



2002/1/4



16. National Emergency Medicine Congress & 7. Intercontinental Emergency Medicine ve 7. International Critical Care Congress

"What is the current status of pre-hospital emergency radiology?"

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My Sincere Thanks to...

- Dear President of EPAT:
 - Prof. Dr. Başar CANDER,
- Board of Directors of EPAT
- Prof. Dr. Mehmet GÜL
 - Moderator of our panel
- Dear speakers/participants,
- Mr. Emre TETİK and his team...



References

- Past 28 years...
- Dr. Can Erkan ARSLAN.
 - Hastane öncesi alanda paramediklerin ultrason kullanımı. Paramedikler için Travma Yönetimi.
- Mazen J. El Sayed, Elie Zaghrini. **XXX**
 - "Prehospital Emergency Ultrasound: A Review of Current Clinical Applications, Challenges, and Future Implications", Emergency Medicine International, vol. 2013, Article ID 531674, 6 pages, 2013.
- Tharwat El Zahran, Mazen J El Sayed.
 - Prehospital Ultrasound in Trauma: A Review of Current and Potential Future Clinical Applications.
 - J Emerg Trauma Shock. 2018 Jan-Mar; 11(1): 4–9.



Please, Don't Worry!







Plan for Presentation

- Introduction
- Radiology in prehospital care:
 - Ultrasound
- The indications,
- The challenges,
- Summary/conclusion



Remember Her?



DIE ANA



Princess die



Remember Why She Died?



At the End of the Presentation...



Introduction

What is the problem?



Main Problem

- Reduce trauma related deaths:
 - Diagnose early,
 - %40-50 prehospital fatalities are preventable



What to Do?



Use Prehospital Ultrasound



Prehospital Ultrasound

- A kind of medical imaging:
 - Portable,
 - Painless,
 - No ionizing radiation
- Recent years:
 - Decreased in size and more portable,
 - Decreased in cost and,
 - Higher quality images







Wireless



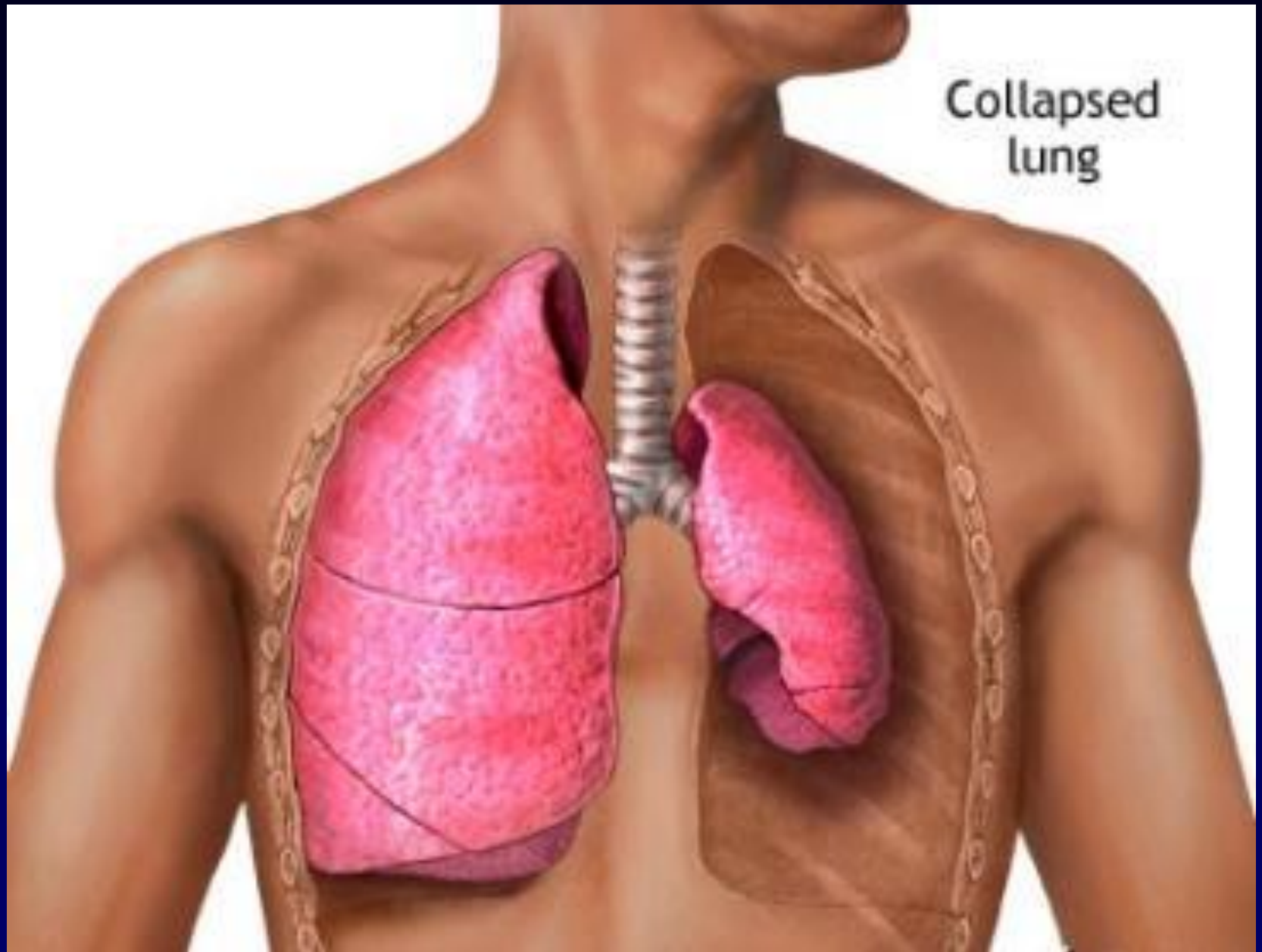




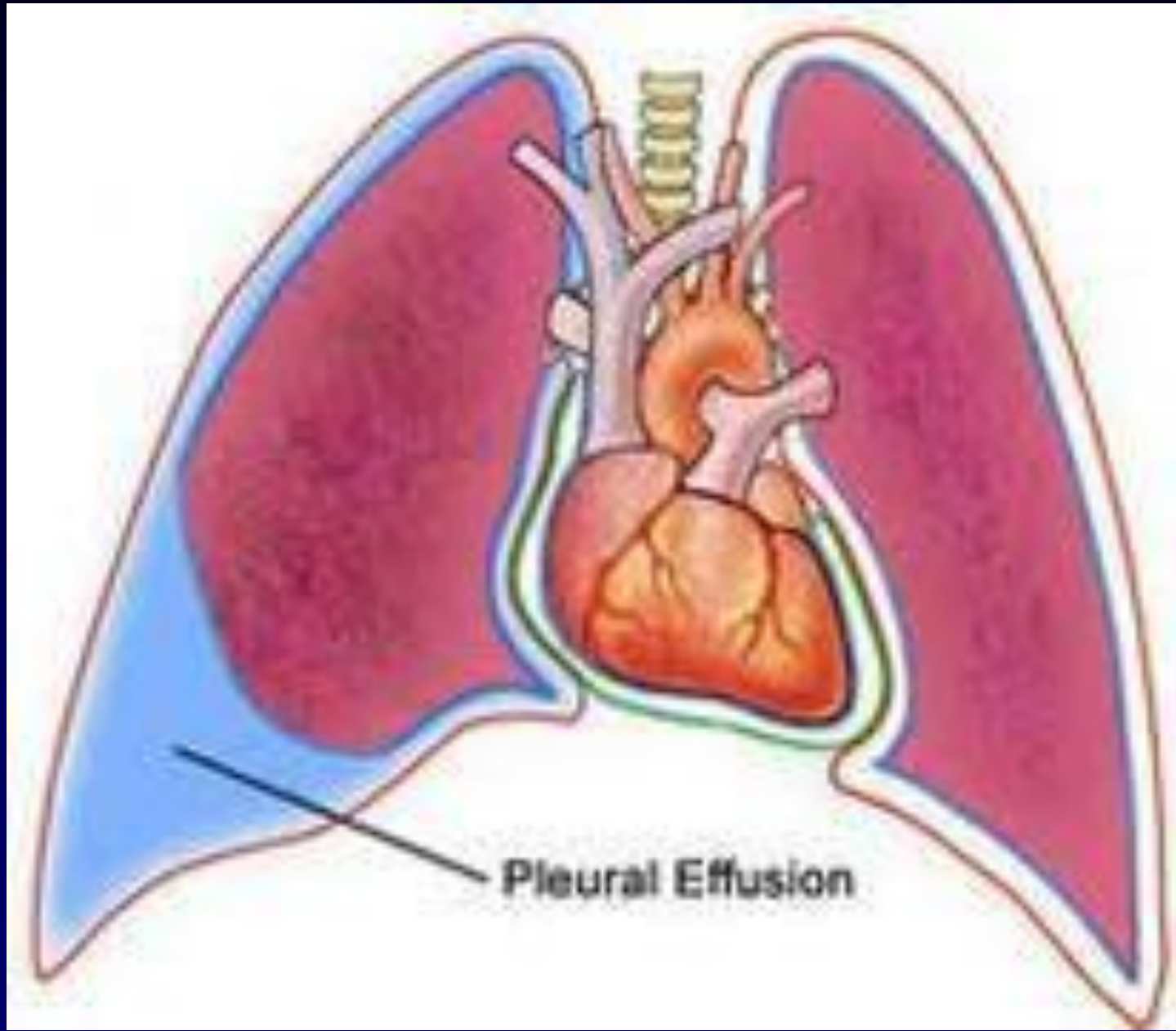
Possible Indications

- Trauma cases:
 - pFAST: Prehospital focused abdominal sonography for trauma.
 - Look for free fluid
- Cardiac arrest,
 - Cardiac wall motion present/absent?
 - Cessation or not
- Chest tube placement,

Tension Pneumothorax



Massive Hemothorax





Possssible Indications-II



Airway management,

Verification of Entubation Tube









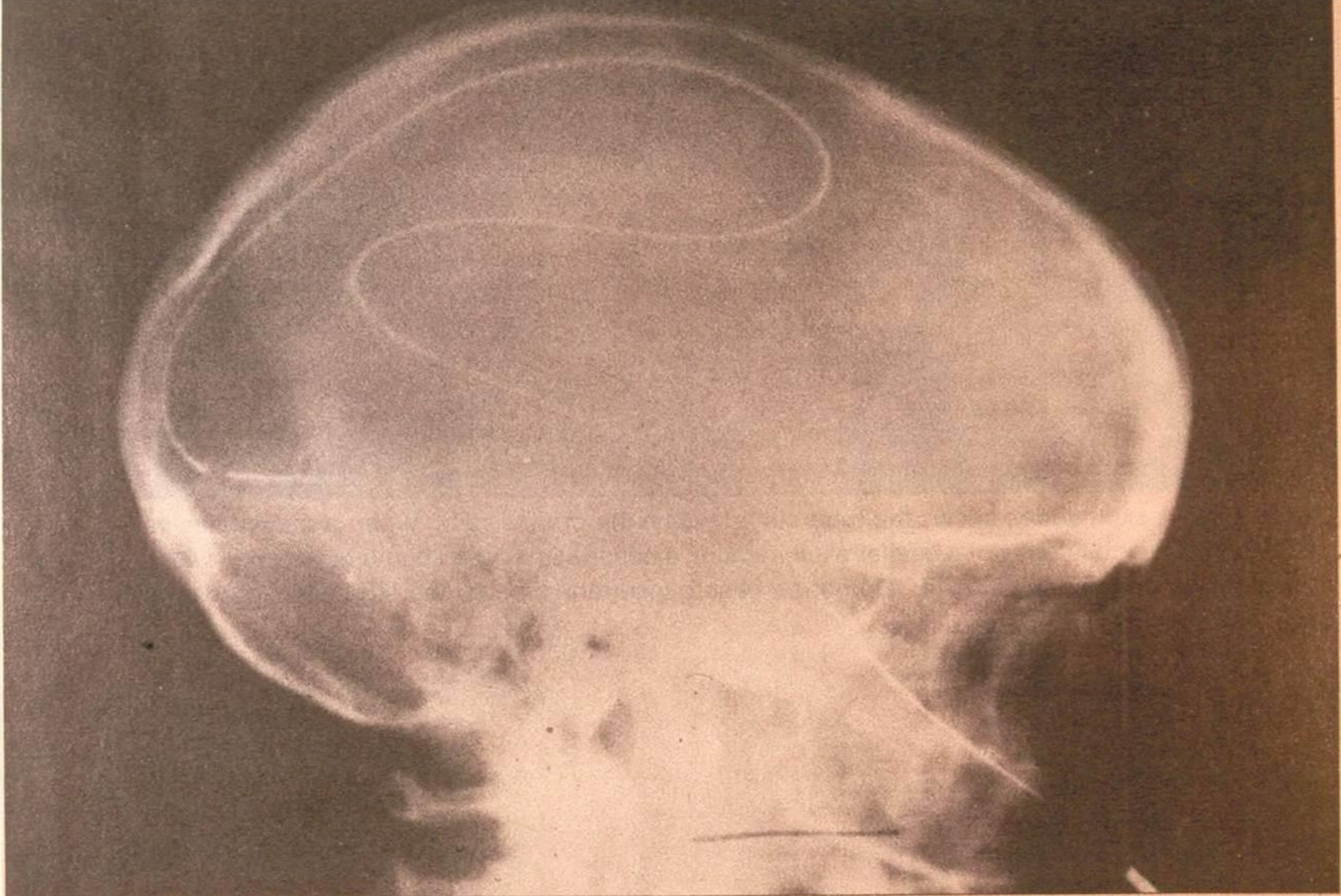


Possible Indications-III

- Mass casualties:
 - Triage of the patients
 - Look for presence/absence of cardiac activity
- Confirming gastric tube placement,
- Stroke diagnosis:
 - Diagnosing intracranial bleed,
- Diagnosing fracture in austere conditions,
- IV line placement:
 - Obese,



Confirming gastric
tube placement,



Clinical history. A 34-year-old man suffered multiple trauma in a motor-vehicle accident and was unresponsive when brought to the emergency department. Endotracheal and nasogastric tubes were inserted but the nasogastric tube could not be seen on the chest x-ray.



Triage

Stop CPR or not?















Future Applications of Prehospital Trauma Ultrasound

- Hemostasis (stop the bleeding)
 - High intensity focused ultrasonography



What Is Needed?

- Prehospital ultrasonography training,
- New regulations



Summary

- Can be tested,
- But I am not convinced yet, why?
 - Short education period,
 - Not skilled yet,
 - Extending the transport time:
 - Time limitation
 - Expertise of the operator,
 - No enough study/evidence
 - Must be done by a physician

DIE ANA



Princess die



Remember Why She Died?



We Must be Careful...

- Transport the patient as soon as possible...
- Otherwise more Princess Diana... .-(((



Many Thanks to You...

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