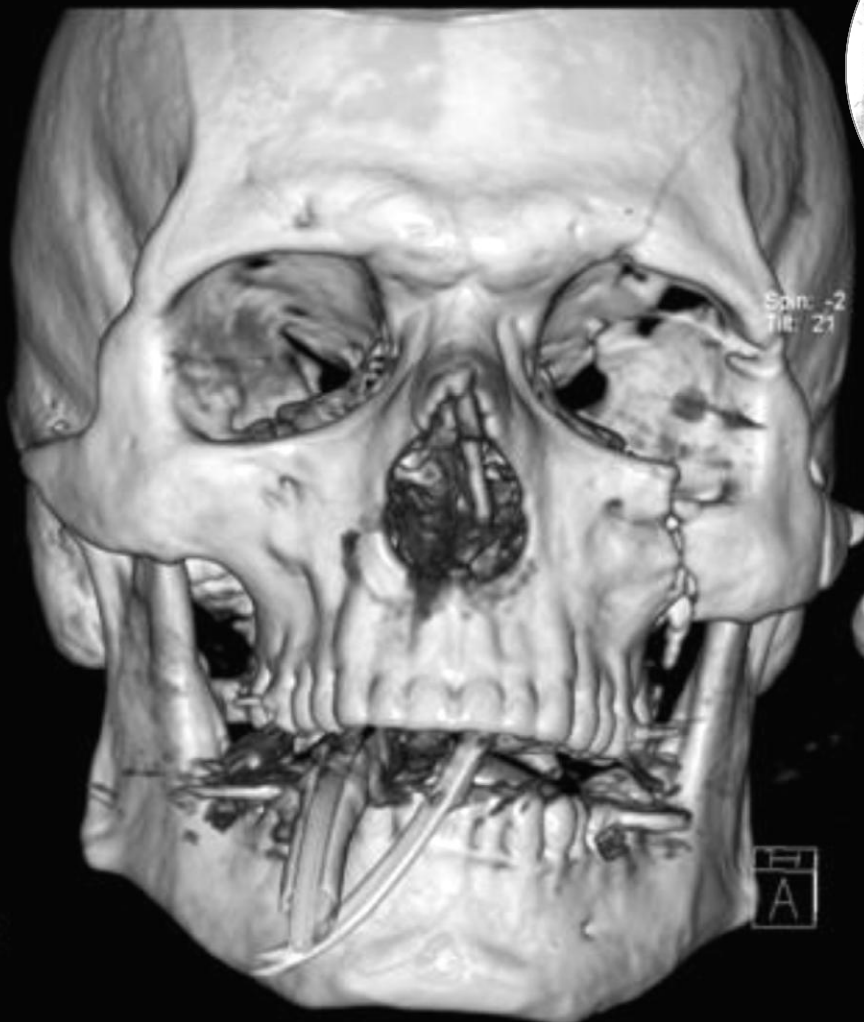
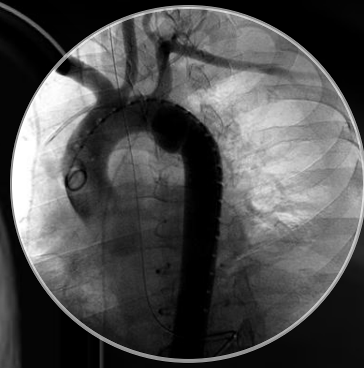
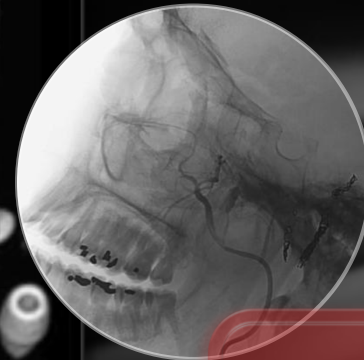
DEPARTMENT OF RADIOLOGY

TEXAS TECH UNIVERSITY
HEALTH SCIENCES CENTER
Paul L. Foster School of Medicine



Fixing Bleeding Per Rectum Via Carotid Embolization

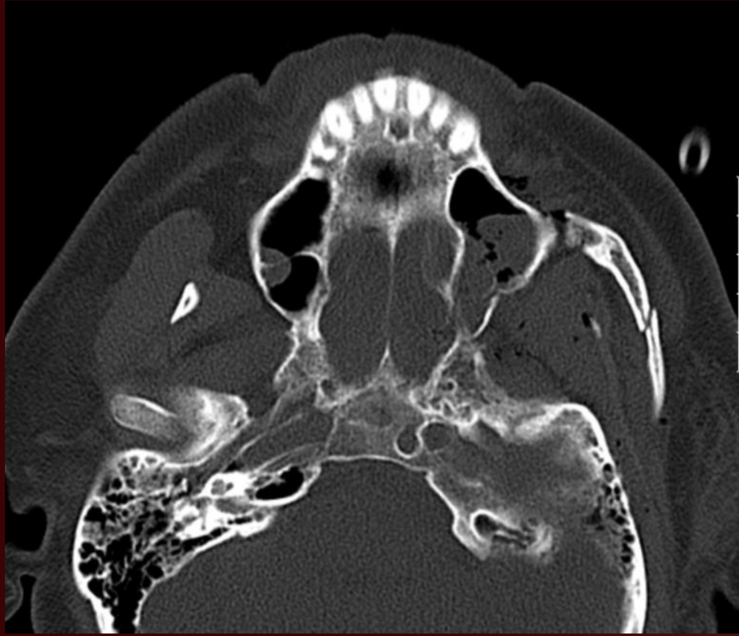
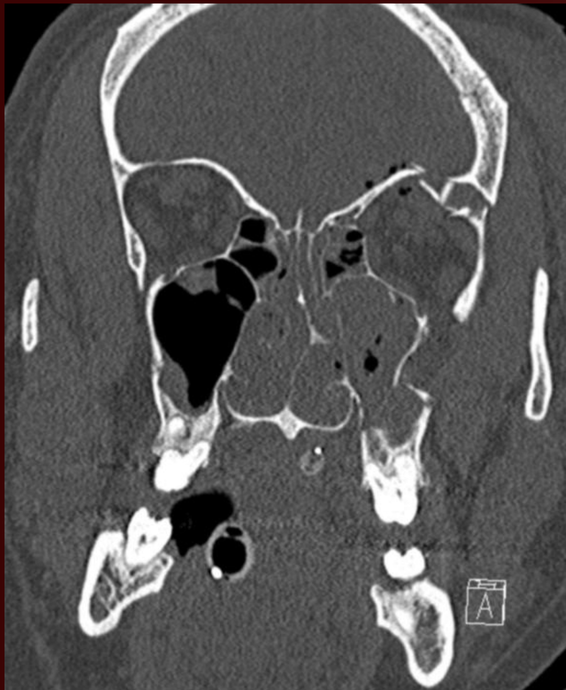
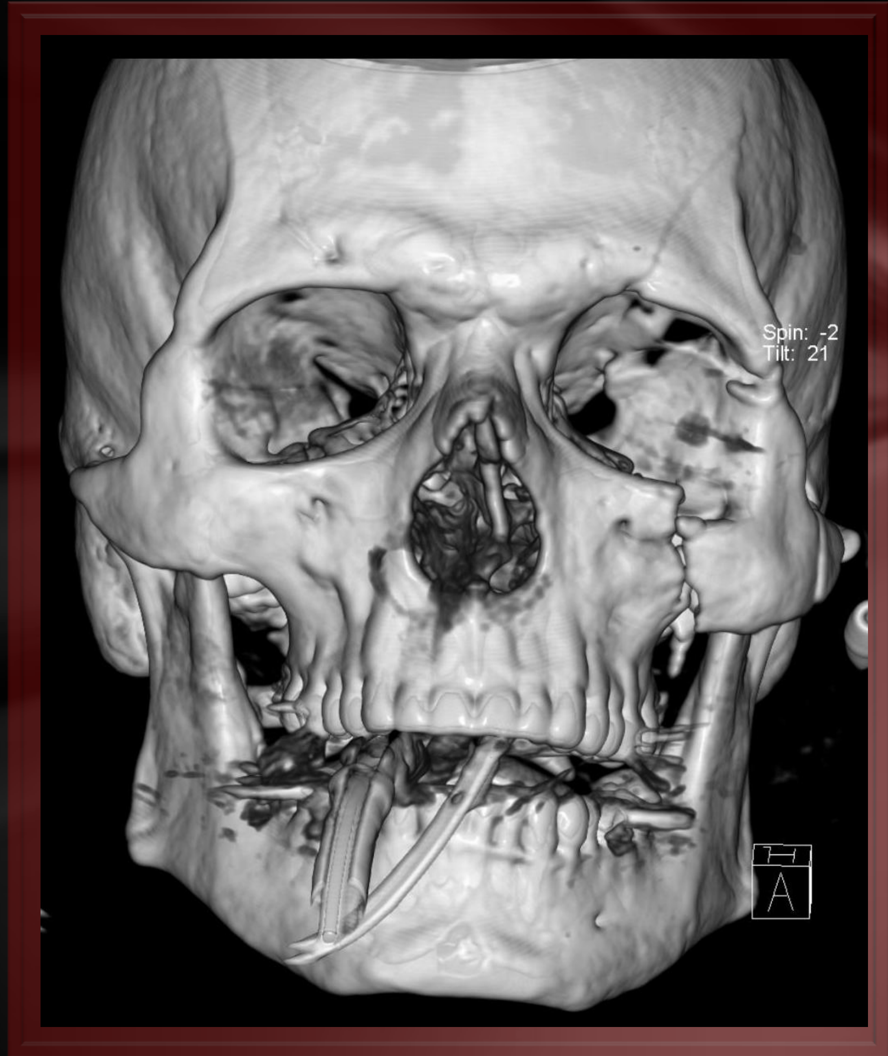


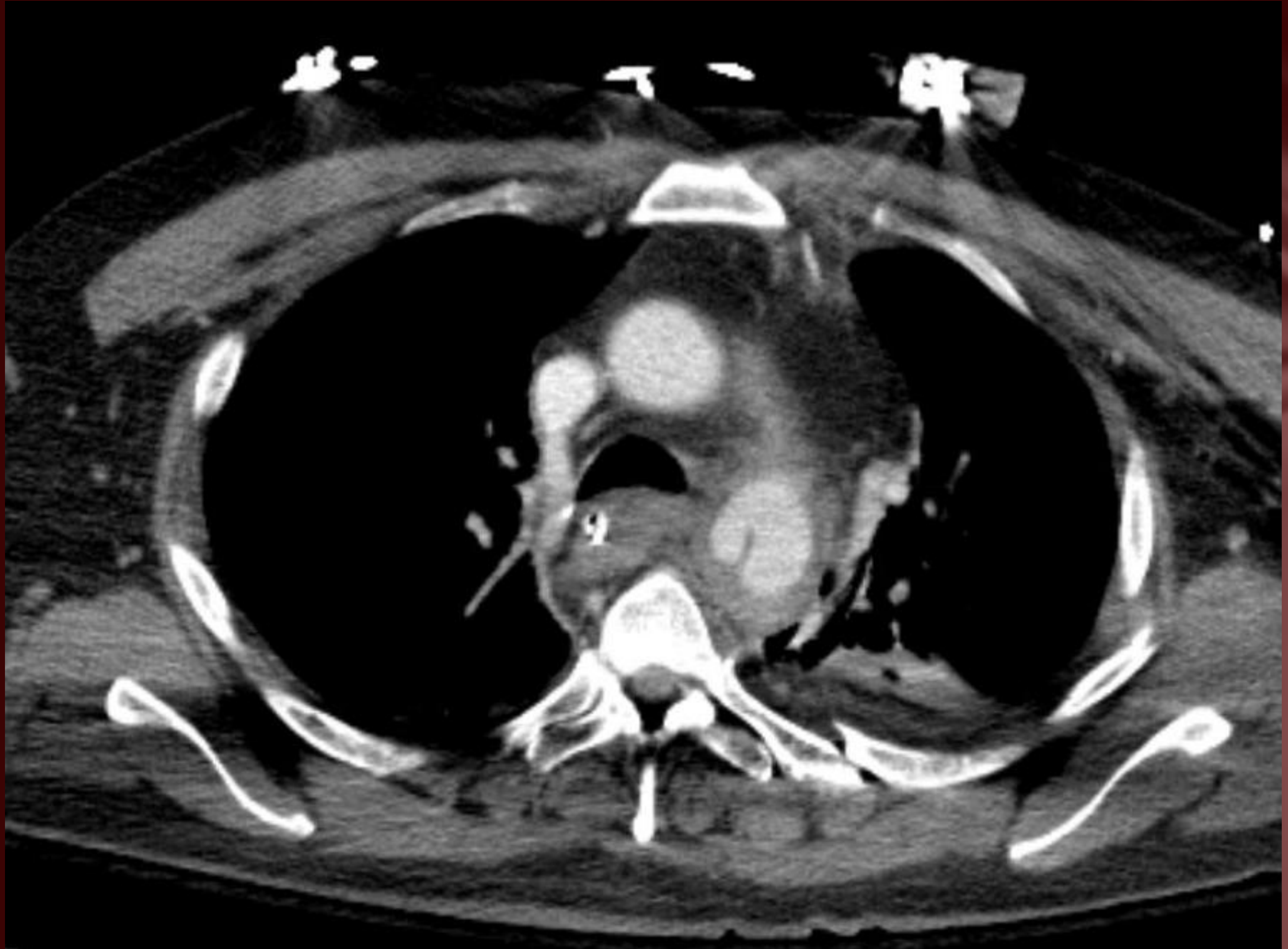


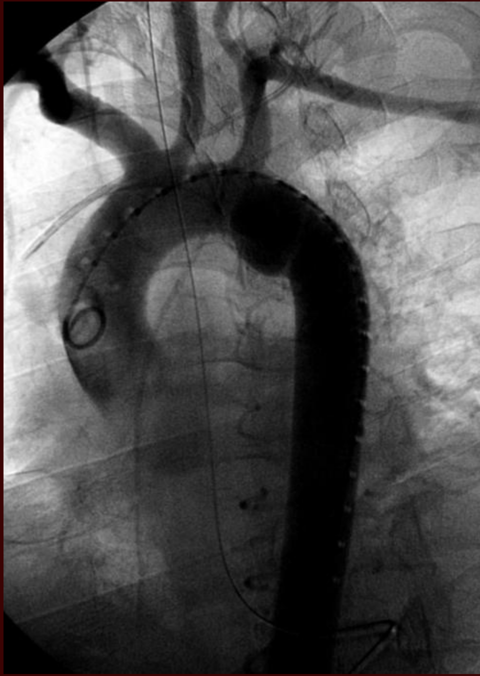
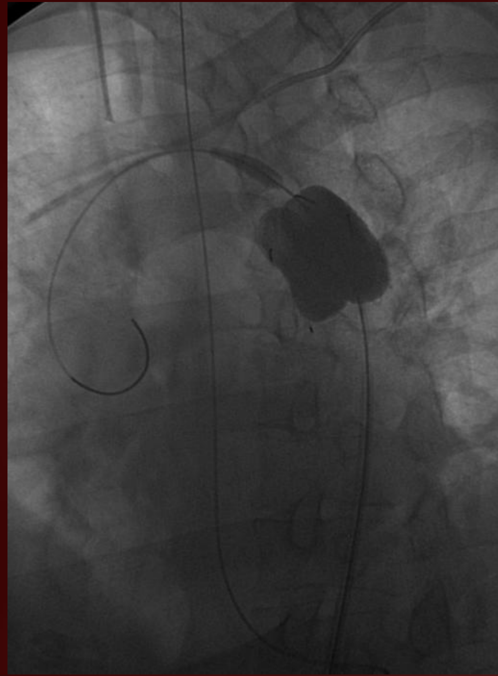
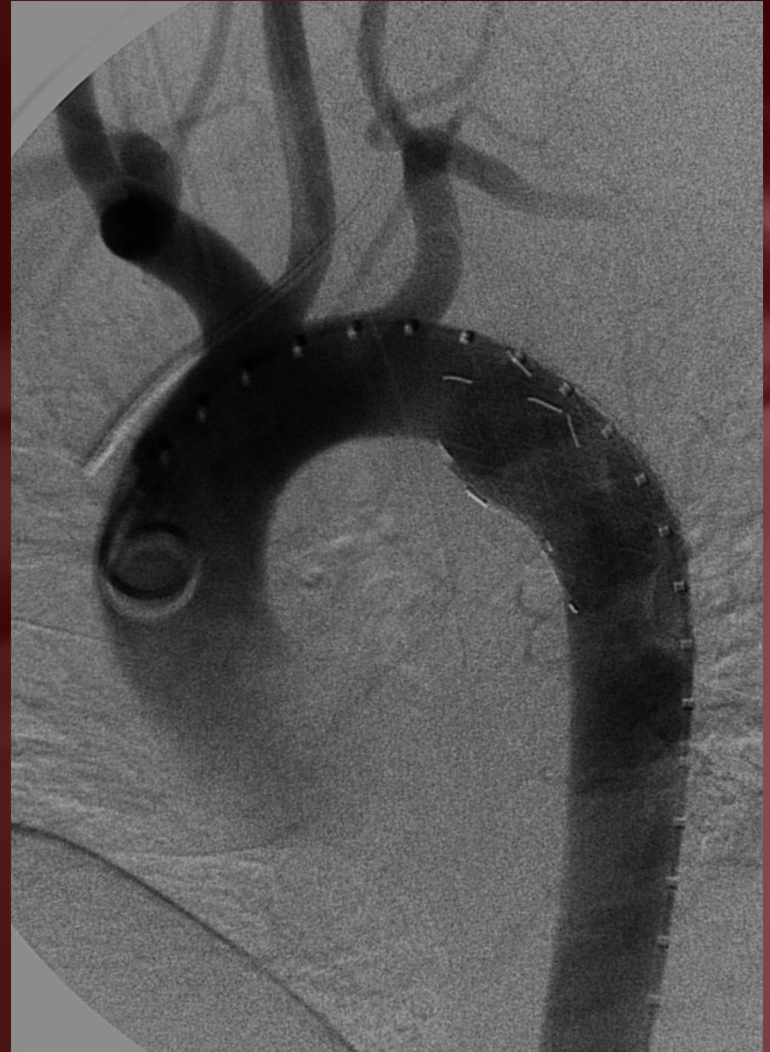
Demetrios J. Agriantonis MD[1], Jorge Aguila MD[1] Susan F. McLean MD[2], Jesus Diaz MD[1] Melhem R. Ghaleb MD[1]

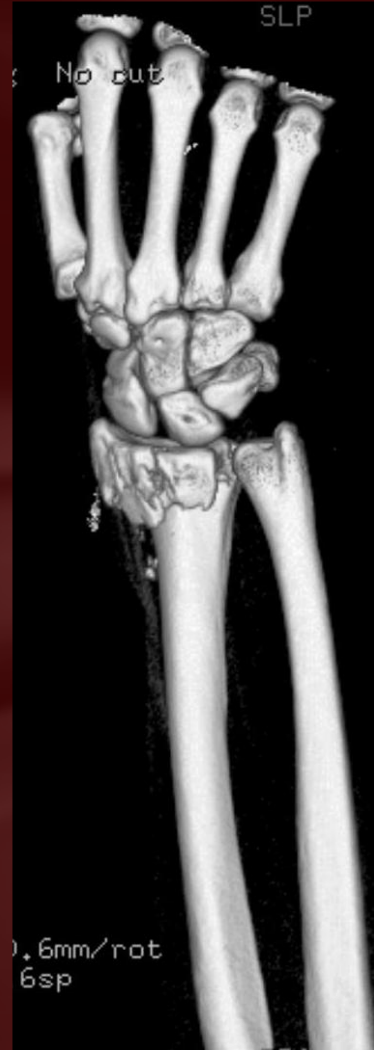
1- Department of Radiology
2- Department of Surgery

- 40 y/o male who presented after a fall from 40 feet high while intoxicated
- Fell on face and chest
- Multiple injuries



A

Spin: -2
Tilt: 21
A




SLP
No cut
.6mm/rot
6sp

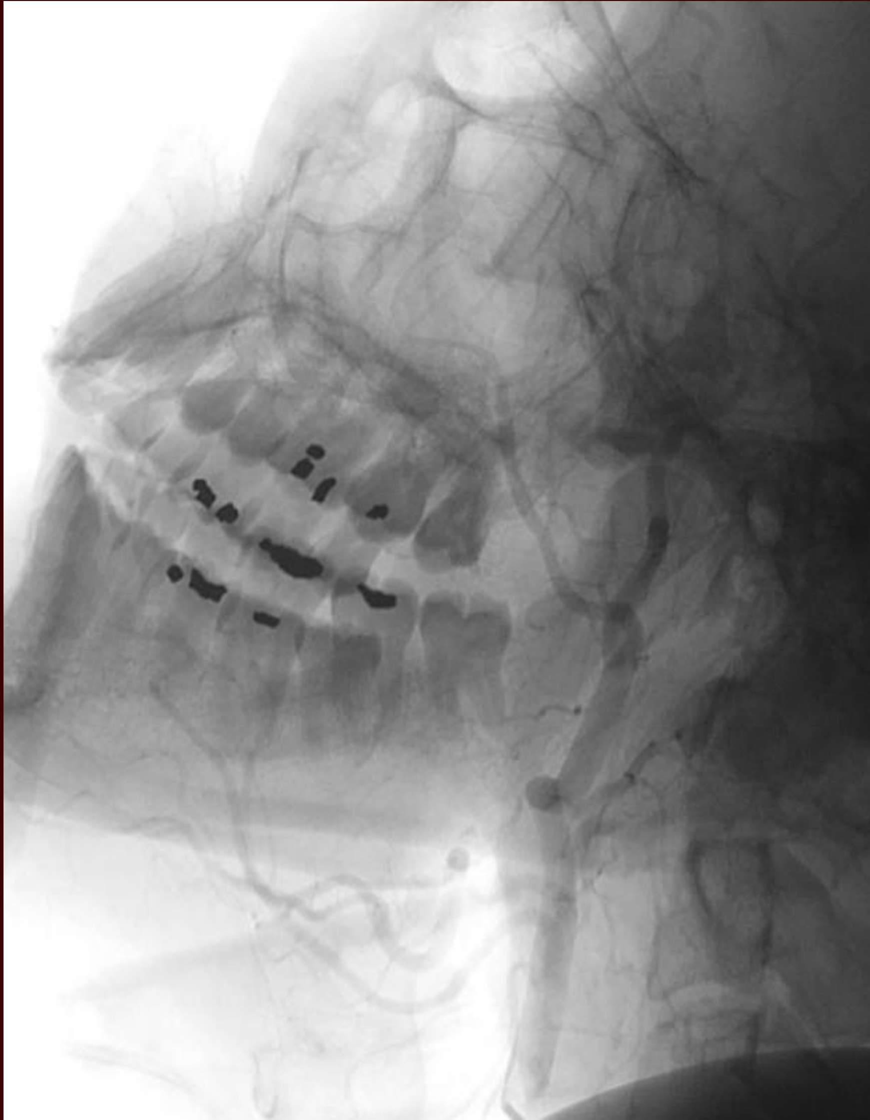
- 11 days after effective initial resuscitation and successful endovascular repair of the aorta the patient became ***hemodynamicaly unstable.***
- Hemoglobin/Hematocrit: 14/42 → 7/20
- Blood Pressure: 133/96 → 85/56
- Persistent epistaxis
- Guaiac-positive stools / melena

Day 1 studies:

- CT abdomen/pelvis at presentation was ***negative***
- Neck CT Angiogram at presentation was also ***negative***

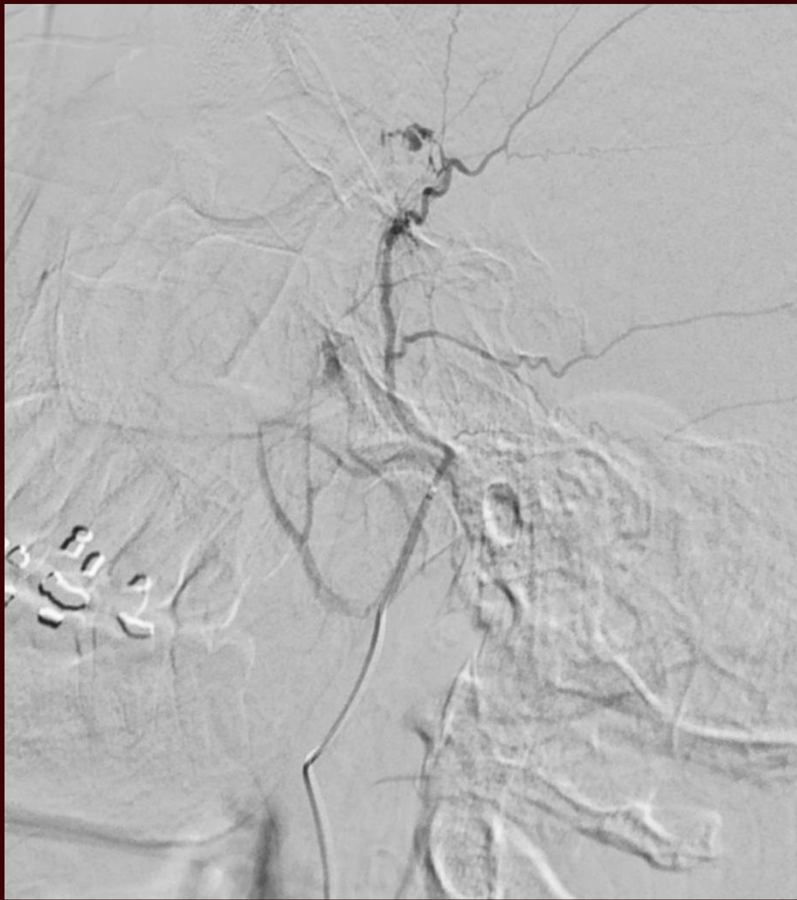
- Given high impact trauma and especially his facial fractures, the patient was considered at **high risk for arterial injury**
- Endoscopic GI workup for melena was negative

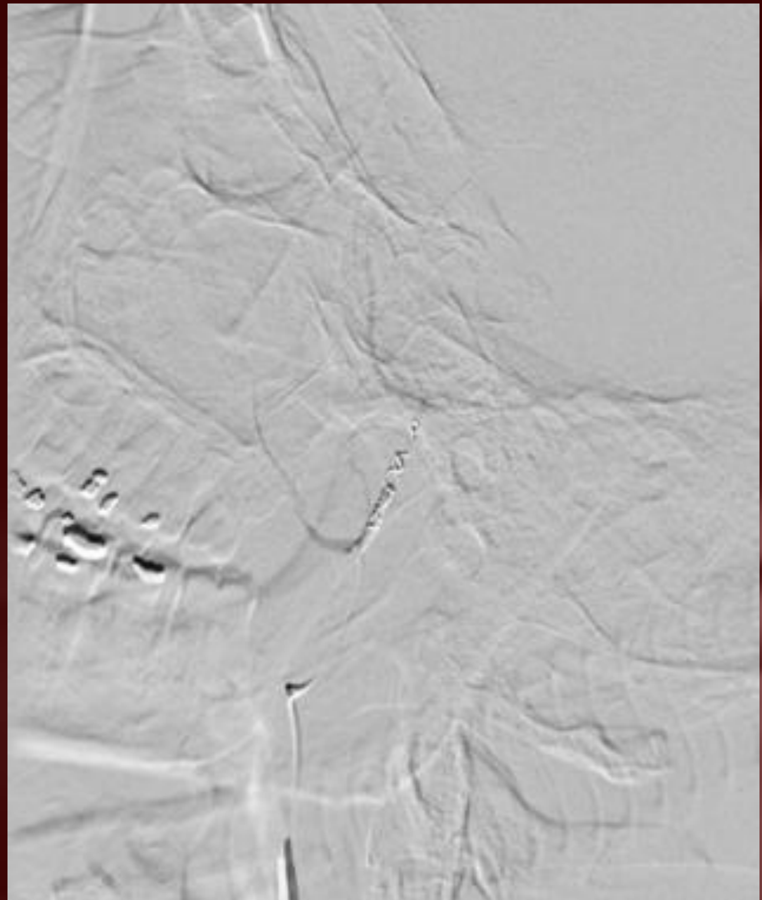
- Hospital Day 12: Carotid angiography

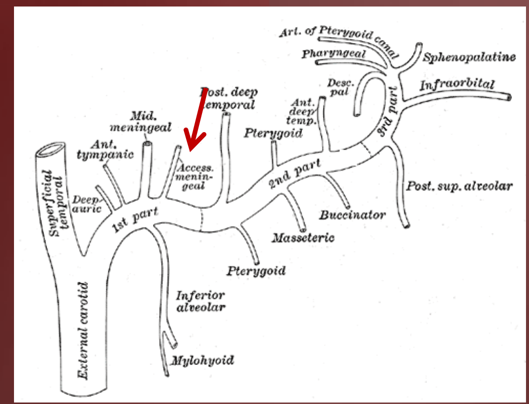


Three traumatic artery pseudoaneurysms were identified (all branches of the Internal Maxillary Artery):

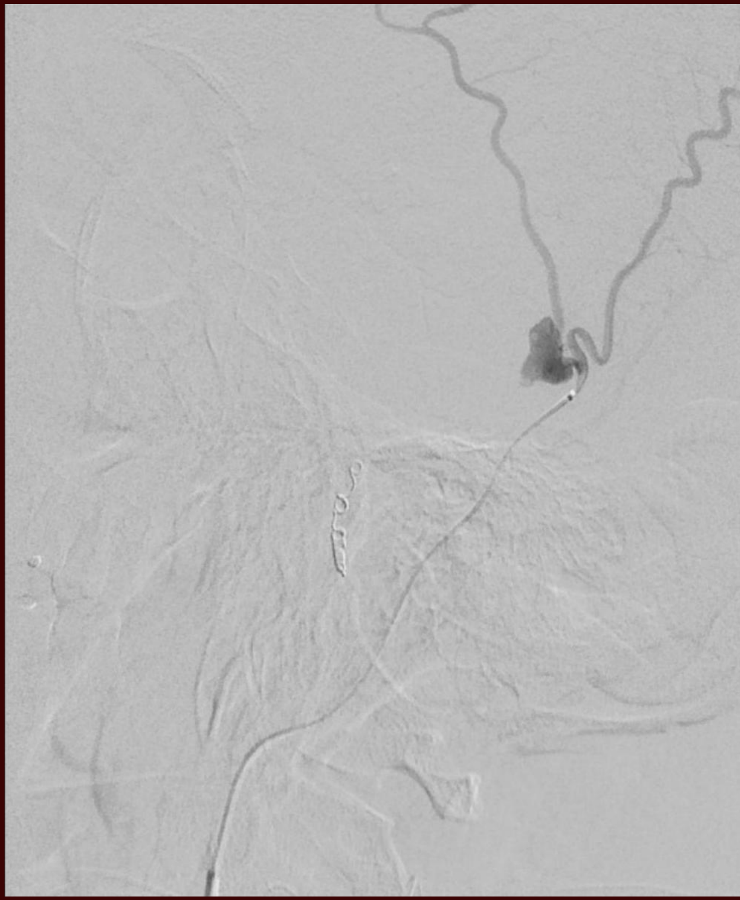
- Left Middle Meningeal Artery Pseudoaneurysm
- Left Accessory Meningeal Artery Pseudoaneurysm
- Right Descending Pharyngeal Artery Pseudoaneurism

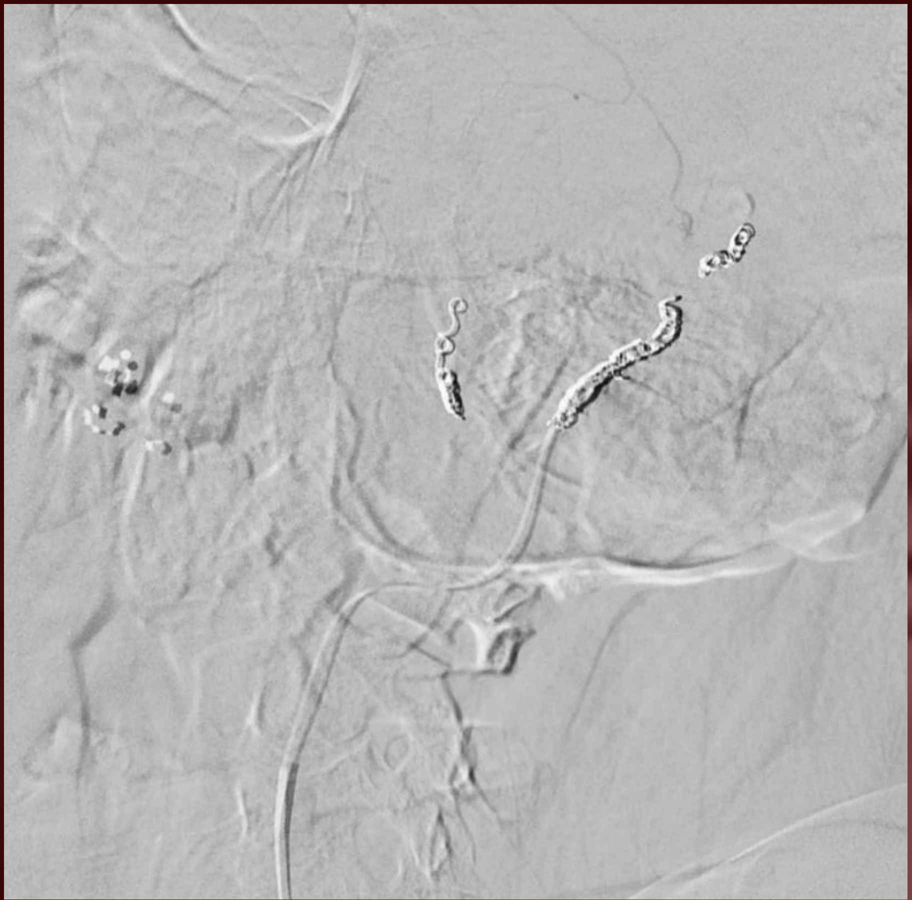


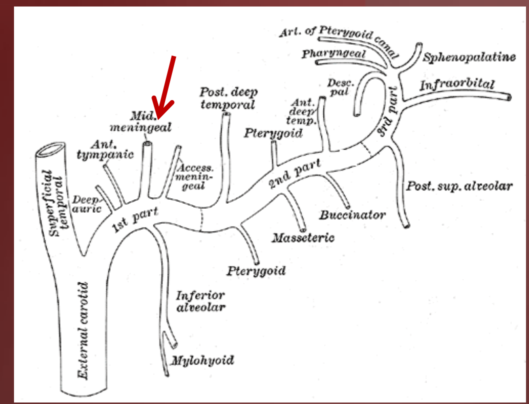




Art. of Pterygoid canal
Pharyngeal
Sphenopalatine
Infraorbital
Desc. pal
Post. deep temporal
Ant. deep temp.
Mid. meningeal
Pterygoid
3rd part
Ant. tympanic
Access. menin-geal
2nd part
Superficial temporal
Deep auric
Post. sup. alveolar
1st part
Buccinator
Masseteric
Pterygoid
Inferior alveolar
External carotid
Mylohyoid



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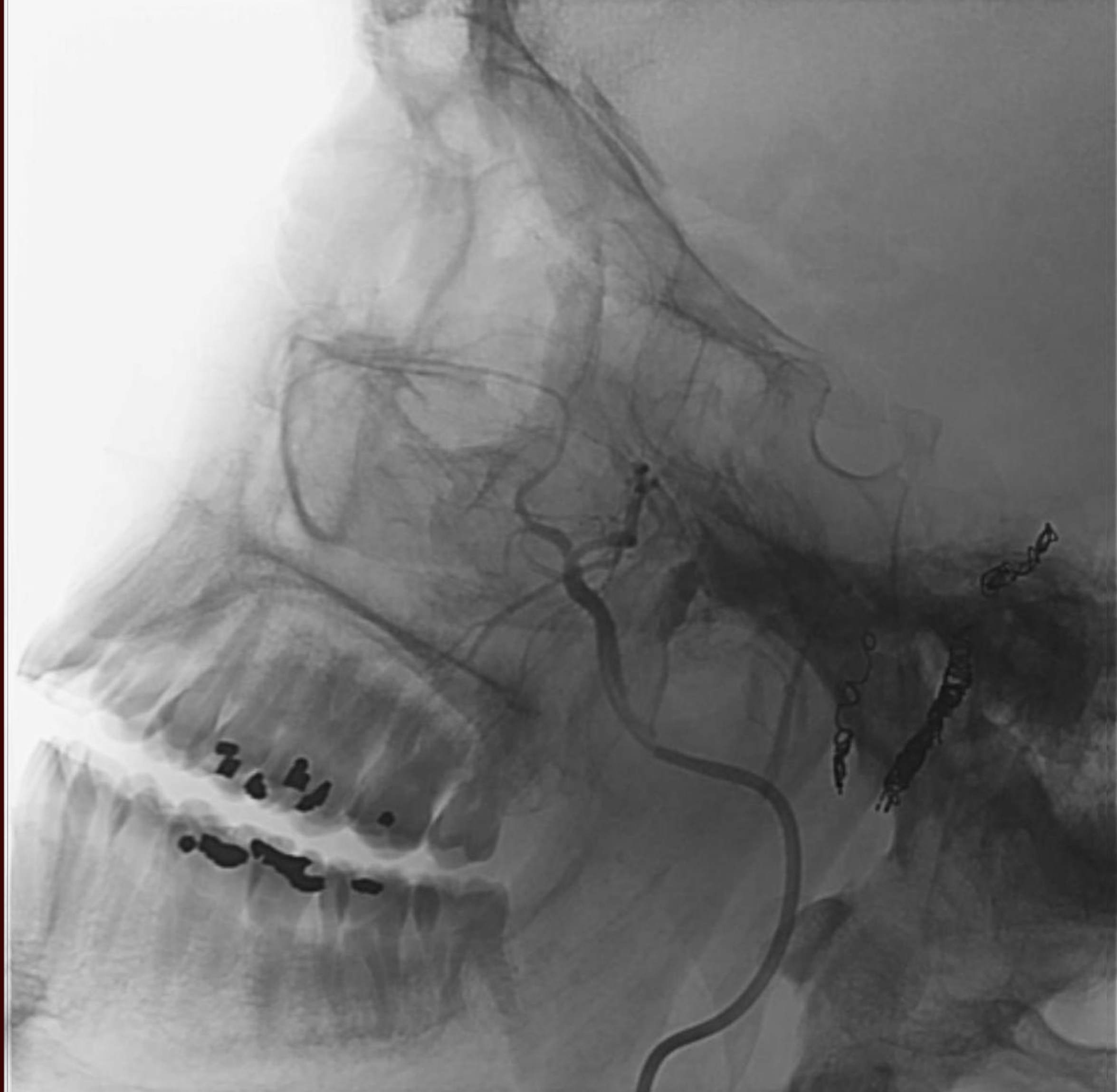

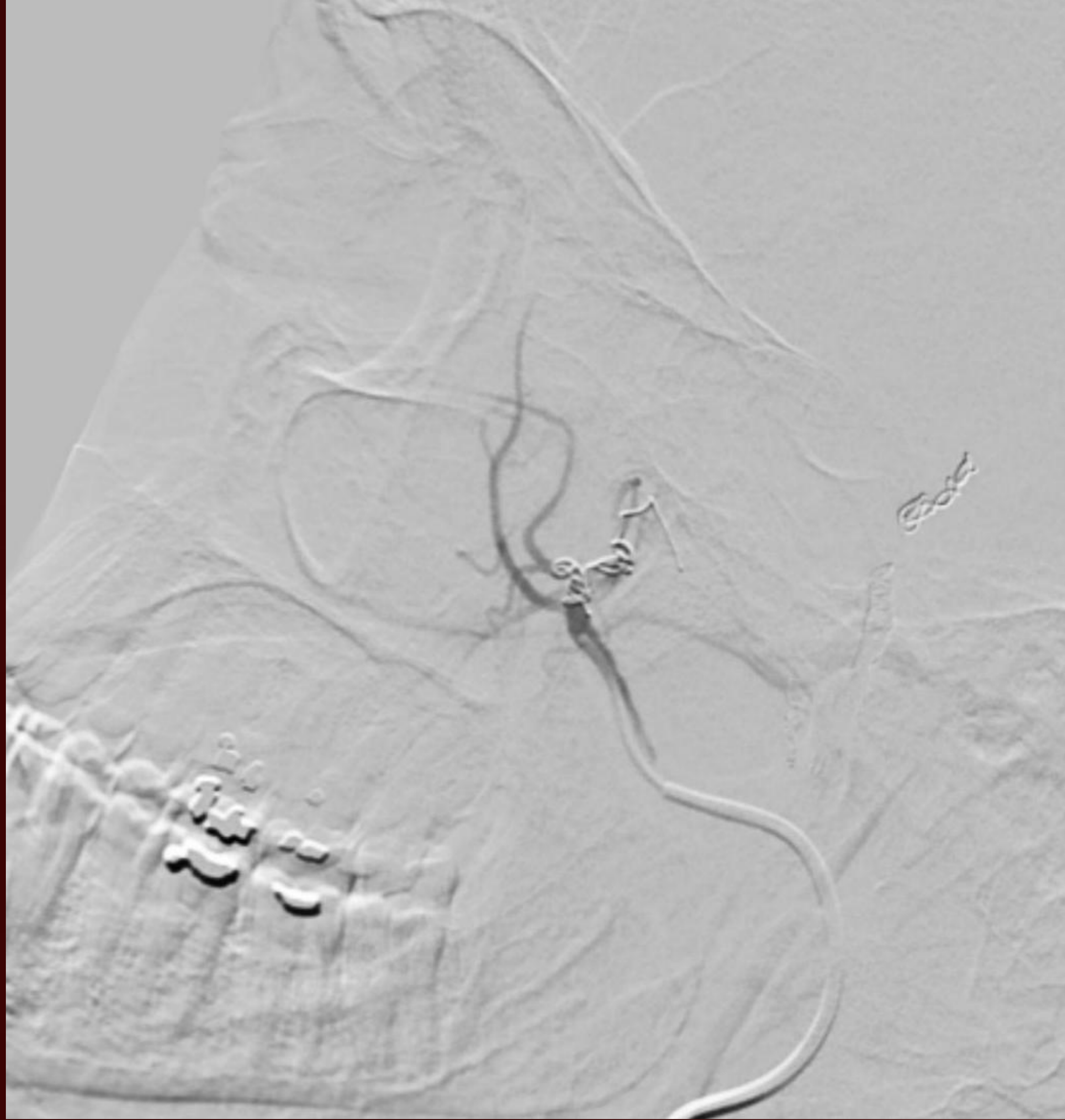

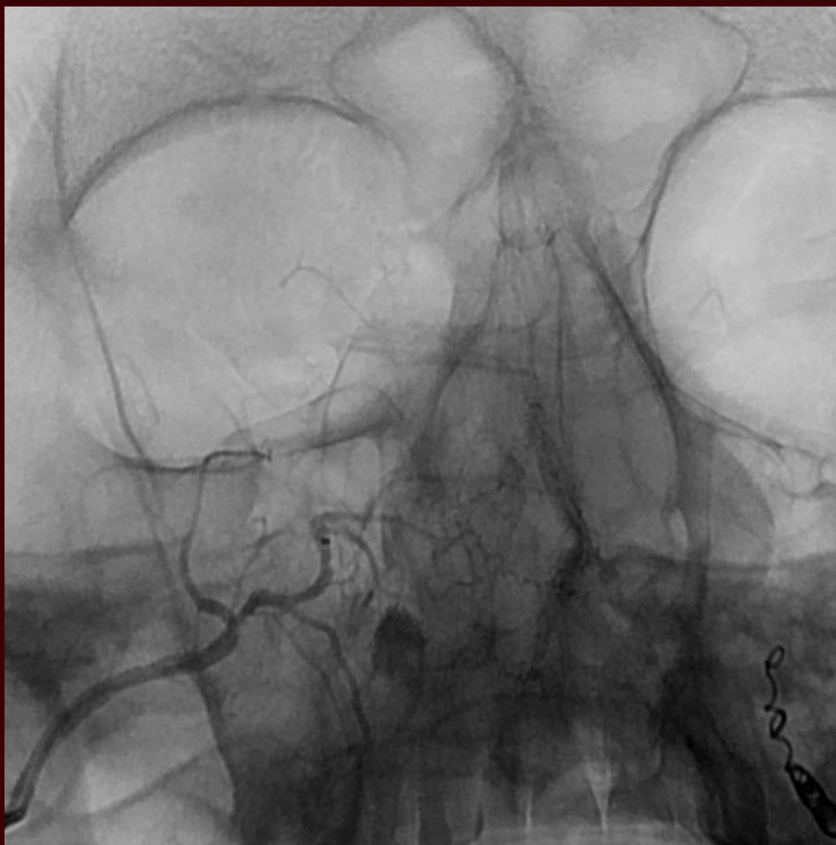

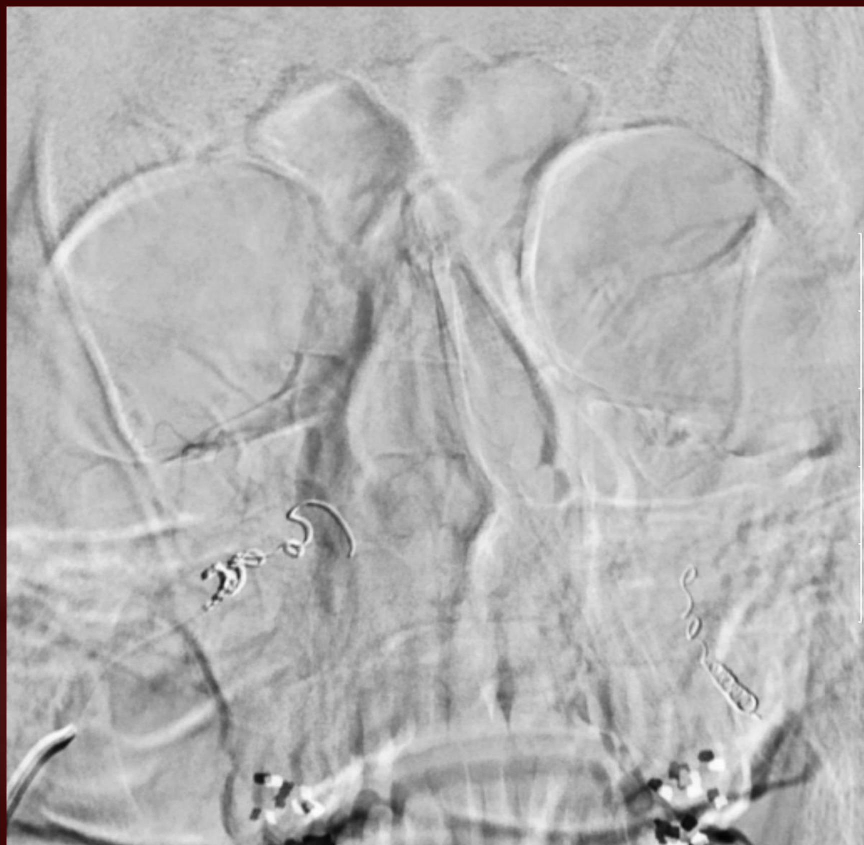

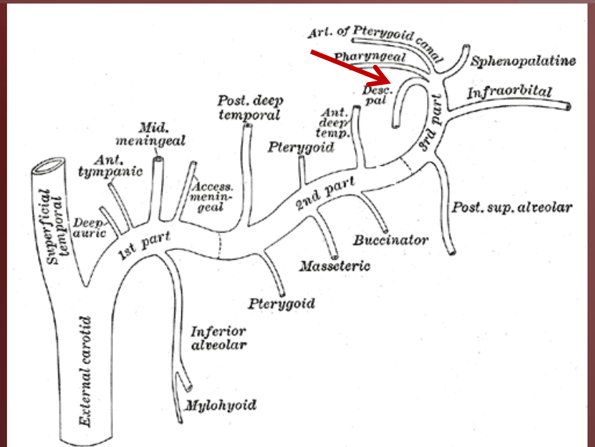
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- The patient’s H & H stabilized and the melena resolved

Discussion

- Facial pseudoaneurysm is a rare cause of bleeding per rectum
- In this patient with extensive craniofacial fractures and aortic injury, the index of suspicion for additional arterial injury was appropriately high

Teaching Points

- Ingested blood from a facial bleed should be considered as a potential cause of melena in the polytrauma patient

Teaching Points

Facial fractures should raise suspicion of arterial injury even up to several months after the trauma.

- Variable onset of delayed bleeding from the time of injury
  - Must maintain vigilance

Conclusion

- While traumatic pseudoaneurysms of the external carotid artery are rare, they should be considered in the polytrauma patient with head injury and persistent melena
- These lesions are readily and effectively treated with endovascular embolization

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