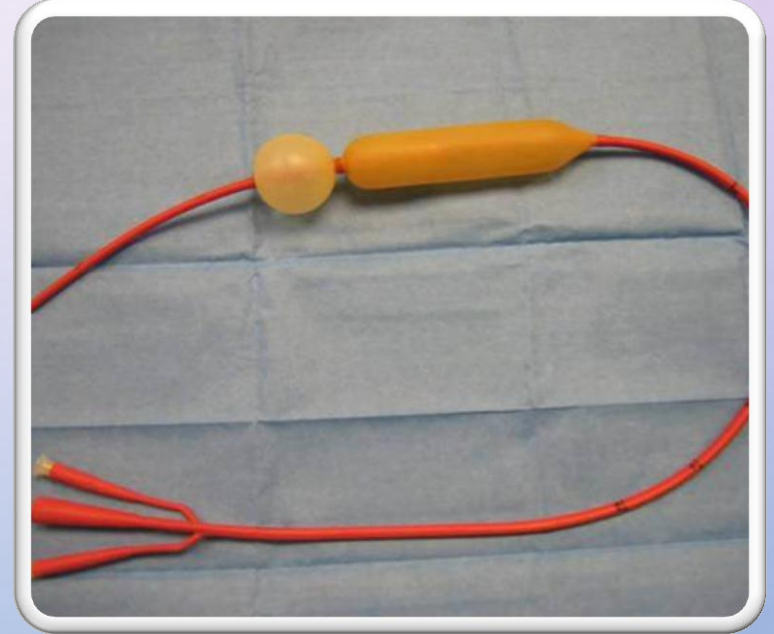
# İLAÇLAR

- TRANSHEKSAMİK ASİT ETKİSİ KANITLANMIŞ DEĞİLDİR
- ANTIKOAGÜLAN VE ANTIPLATELET AJANLAR  
KONSÜLTASYON ???
- ANTİBİYOTERPİ ??? (VARİS KANAMALARI)



# BALON TAMPONAD

- VARIS KANAMALARINDA
- KISA DÖNEMLİ HEMOSTAZ İÇİN ETKİLİ
- SENGSTAKEN-BLAKEMORE TÜPÜ, MINNESOTA TÜPÜ VE LINTON-NAHLAS TÜPÜ
- %30-90 HASTADA GEÇİCİ OLSADA BAŞLANGIÇ TEDAVISİNDE HEMODİNAMİYİ SAĞLADIĞI GÖRÜLMÜŞTÜR
- GENİŞ ORAN = HASTA SEÇİMİ, KLİNİSYENİN DENEYİMİ VE BERABERİNDEKİ MEDİKAL TEDAVİ



## RISK SINIFLAMASI VE SKORLARI

- TEKRAR KANAMA İÇİN RISK FAKTÖRLERİ:
- ENDOSKOPIDE AKTİF KANAMA
- UNSTABİL HASTALAR
- HGB < 10 MG/DL
- BÜYÜK ÜLSER ALANI (1-3 CM DEN FAZLA)
- ÜLSER LOKALİZASYONU ( PROKSİMAL KÜÇÜK KURVATUR VEYA POSTERIOR DUEDONUM)

**Annals of Internal Medicine**

**CLINICAL GUIDELINES**

### **International Consensus Recommendations on the Management of Patients With Nonvariceal Upper Gastrointestinal Bleeding**

Alan N. Barkun, MD, MSc (Clinical Epidemiology); Marc Bardou, MD, PhD; Ernst J. Kuipers, MD; Joseph Sung, MD; Richard H. Hunt, MD; Myriam Martel, BSc; and Paul Sinclair, MSc, for the International Consensus Upper Gastrointestinal Bleeding Conference Group\*



### Age

- ☐ <60 years old (0 points)
- ☐ 60-79 years old (1 point)
- ☐ ≥80 years old (2 points)

### Hemodynamic Shock

- ☐ None with systolic BP ≥100 mmHg and pulse <100/min (0 points)
- ☐ Tachycardic with pulse ≥100/min but systolic BP ≥100 mmHg (1 point)
- ☐ Hypotension with systolic BP <100 mmHg (2 points)

### Major Comorbidities

- ☐ None (0 points)
- ☐ Cardiac failure, ischemic heart disease or similar major comorbidity (2 points)
- ☐ Renal failure, hepatic failure or disseminated cancer (3 points)

### Diagnosis

- ☐ Mallory-Weiss tear, but no major lesions and no stigmata of recent bleed (0 points)
- ☐ Other nonmalignant gastrointestinal diagnoses (1 point)
- ☐ Upper gastrointestinal tract malignancy (2 points)

### Recent hemorrhage

- ☐ None (or dark area only) (0 points)
- ☐ Blood found in upper gastrointestinal tract (clot adherence, spurting or visible vessel) (2 points)

**Rokcall skoru**  
**<2 puan**

**Blatchford skoru**  
**0 puan**

### Blood urea nitrogen

- ☐ <18.2 mg/dL (<6.5 mmol/L) (0 points)
- ☐ ≥18.2 and <22.4 mg/dL (≥6.5 and <8 mmol/L) (2 points)
- ☐ ≥22.4 and <28 mg/dL (≥8 and <10 mmol/L) (3 points)
- ☐ ≥28 and <70 mg/dL (≥10 and <25 mmol/L) (4 points)
- ☐ ≥70 mg/dL (≥25 mmol/L) (6 points)

### Hemoglobin

- ☐ Male ≥13 g/dL (>130 g/L) (0 points)
- ☐ Male ≥12 and <13 g/dL (≥120 and <130 g/L) (1 point)
- ☐ Male ≥10 and <12 g/dL (≥100 and <120 g/L) (3 points)
- ☐ Female ≥12 g/dL (>120 g/L) (0 points)
- ☐ Female ≥10 and <12 g/dL (≥100 and <120 g/L) (1 point)
- ☐ Male or female <10 g/dL (<100 g/L) (6 points)

### Systolic blood pressure

- ☐ ≥110 mmHg (0 points)
- ☐ 100 to 109 mmHg (1 point)
- ☐ 90 to 99 mmHg (2 points)
- ☐ <90 mmHg (3 points)

### Other markers

- ☐ Heart rate ≥100 per minute (1 point)
- ☐ Melena at presentation (1 point)
- ☐ Syncope at presentation (2 points)
- ☐ Hepatic disease present (2 points)
- ☐ Cardiac failure present (2 points)

# A simple risk score accurately predicts in-hospital mortality, length of stay, and cost in acute upper GI bleeding (CME)

AIMS-65

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Anne C. Travis, MD, MSc,<sup>1,2</sup> Richard S. Johannes, MD, MPH<sup>2</sup>

Boston, Marlborough, Massachusetts, USA

**Background:** Although the early use of a risk stratification score in upper GI bleeding is recommended, existing risk scores are not widely used in clinical practice.

**Objective:** We sought to develop and validate an easily calculated bedside risk score, AIMS65, by using data routinely available at initial evaluation.

**Design:** Data from patients admitted from the emergency department with acute upper GI bleeding were extracted from a database containing information from 187 U.S. hospitals. Recursive partitioning was applied to derive a risk score for in-hospital mortality by using data from 2004 to 2005 in 29,222 patients. The score was validated by using data from 2006 to 2007 in 32,504 patients. Accuracy to predict mortality was assessed by the area under the receiver operating characteristic (AUROC) curve.

**Main Outcome Measurements:** Mortality, length of stay (LOS), and cost of admission.

**Results:** The 5 factors present at admission with the best discrimination were albumin less than 3.0 g/dL, international normalized ratio greater than 1.5, altered mental status, systolic blood pressure 90 mm Hg or lower, and age older than 65 years. For those with no risk factors, the mortality rate was 0.3% compared with 31.8% in patients with all 5 ( $P < .001$ ). The model had a high predictive accuracy (AUROC = 0.80; 95% CI, 0.78-0.81), which was confirmed in the validation cohort (AUROC = 0.77, 95% CI, 0.75-0.79). Longer LOS and increased costs were seen with higher scores ( $P < .001$ ).

**Limitations:** Database data used does not include outcomes such as rebleeding.

**Conclusions:** AIMS65 is a simple, accurate risk score that predicts in-hospital mortality, LOS, and cost in patients with acute upper GI bleeding. (Gastrointest Endosc 2011;74:1215-24.)

# ÖZET

## Major causes\*

Peptic ulcer, esophagogastric varices, arteriovenous malformation, tumor, esophageal (Mallory-Weiss) tear

## Clinical features

### History

Use of: NSAIDs, aspirin, anticoagulants, antiplatelet agents

Alcohol abuse; previous GI bleed; liver disease; coagulopathy

Symptoms and signs: Abdominal pain; hematemesis or "coffee ground" emesis; passing melena/tarry stool (stool may be frankly bloody or maroon with massive or brisk upper GI bleeding)

### Examination

Tachycardia, orthostatic blood pressure changes suggest moderate to severe blood loss; hypotension suggests life-threatening blood loss (hypotension may be late finding in healthy younger adult)

Rectal examination is performed to assess stool color (melena versus hematochezia versus brown)

Significant abdominal tenderness accompanied by signs of peritoneal irritation (eg, involuntary guarding) suggests perforation

## Diagnostic testing

Obtain type and screen (or type and crossmatch for hemodynamic instability, severe bleeding, or high-risk patient)

Obtain hemoglobin concentration (normal measurement may be inaccurate with acute severe hemorrhage), platelet count, coagulation studies (prothrombin time with INR), liver enzymes (AST, ALT), albumin, BUN and creatinine

Nasogastric lavage may be helpful if the source of bleeding is unclear (upper or lower GI tract) or to clean the stomach prior to endoscopy



## Treatment

Closely monitor airway, clinical status, vital signs, cardiac rhythm, urine output, nasogastric output (if nasogastric tube in place)

Do NOT give patient anything by mouth

Establish two large bore IV lines (16 gauge or larger)

Provide supplemental oxygen

Treat hypotension initially with rapid, bolus infusions of isotonic crystalloid

Transfuse for:

Hemodynamic instability despite crystalloid resuscitation

Hemoglobin <9 g/dL (90 g/L) in high-risk patients (eg, elderly, coronary artery disease)

Hemoglobin <7 g/dL (70 g/L) in low-risk patients

Avoid over-transfusion with possible variceal bleeding

Give fresh frozen plasma for coagulopathy; give platelets for thrombocytopenia (platelets <50,000) or platelet dysfunction (eg, chronic aspirin therapy)

Obtain immediate consultation with gastroenterologist; obtain surgical and interventional radiology consultation for any large-scale bleeding¶

Pharmacotherapy for all patients with suspected or known severe bleeding:

Give a proton pump inhibitor (eg, esomeprazole 40 mg IV twice daily or pantoprazole 40 mg IV twice daily)

Pharmacotherapy for known or suspected esophagogastric variceal bleeding and/or cirrhosis:

Give somatostatin or an analogue (eg, octreotide 50 mcg IV bolus, followed by 50 mcg/hour continuous IV infusion)

Give an IV antibiotic (eg, ceftriaxone or fluoroquinolone)

Balloon tamponade may be performed as a temporizing measure for patients with uncontrollable hemorrhage likely due to varices using any of several devices (eg, Sengstaken-Blakemore tube, Minnesota tube); tracheal intubation is necessary if such a device is to be placed; ensure proper device placement prior to inflation to avoid esophageal rupture