FIXATION ERRORS AND THE DIFFICULT AIRWAY

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FLIGHT NURSE / YAKIMA BASE MANAGER

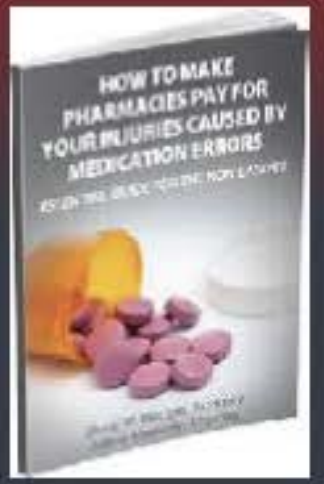
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OBJECTIVES

- Review the history of error recognition in health care
- Define what fixation errors are
- Discuss the common causes
- Identify strategies of how to avoid these errors
- Discuss a difficult airway case with high potential for fixation errors to occur

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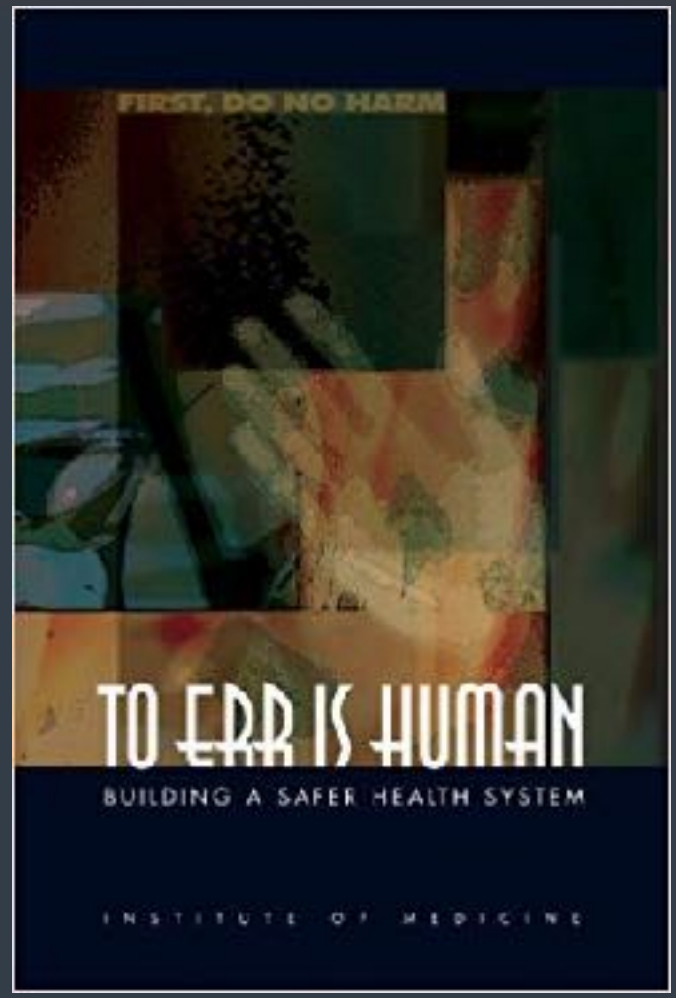




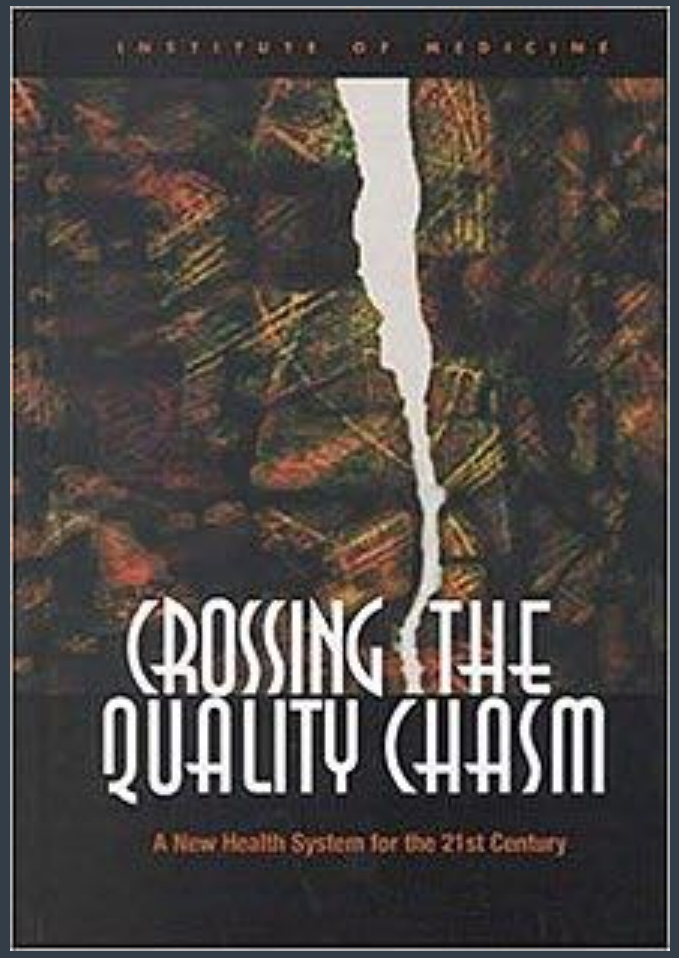




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HEALTH CARE PATIENT SAFETY

- Medical errors today:
  - Leading cause of morbidity and mortality
  - Human error accounts for 87% of all medical errors
  - 10-15% in Emergency Medicine care
  - 83% in Anesthesia with
    - Fixation errors as major contributing factor
      - Complexity of OR setting
      - Acuity of crisis situations
      - Psychophysiological variables unique to individuals and teams



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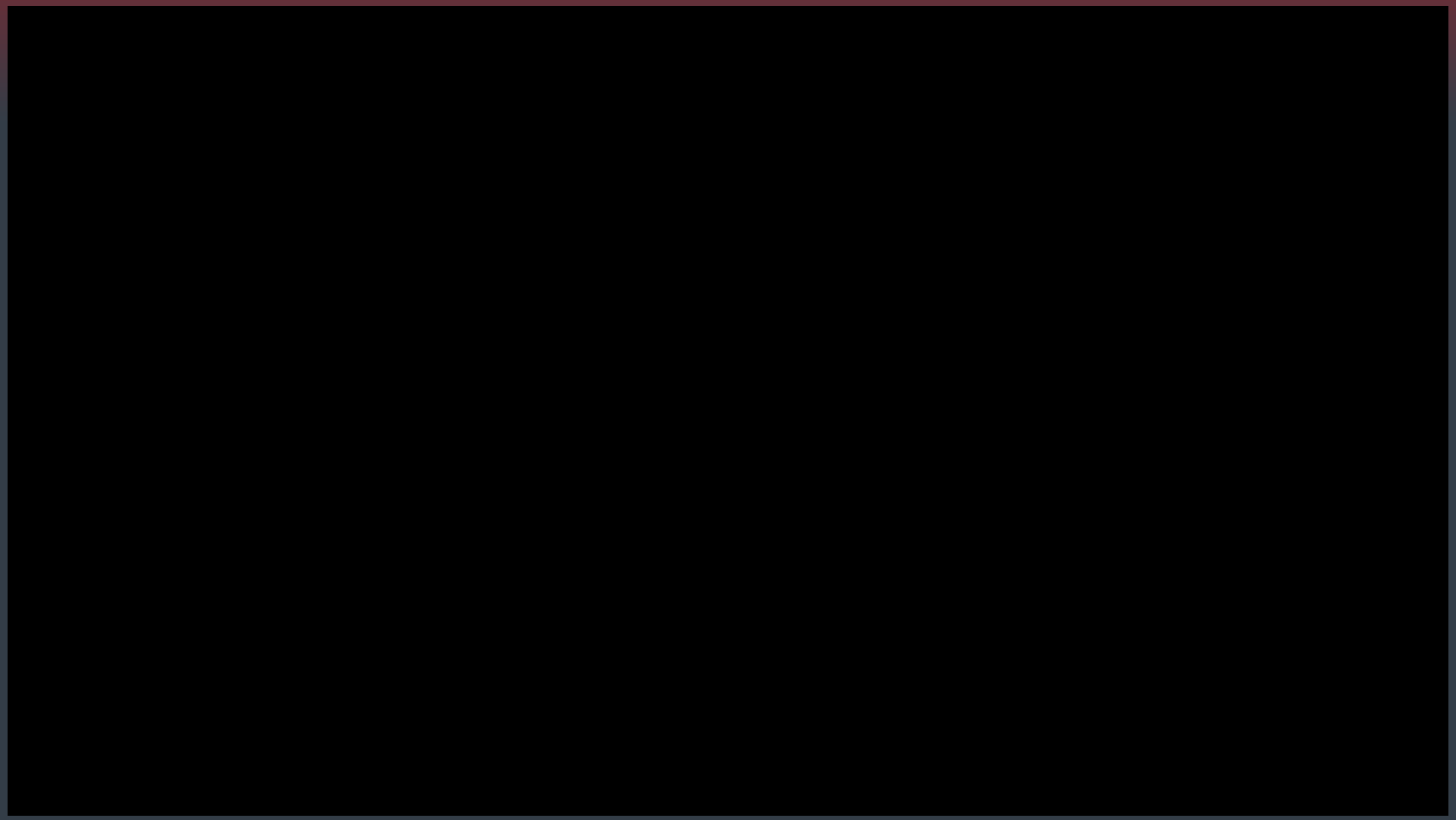








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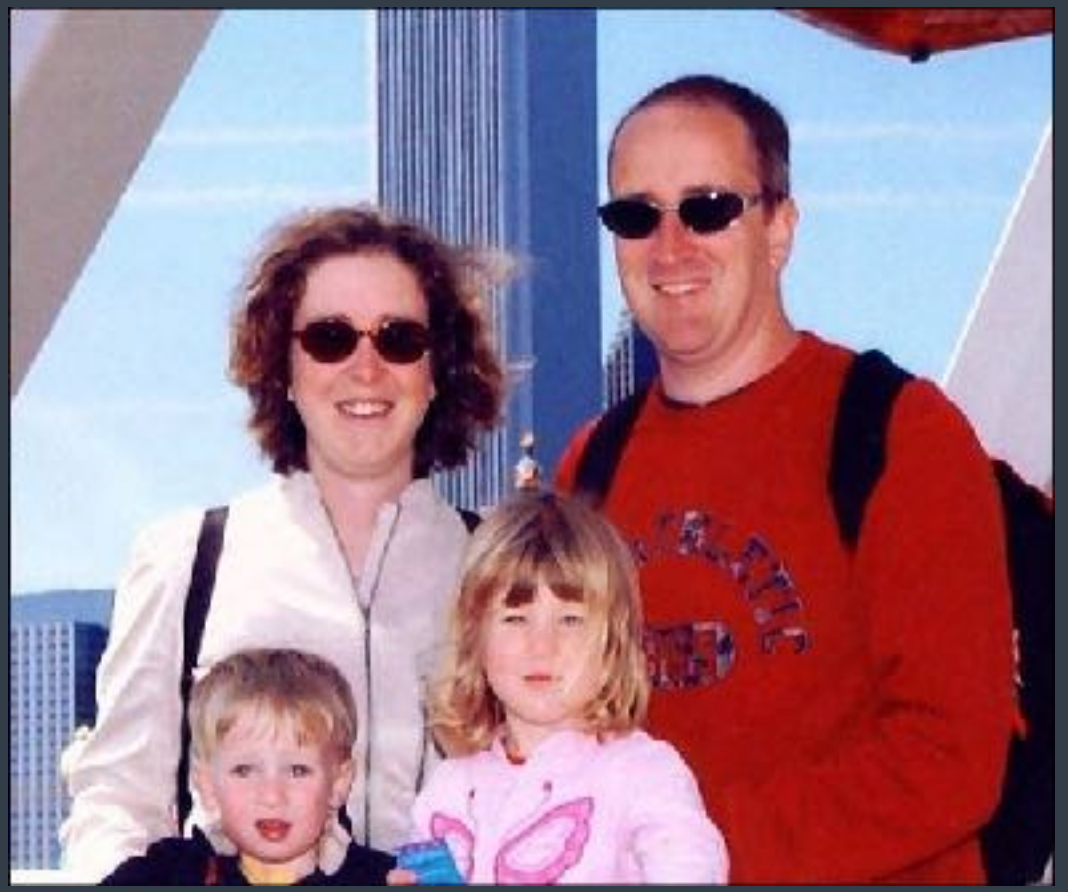


https://www.youtube.com/watch?v=JzIvgtPIof4

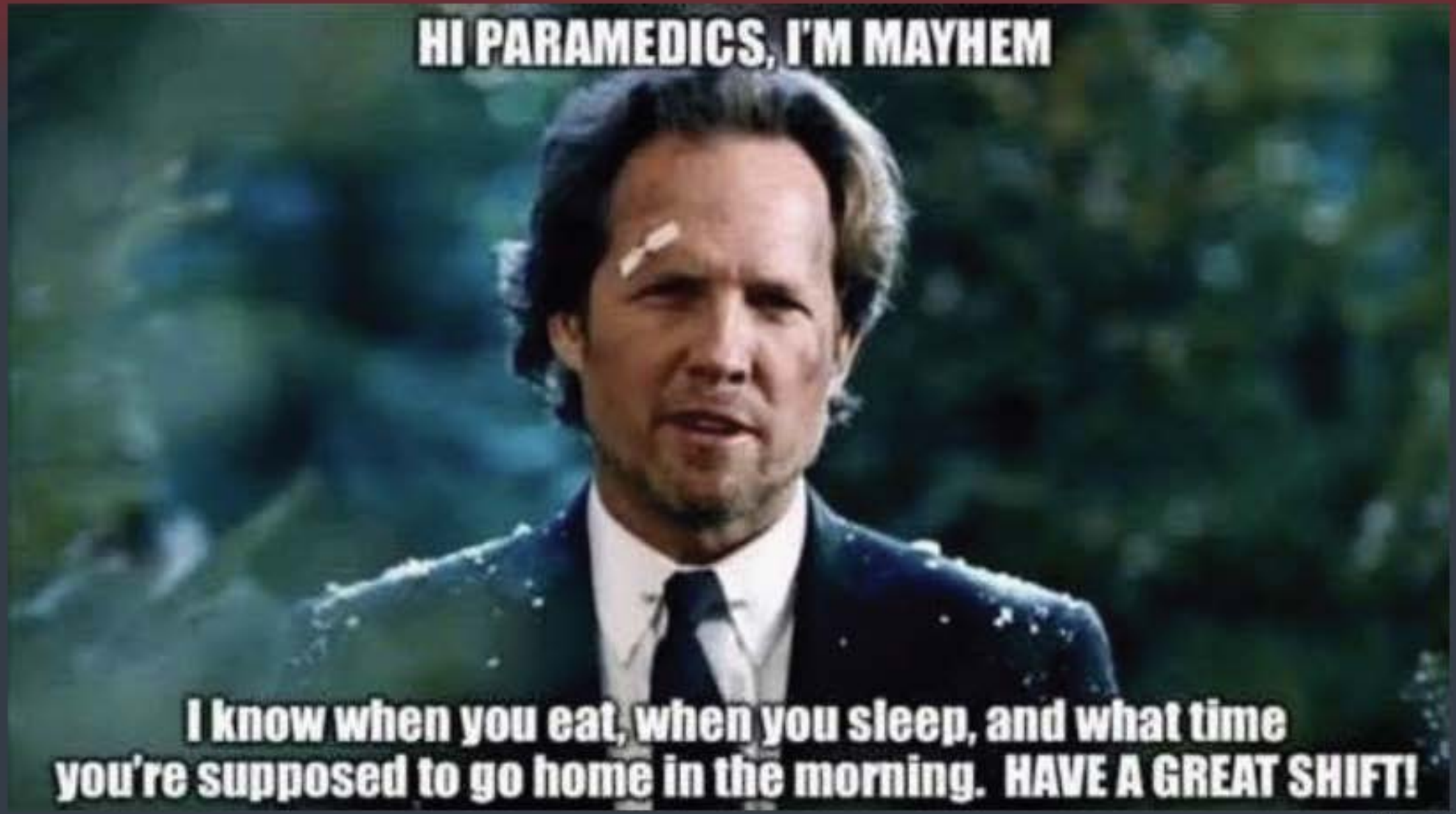
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HEALTH CARE PATIENT SAFETY

- Mr. Bromiley took a stance of patient advocacy and action
  - Patient safety focused
  - Learning versus blame
  - Clinical Human Factors Group charity formation
- Lessons learned to teach to others:
  - Communication
  - Have a plan
  - Listen to all the team members
  - Take control



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HI PARAMEDICS, I'M MAYHEM
I know when you eat, when you sleep, and what time you're supposed to go home in the morning. HAVE A GREAT SHIFT!











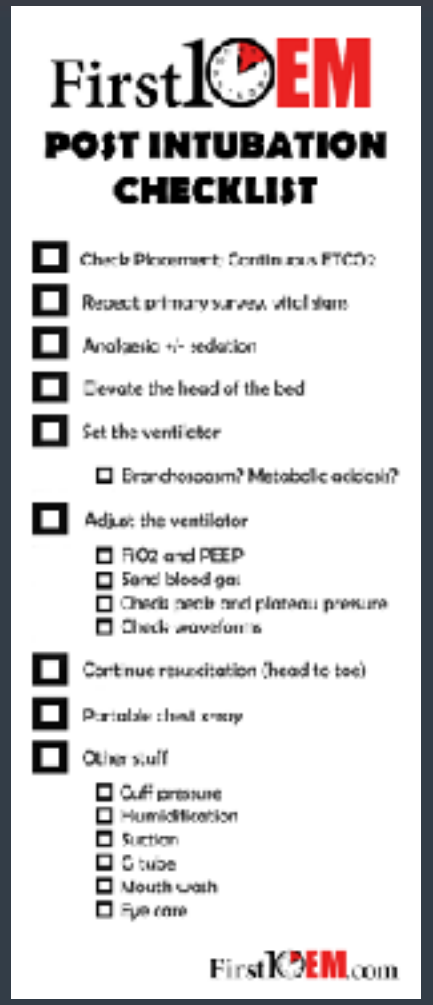
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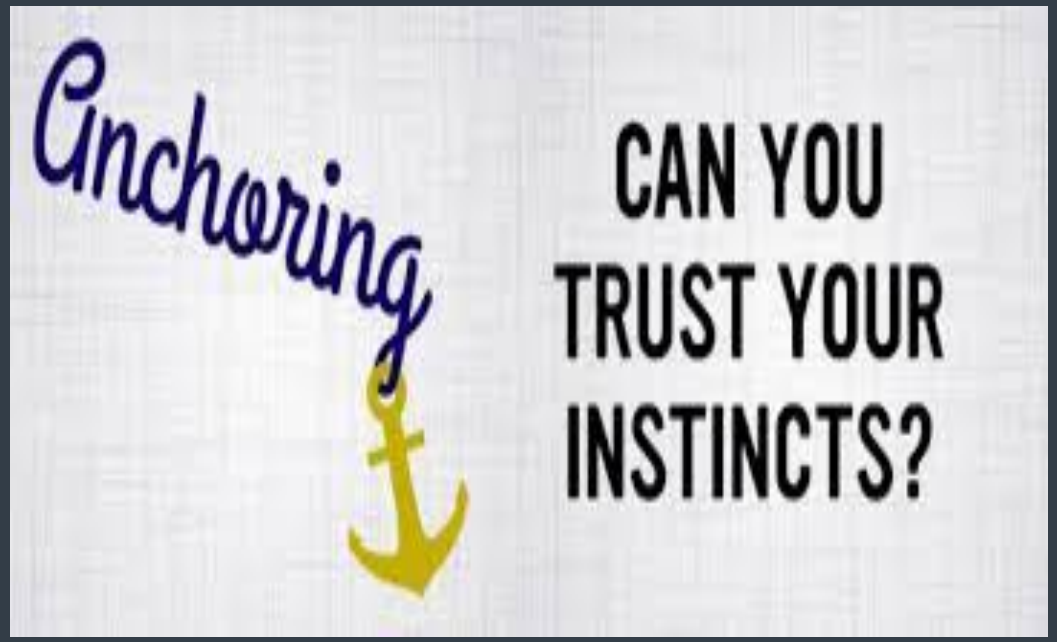


	Actions
M	Adjust **Mask** to assure good seal on the face
R	**Reposition** airway by adjusting head to "sniffing position
S	**Suction** mouth and nose of secretions, if present
O	**Open** mouth slightly and move jaw forward
P	Increase **Pressure** to achieve chest rise
A	Consider **Airway** alternative (endotracheal intubation or laryngeal mask airway)

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FIXATION ERRORS

- Strategies for correction:
  - Awareness most important to improve problem solving
  - Training for routine and non-routine scenarios
  - Provide a safe educational setting
    - Practitioners can explore their patterns of fixation
    - Increase awareness of the conditions that exacerbate them
    - Support exploration of how to mitigate them









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WE SPLIT WAYS HERE...
LED ZEPPELIN
STAIRWAY TO HEAVEN
HIGHWAY TO HELL



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CASE REVIEW

- Updated information from Comm Center upon lift:
  - Cross bow to the head
  - Patient weight approximately 100kg
  - EMS on scene with updated GPS coordinates provided
  - Patient being intubated

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CASE REVIEW



- Radio contact made with LZ Command 7” out
  - LZ report given:
    - High grass field adjacent to house
    - Trees bordering property
    - Fencing
    - Poles and wires distance away
    - Mild-moderate winds
  - Patient update
    - Being moved from house to ambulance for intubation

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CASE REVIEW



- Flight team escorted through fence by Fire / EMS personnel towards ambulance
- Multiple disheveled appearing people standing near ambulance crying hysterically “please help him!”
- Strong law enforcement presence
- One team member to back door of ambulance / partner goes to side

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CASE REVIEW

- My Mom always taught me to count my blessings ☺️
- “Take your pulse….if you have a pulse, you can help”
- “Training is there for a reason….use it to your advantage”





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CASE REVIEW

- Bleeding control
  - Lots of blood under head of patient, on cot, and on floor
  - Active “spurters” on outside of left face
  - Gross visual with no blood in airway
- Airway / breathing control
  - Effective 2 person BVM with good seal and noted chest rise
- Circulation
  - Skin appearance pale
  - Positive radial pulse
- Current VS on EMS monitor:
  - HR 118; Resp BVM assisted 14; O2 sat 94%; BP 118/84

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CASE REVIEW

- Ready to move and load:
  - Ability to move the ambulance closer to the aircraft
  - Partner going ahead to aircraft:
    - Stretcher ready to receive patient
    - Ventilator on
    - Prime FFP on blood tubing
    - Warming blanket and fluid warmer
    - Ready to receive the patient inside
  - Every movement *SLOW AND EASY*!!
  - One person on the airway at all times



CASE REVIEW

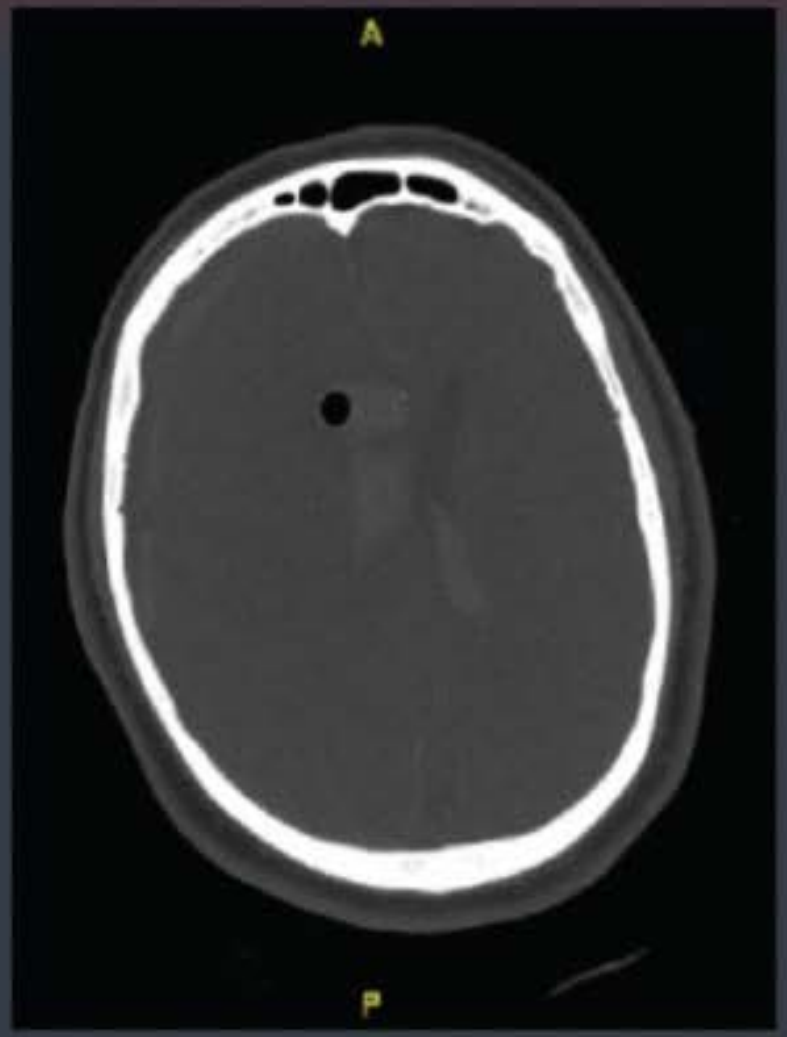


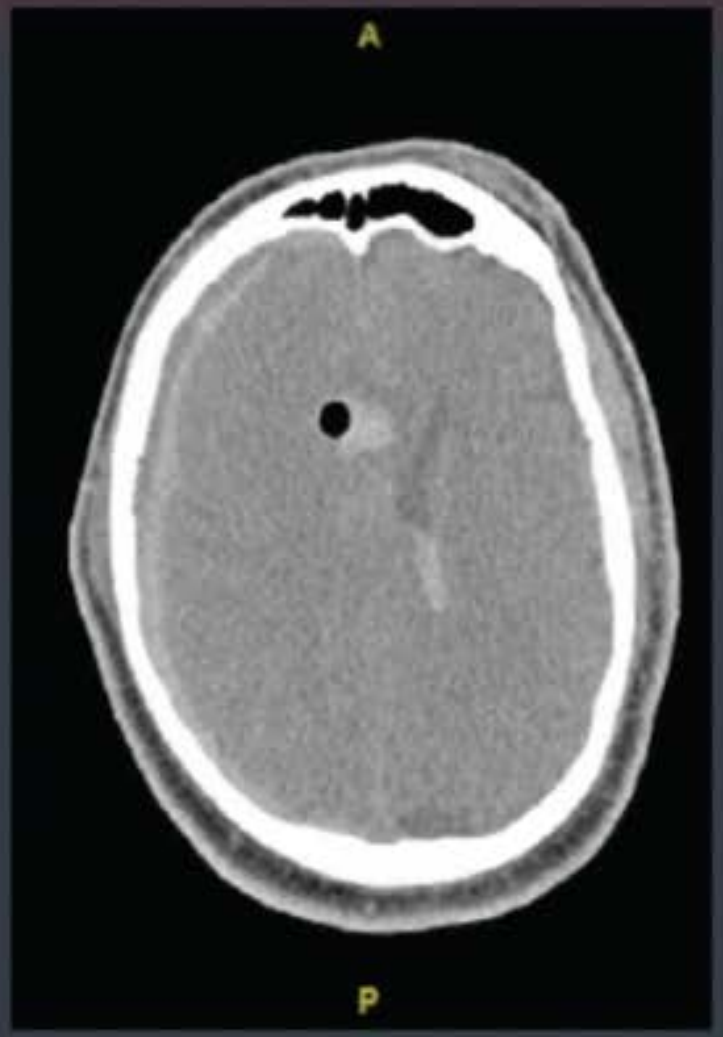
- Busy short flight:
  - Low altitude request
  - Pilot asked for relay from Comm Center to receiving upon lift
    - Full Trauma Activation
    - Crossbow to the head
    - Intubated
    - Never hypotensive
  - Crew positioning to avoid catching bow
  - 2nd IV initiated
    - Blood glucose check
  - One unit FFP
  - One unit PRBC
  - 3% NS after tank being filled

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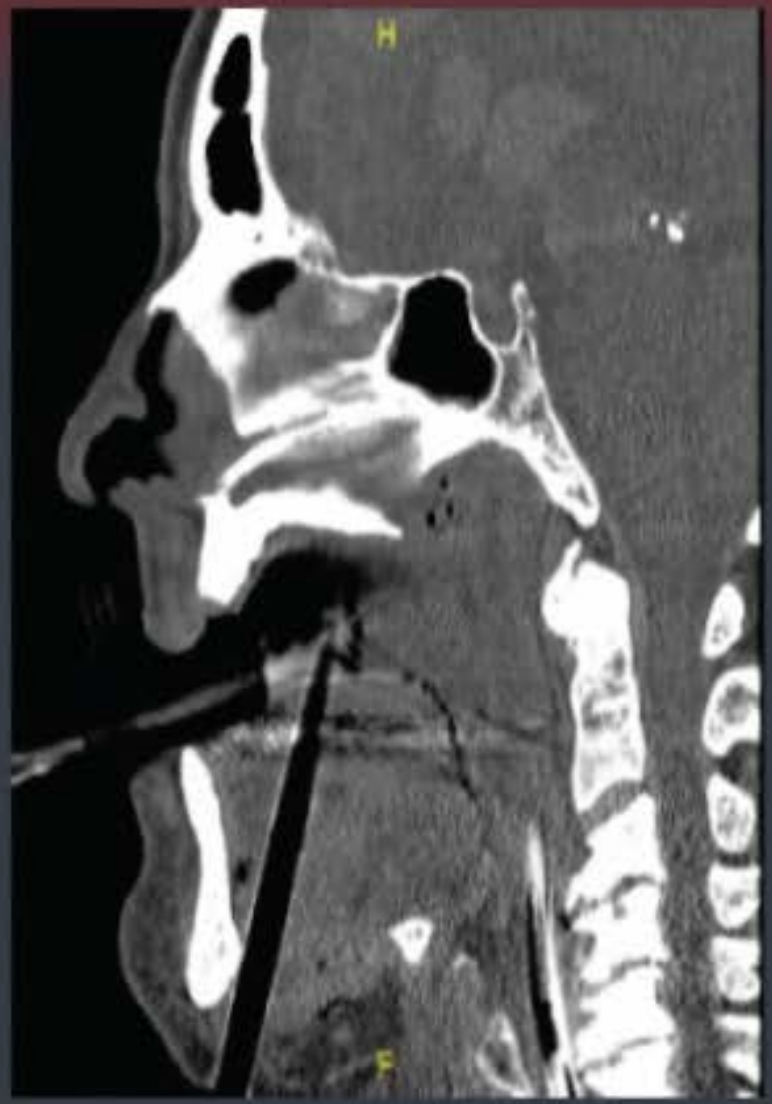


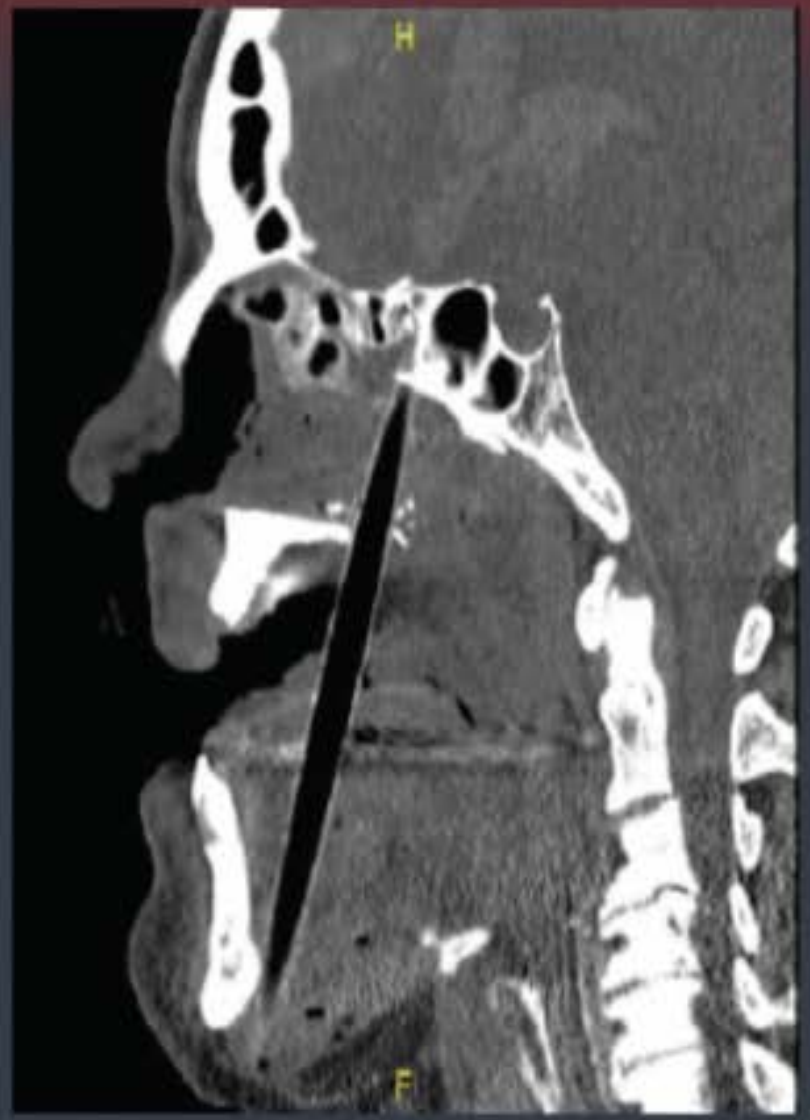


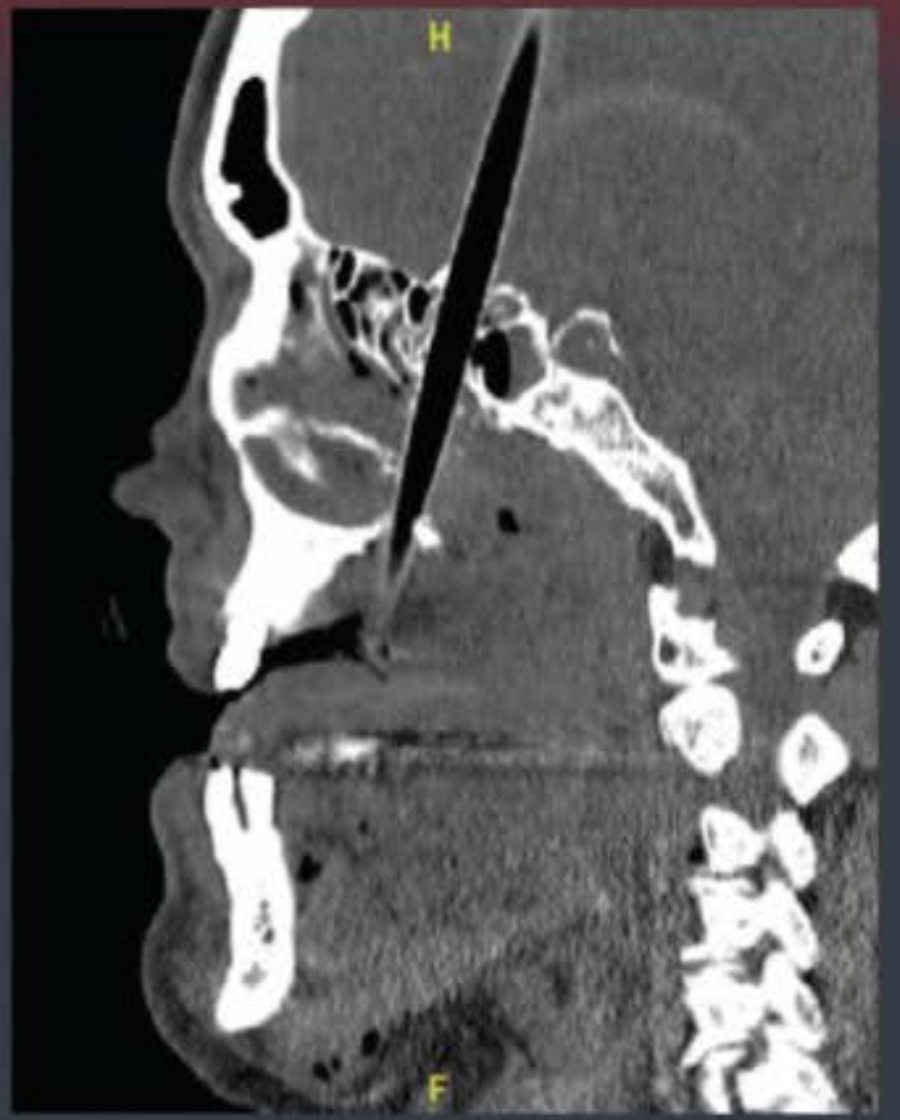




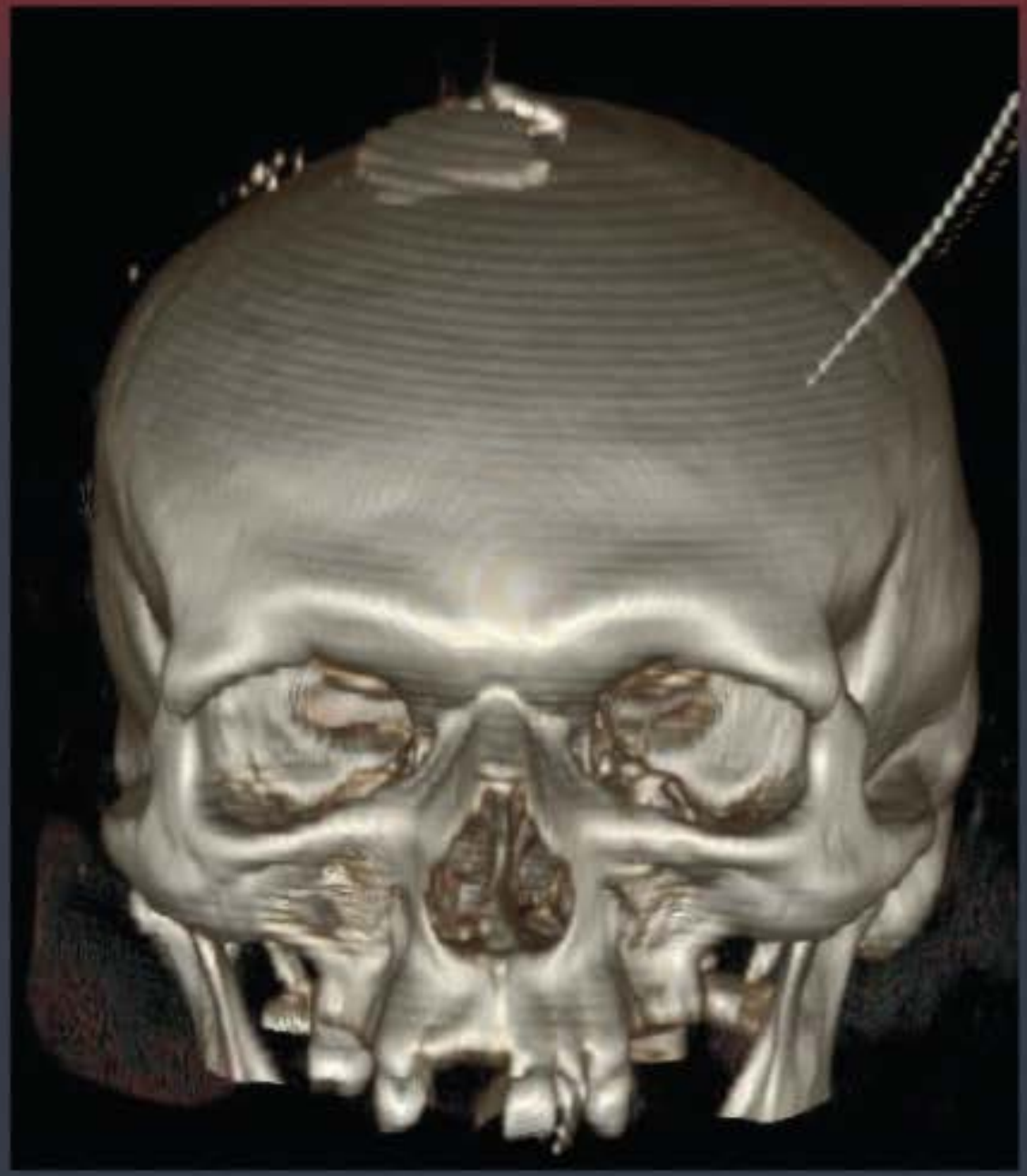
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THANKS FOR ALL YOU DO!!!!



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