

Head and neck emergencies

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Disclosures

▶ None

Head and neck emergencies

Traumatic/ non traumatic

Orbits

Sinuses

Skull base

Pharynx/Larynx

Soft tissues

► ORBITS

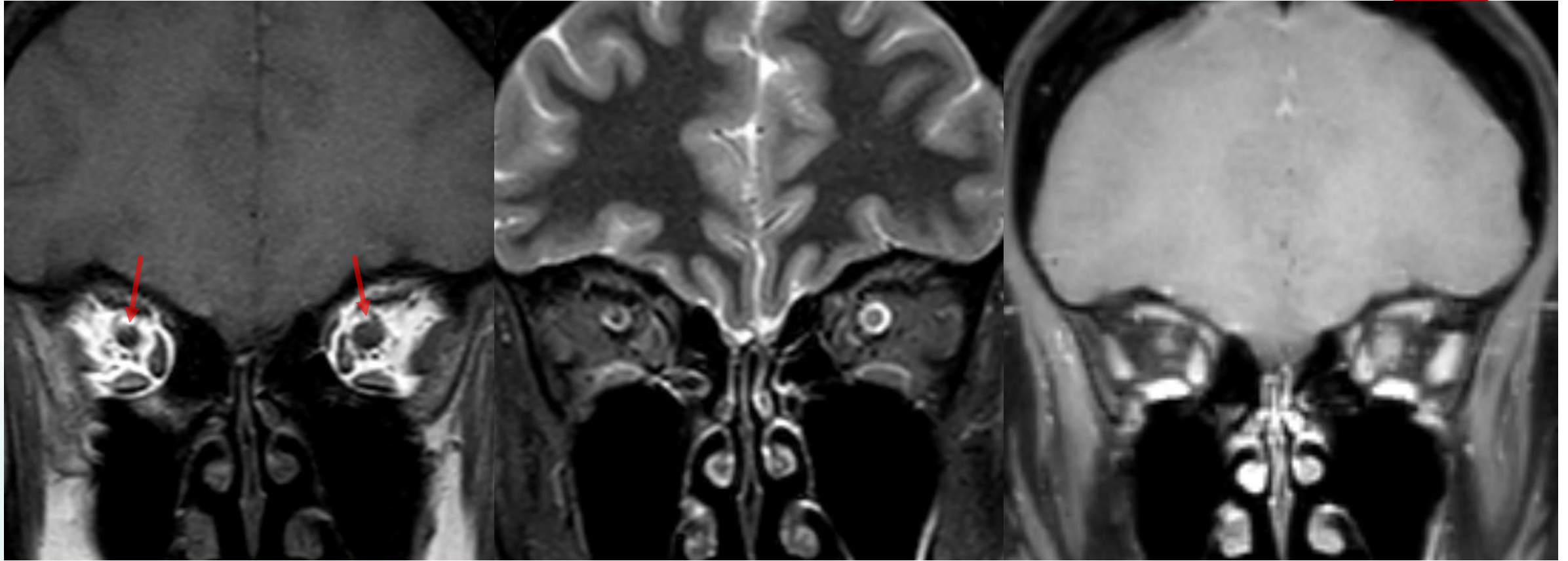
Infection

Optic nerve inflammation

Post traumatic

Vascular

Degenerative



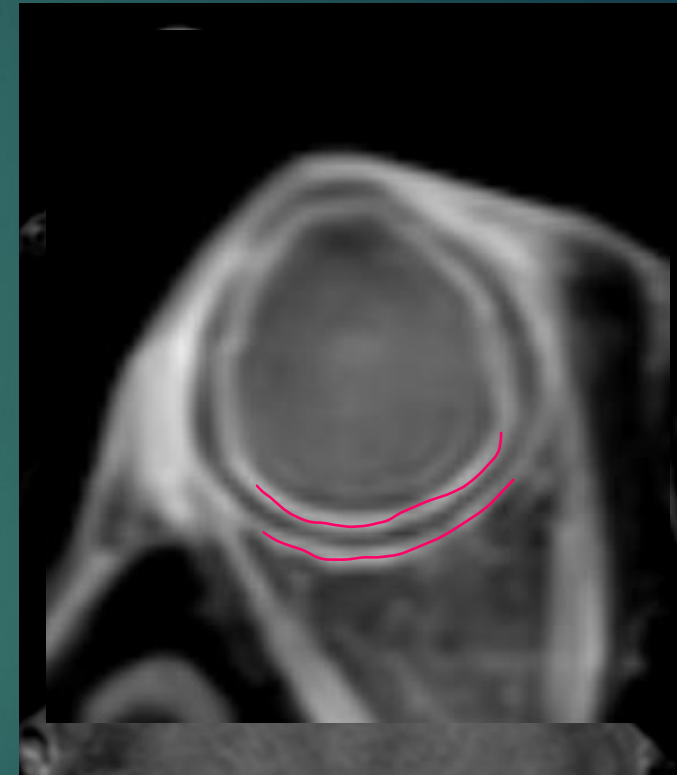
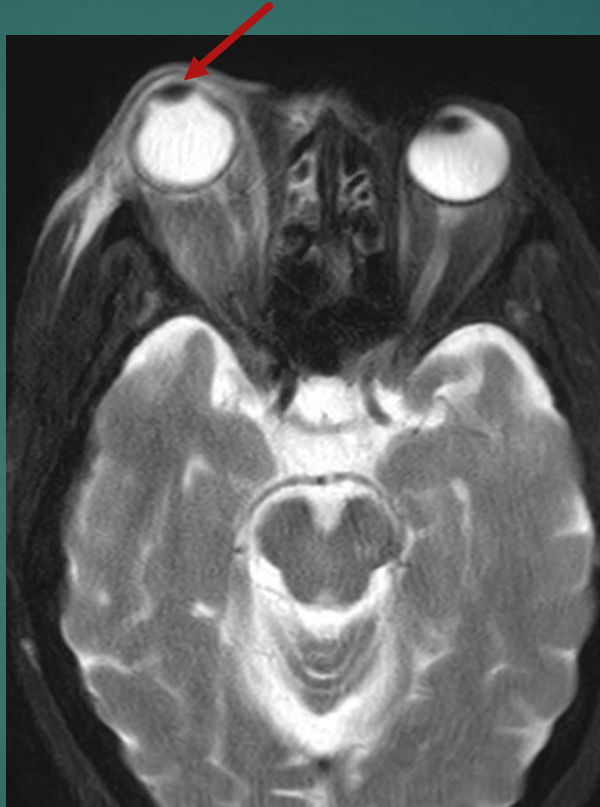
T1

STIR

Fat sat Post contrast

Acute optic neuritis : mild enlarged edematous optic nerve
Idiopathic or form Multiple sclerosis, SLE, Viral or Radiation

79-year-old patient with ileostomy, frequently rubs her eyes, red eye on the right with pain

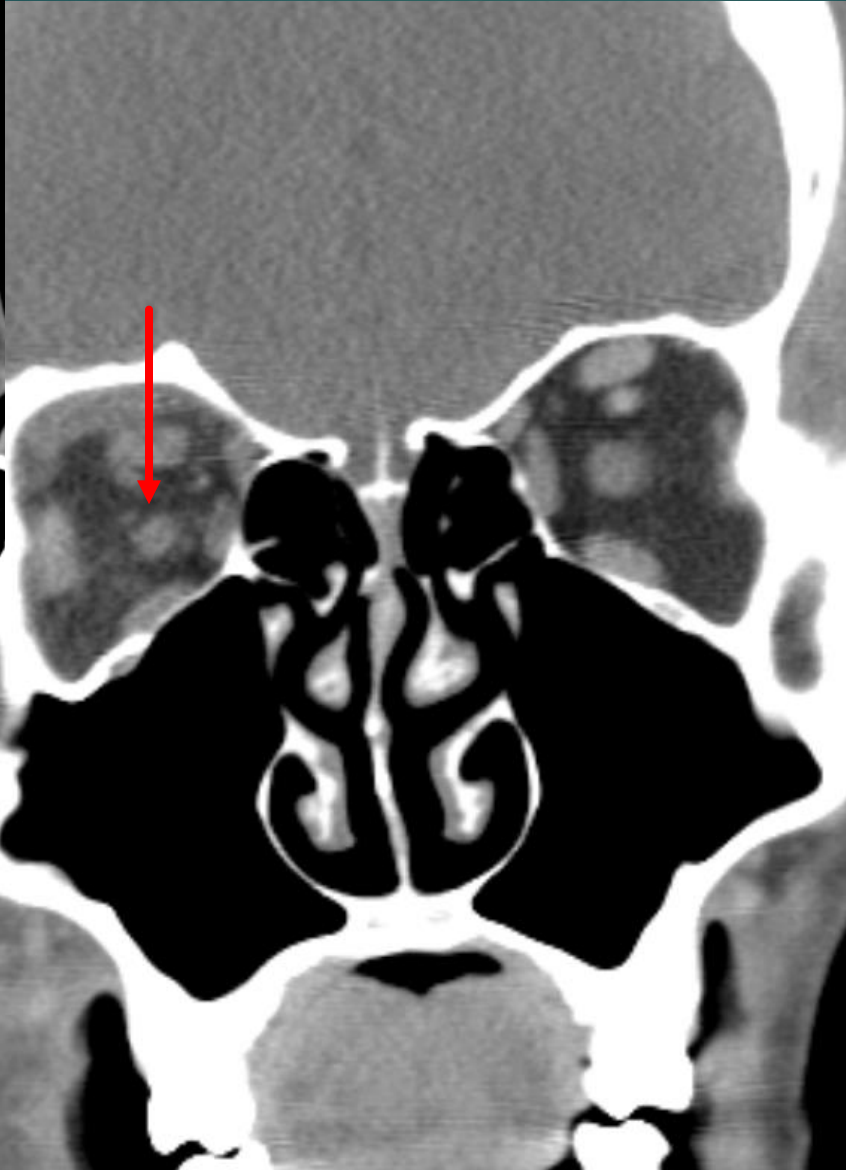
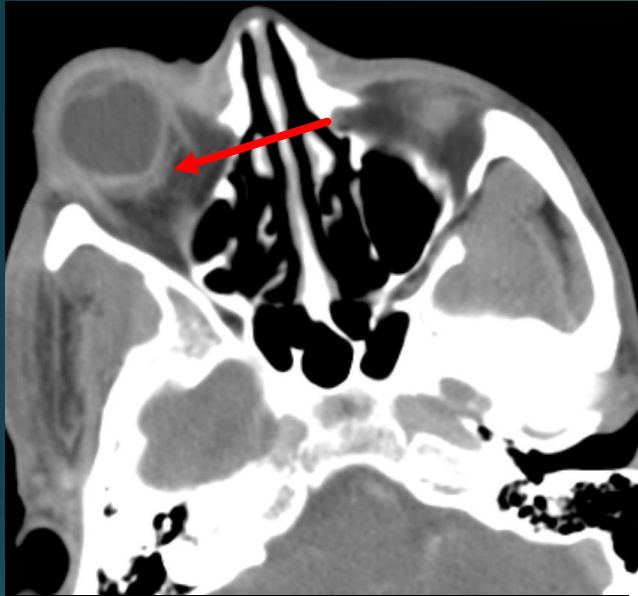


Retina

Choroid

Endophthalmitis –Infection of the vitreous and retina

Panophthalmitis- Extension to Choroid and extra-globe soft tissue-May require enucleation



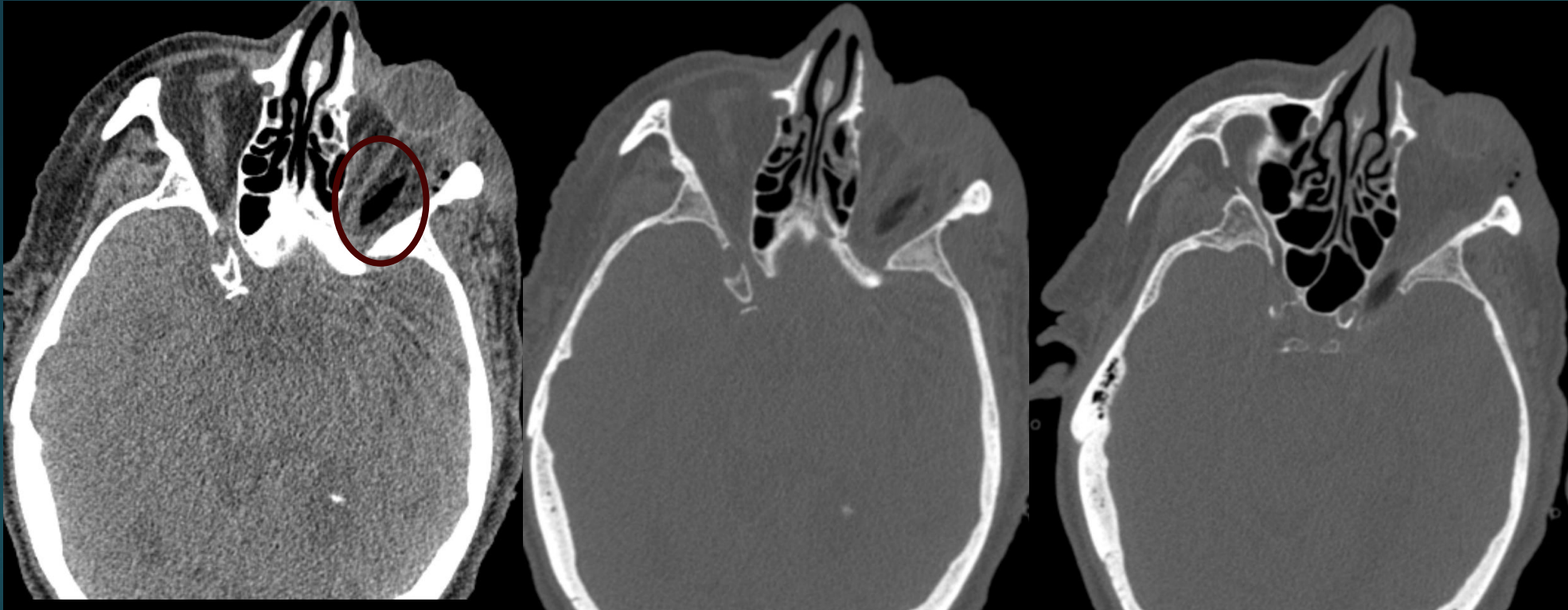
Pre and post septal cellulitis

Orbital compression syndrome-
Proptosis

Guitar pick sign

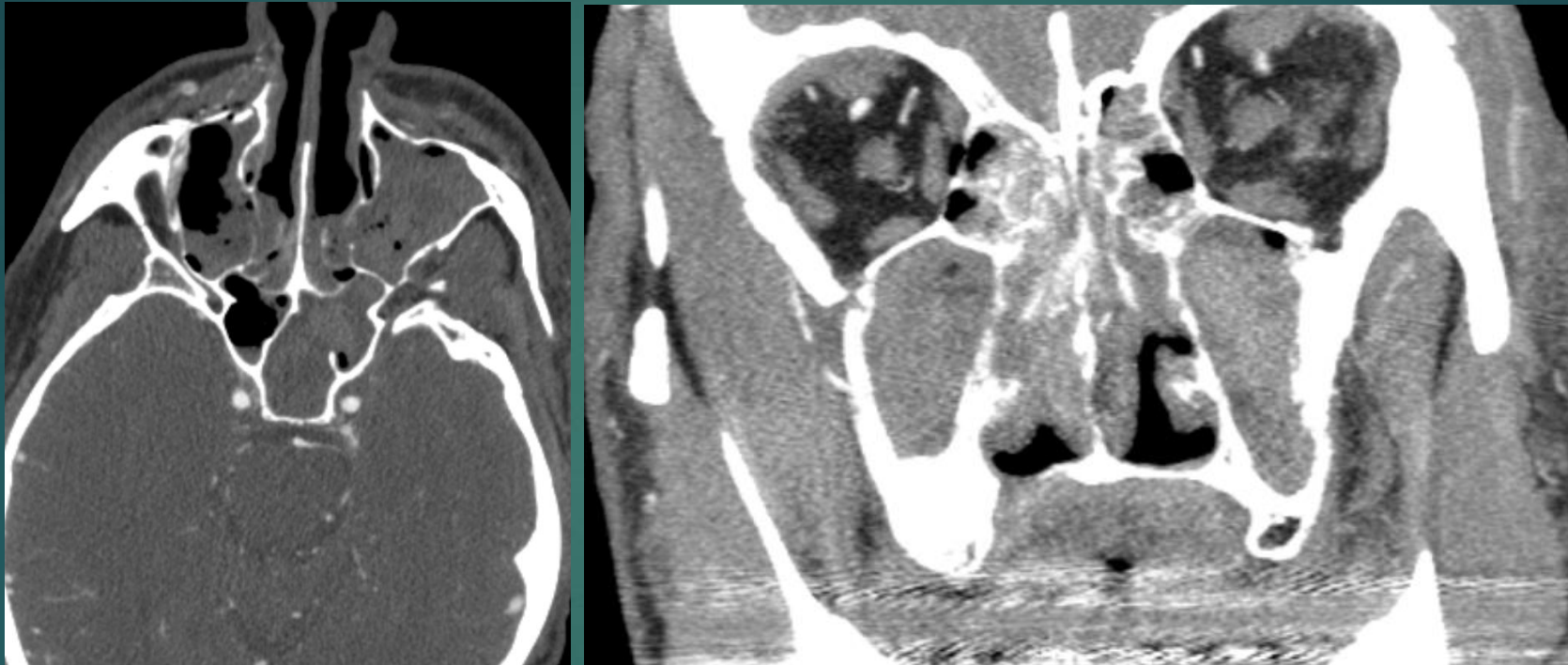
Optic nerve thinning

Orbital trauma- Elderly male fell in wood and hit left eye with a stick

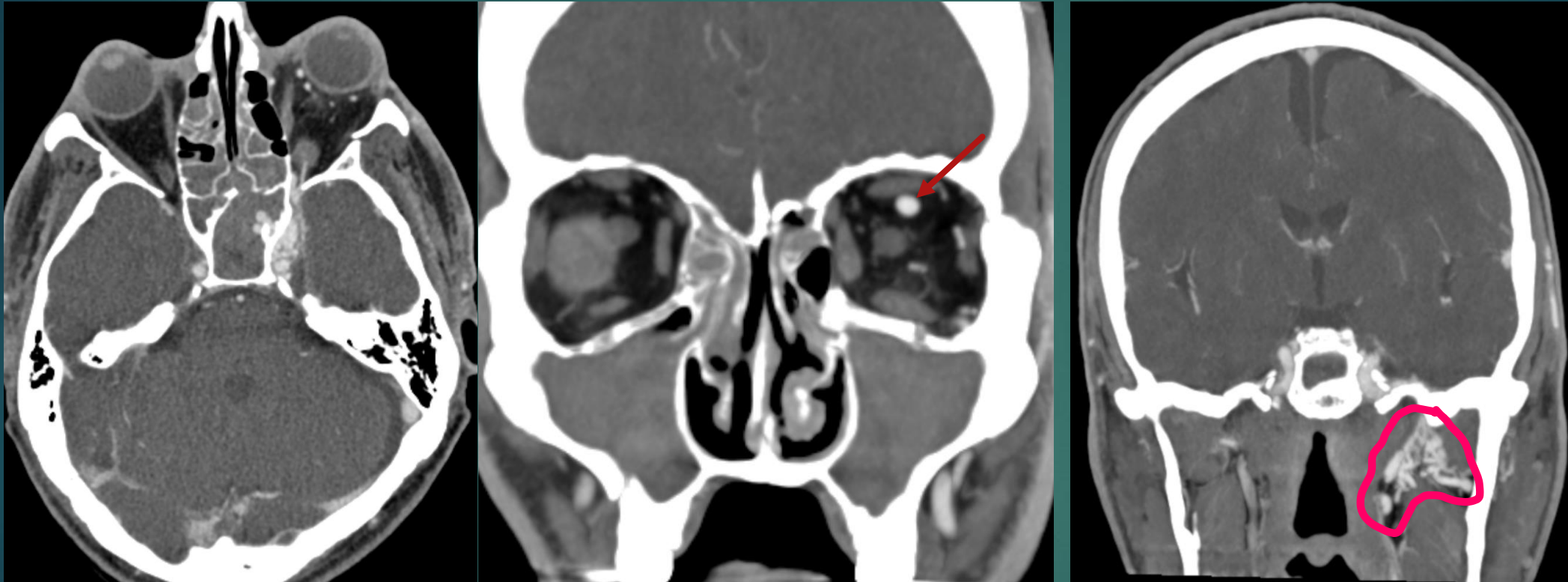


Intraorbital foreign body –Wood chip

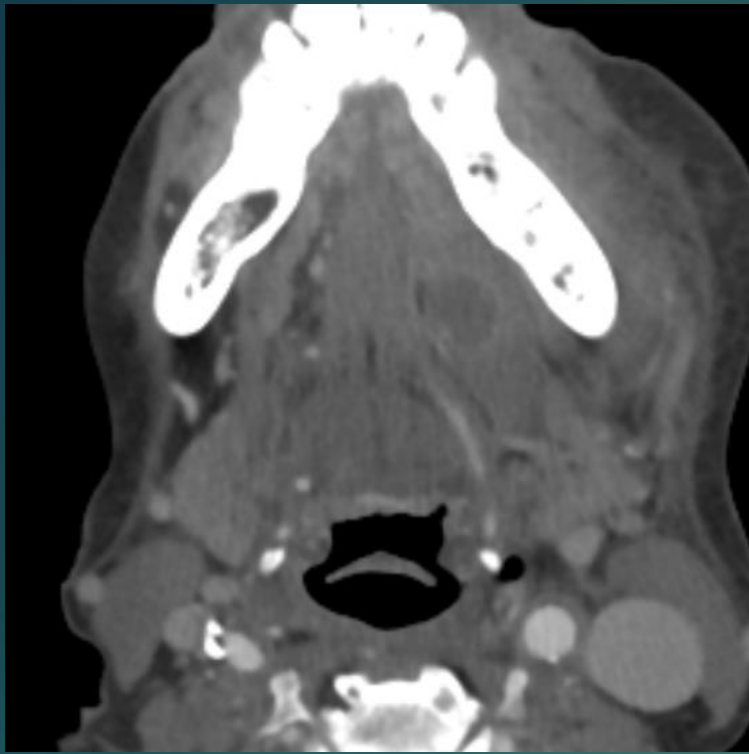
Trauma- MVA- Multiple facial and skull base fractures



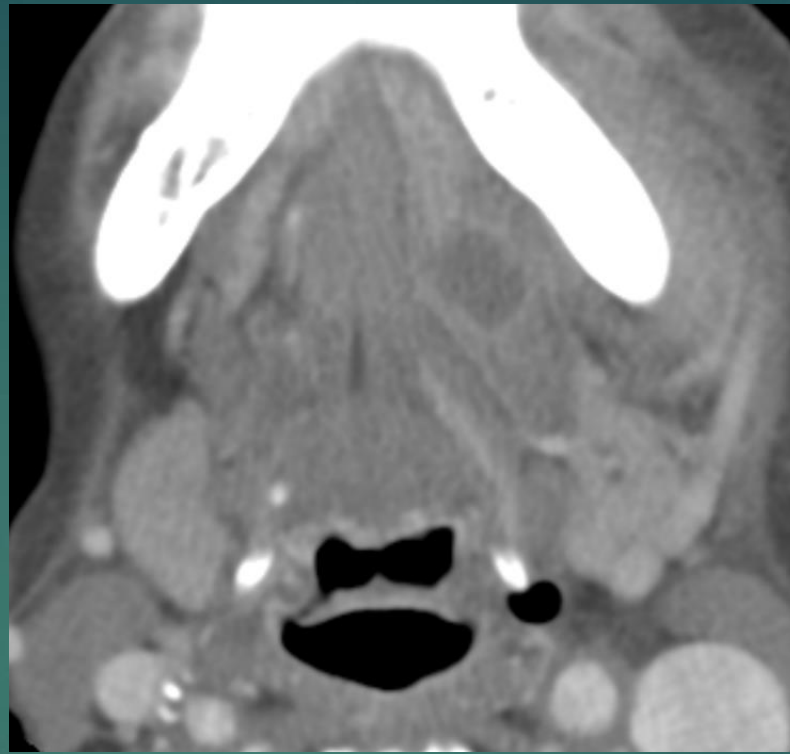
Develops facial pain and left sided Proptosis a week later



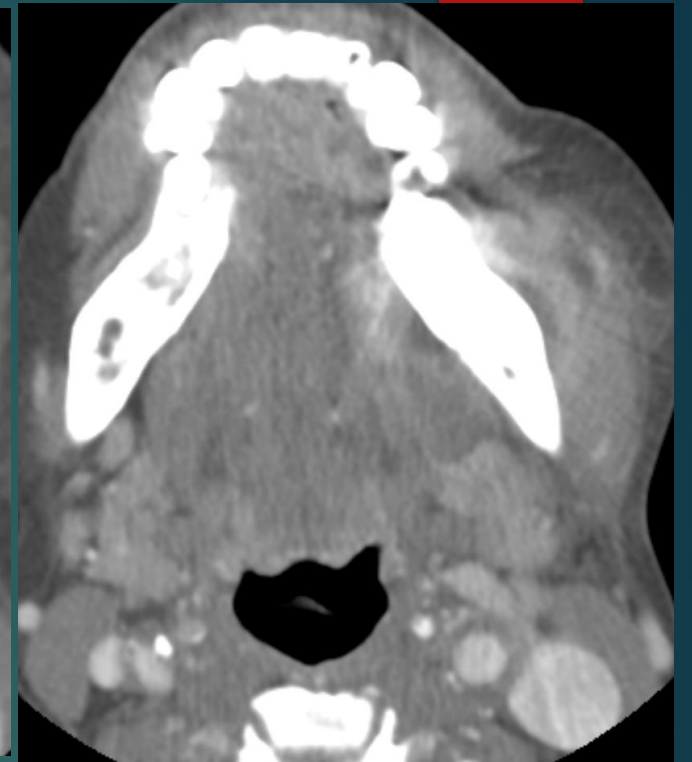
Early filling of cavernous sinus, dilated Superior ophthalmic vein, Prominent Pterygoid venous plexus
ICA Pseudoaneurysm –Direct Carotid Cavernous fistula



CT neck

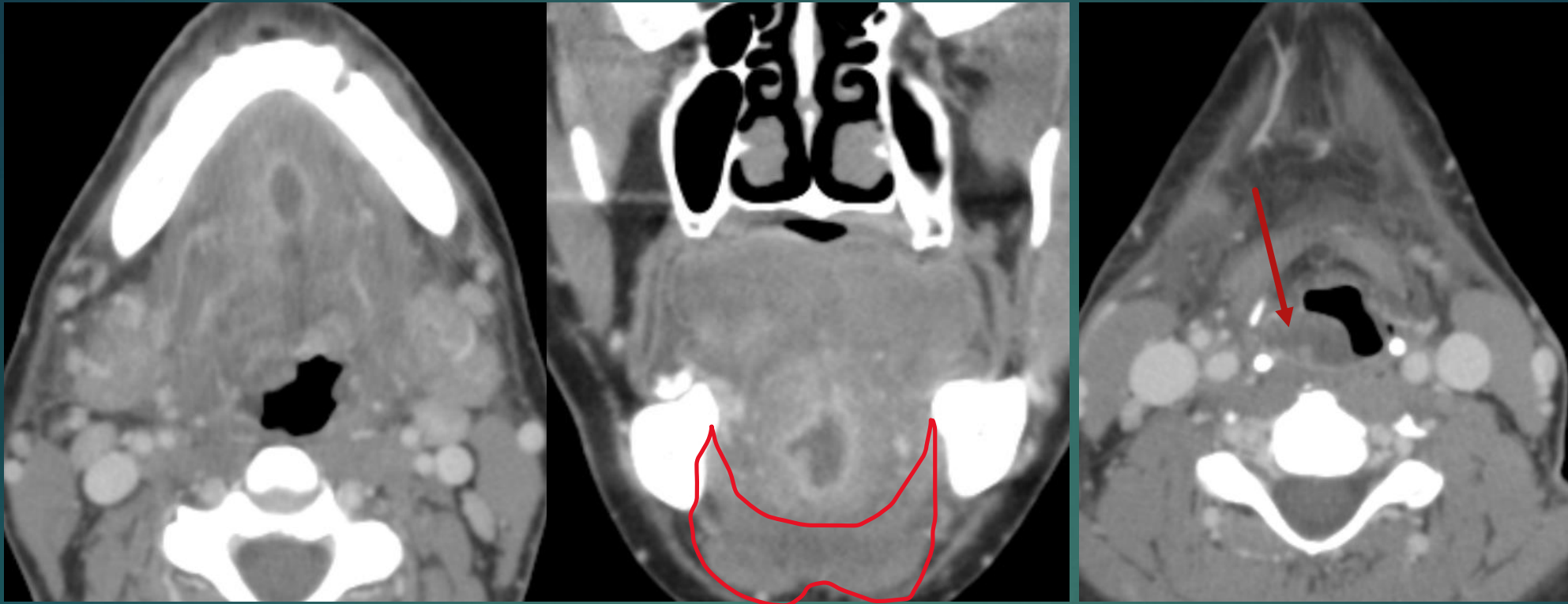


CT maxillofacial



Oral cavity and buccal mucosal space abscess

Usually from otontogenic infection



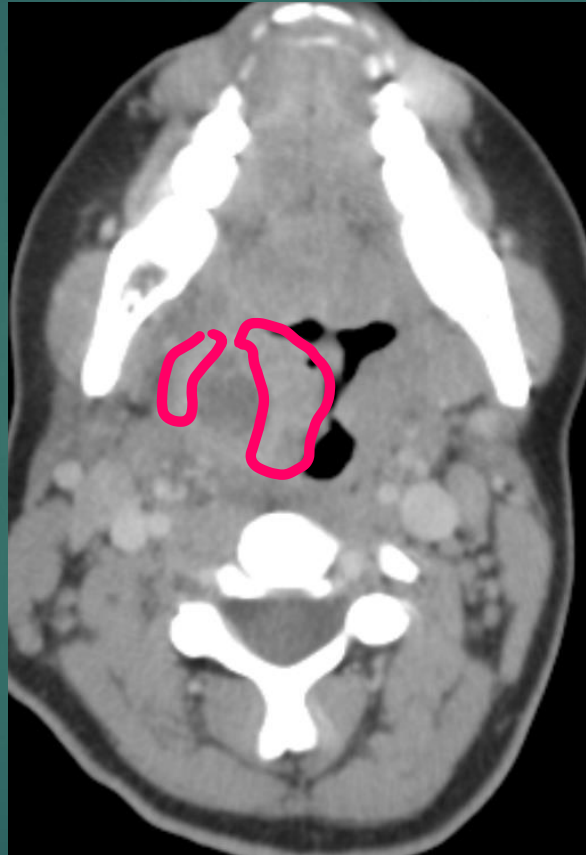
Sublingual space abscess- Ludwigs Angina

Odontogenic infection, salivary gland infection, Tonsillar infection

Airway edema can complicate

Acute throat pain, difficulty swallowing

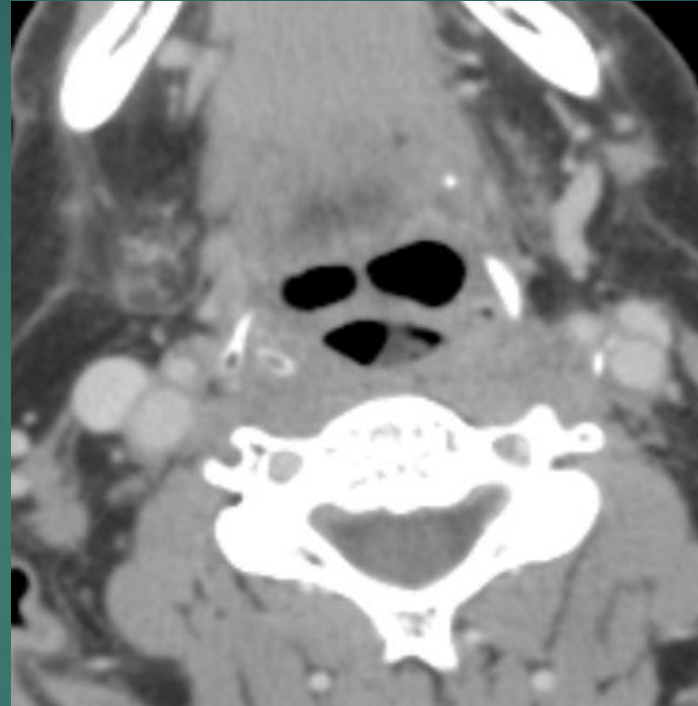
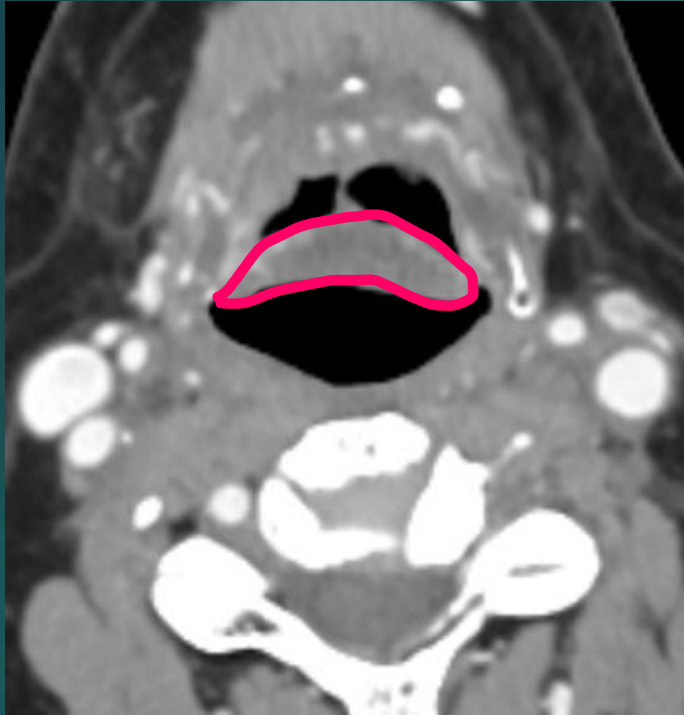
Superior constrictor



Palatine tonsil

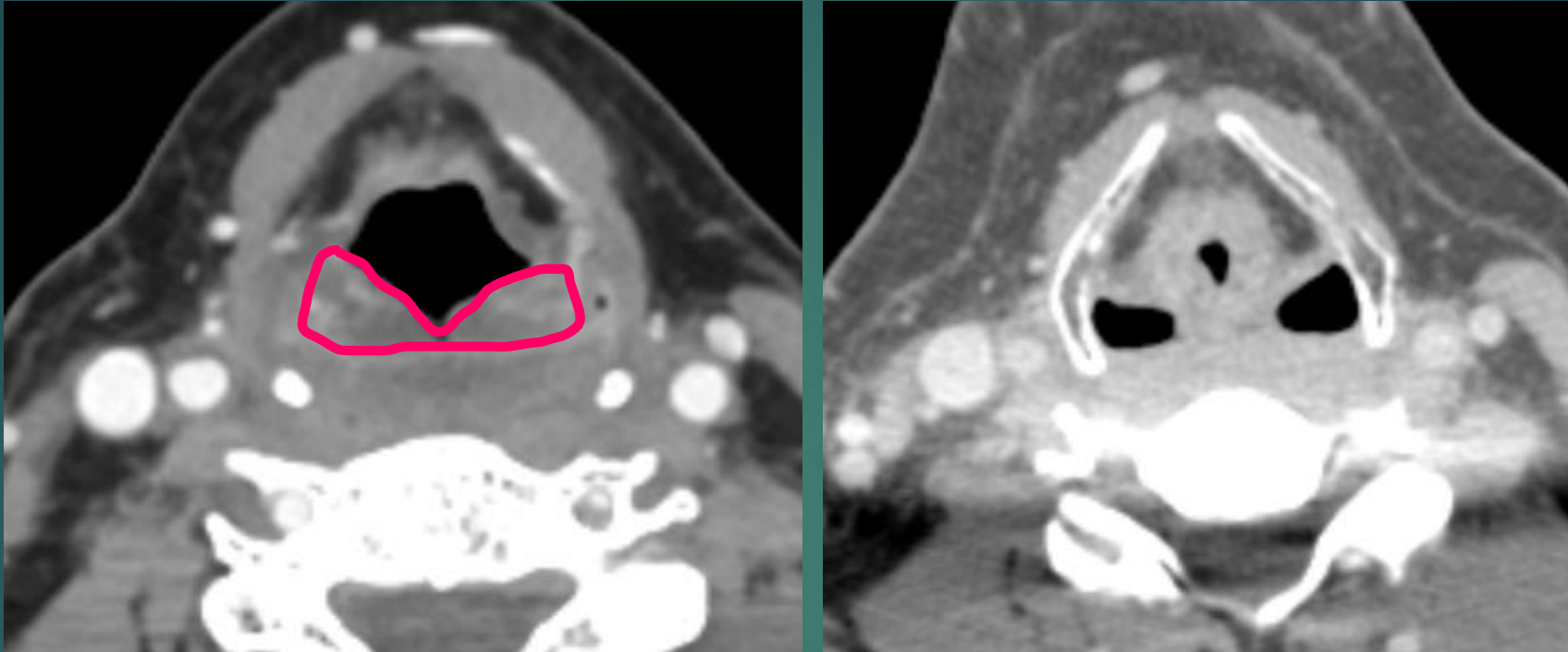
Peritonsillar abscess; treated by Antibiotics or drainage

49-year-old with sore throat and difficulty swallowing



CT 3 year ago

49-year-old with sore throat and difficulty swallowing

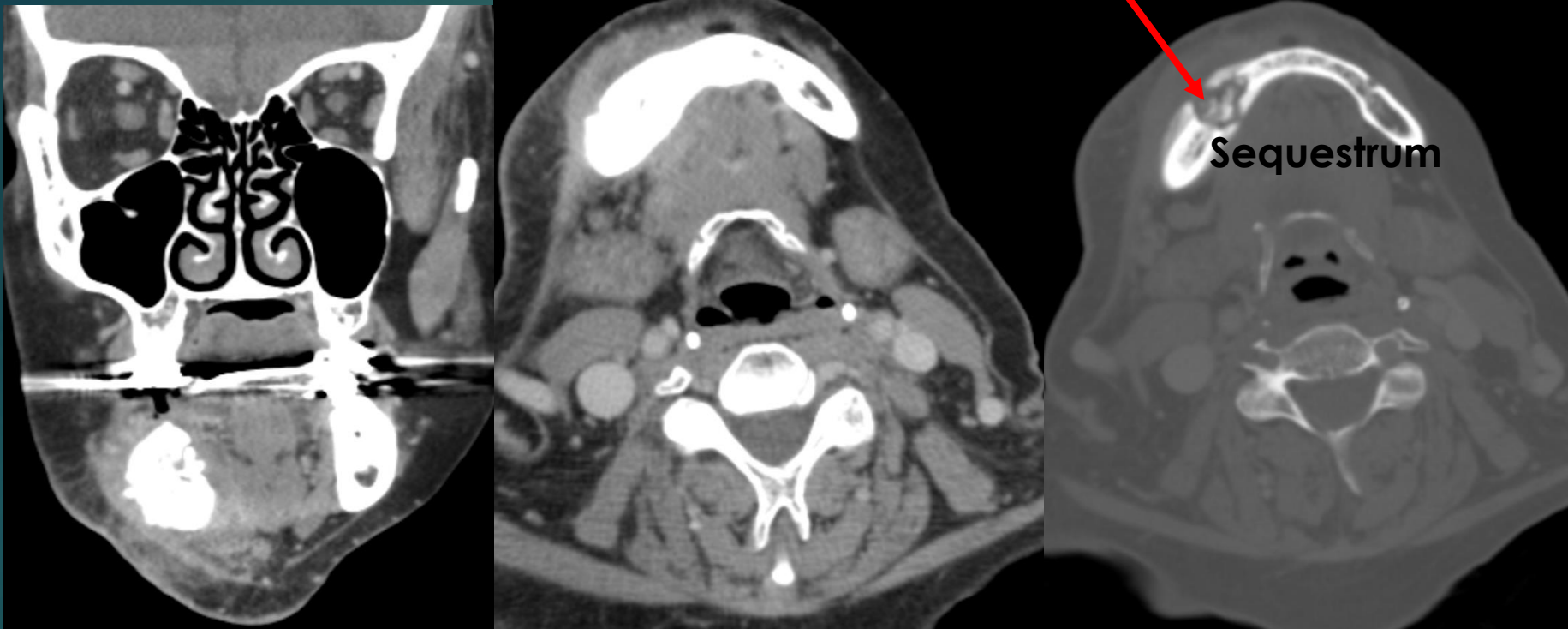


CT 3 years ago

Epiglottitis- less life threatening, less likely to require airways support than adults

Bacterial-Streptococcus and Staphylococcus (Hemophilus more common in children)

Middle aged women with acute jaw swelling

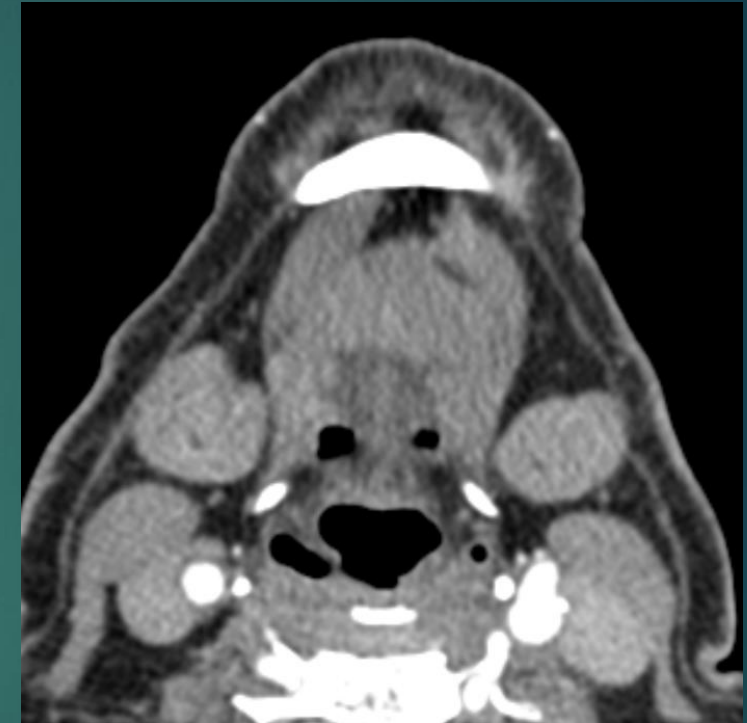
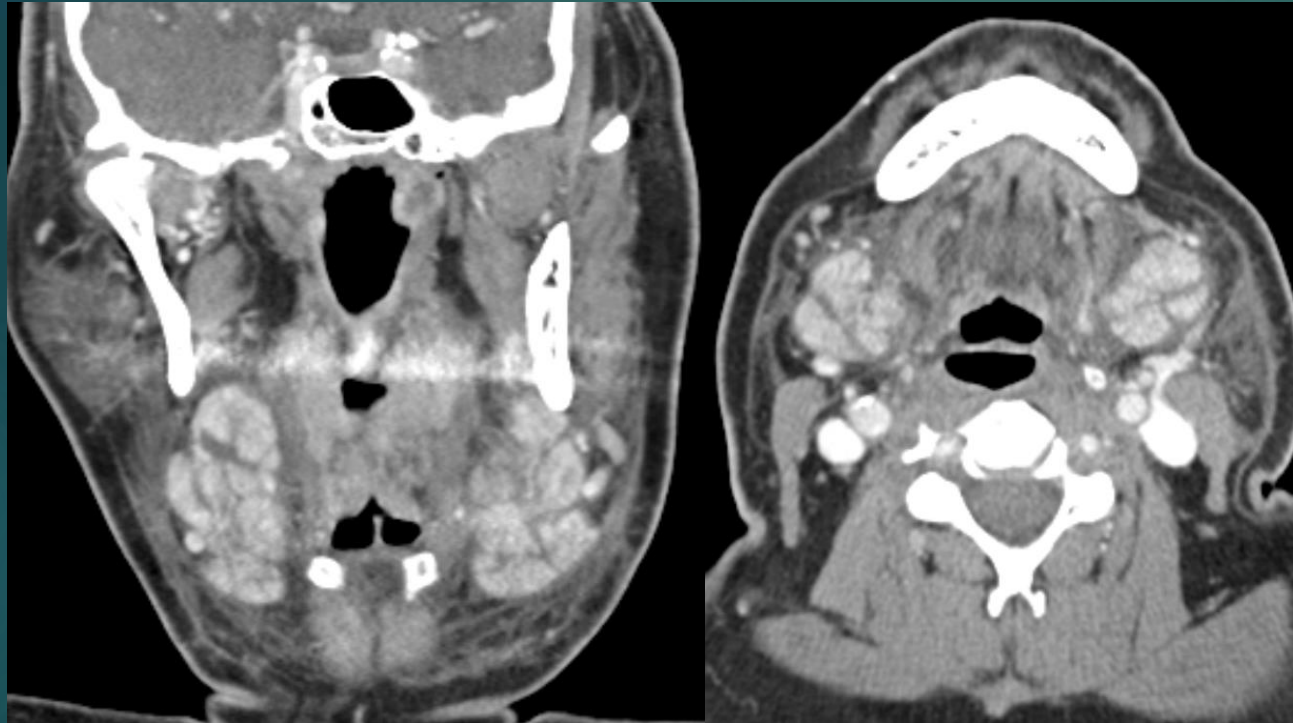


Osteomyelitis ???

Patient was on Biphosphonate treatment

Medication related Osteonecrosis of the Jaw (MRONJ)

Swelling of jaw- sudden for 48 hours

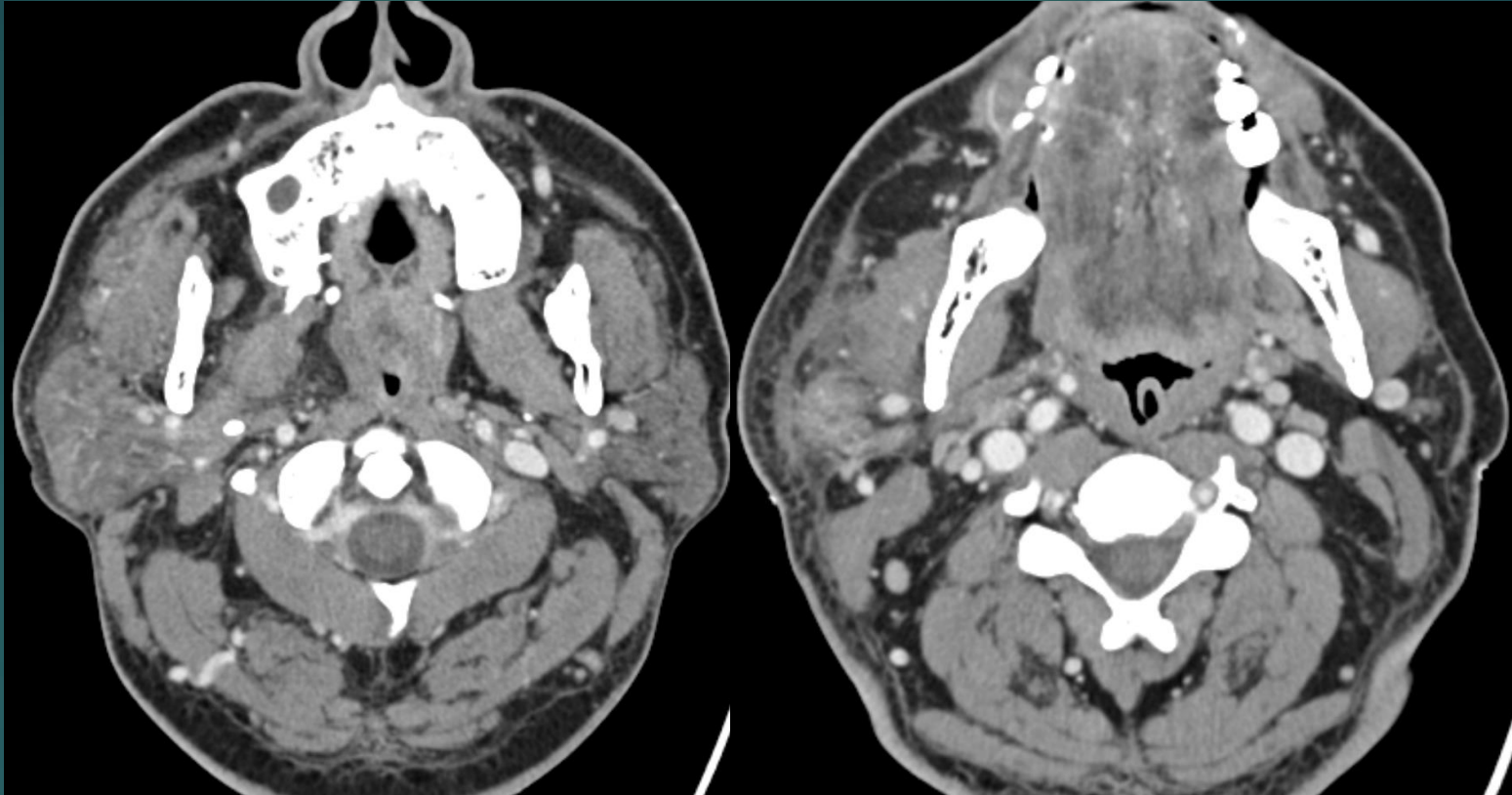


CT 48 hours earlier

Iodide mumps/sialadenitis; Due to IV contrast

Excreted Iodine in major salivary glands; Treated with Analgesics and is self limited

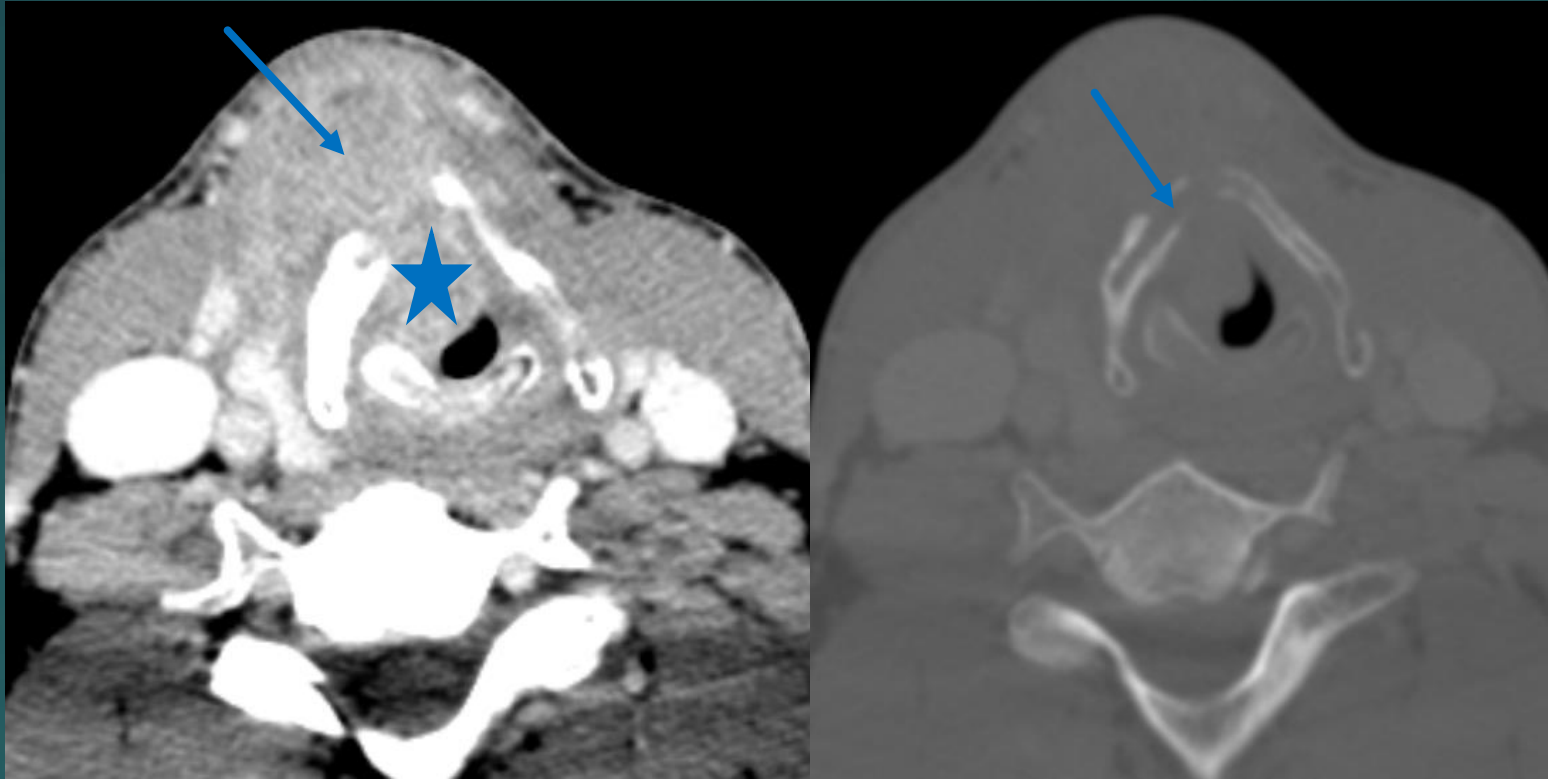
Right facial swelling and throbbing pain



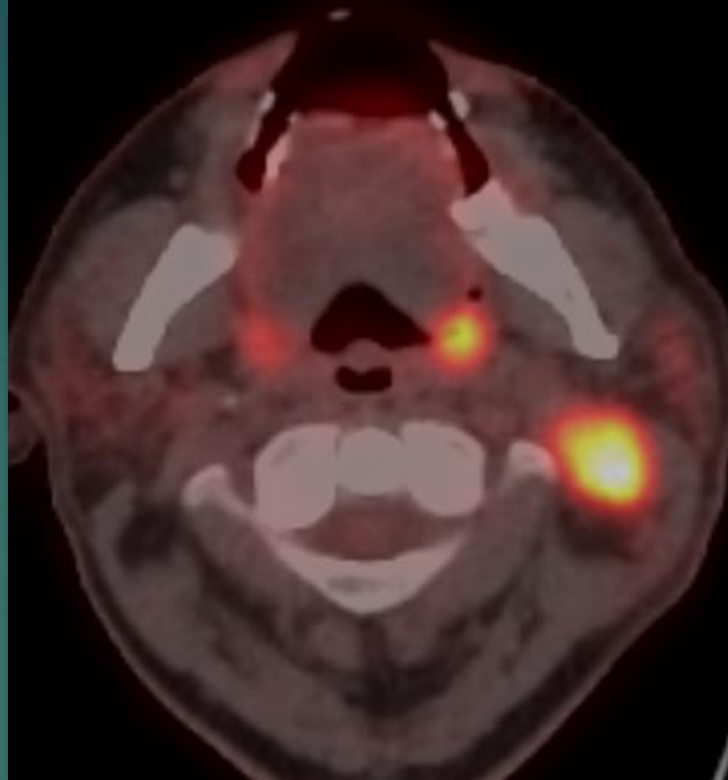
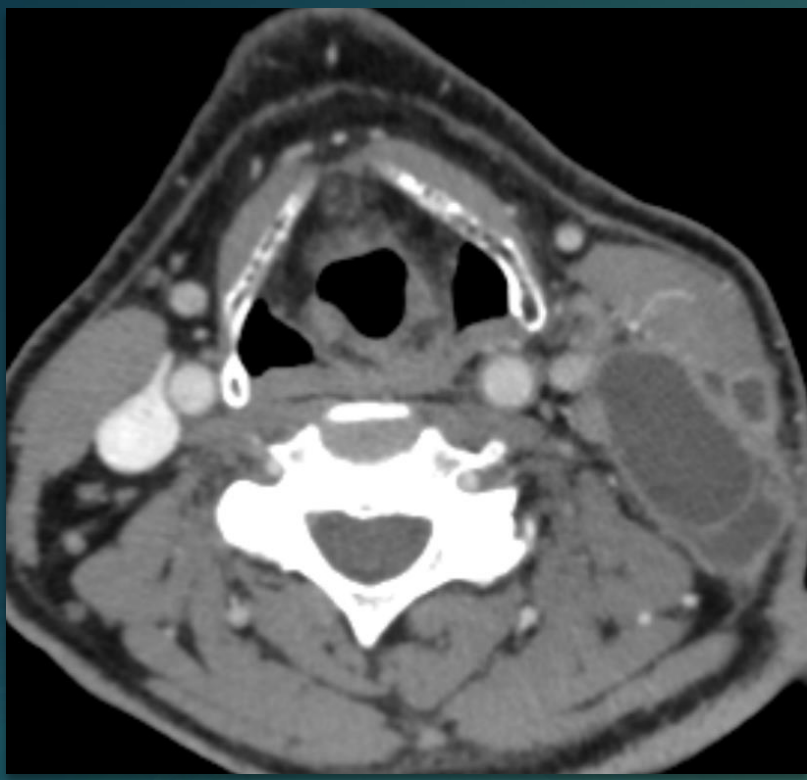
Parotitis- Calculous, Autoimmune, Bacterial , viral or tumor related

Look for bilaterality (viral ,autoimmune) or enhancing nodules-Malignancy

44-year-old male with acute SOB. Voice has been gradually “changing” since last 8 months



Supraglottic laryngeal cancer with superimposed infection of the cartilage and overlying soft tissue

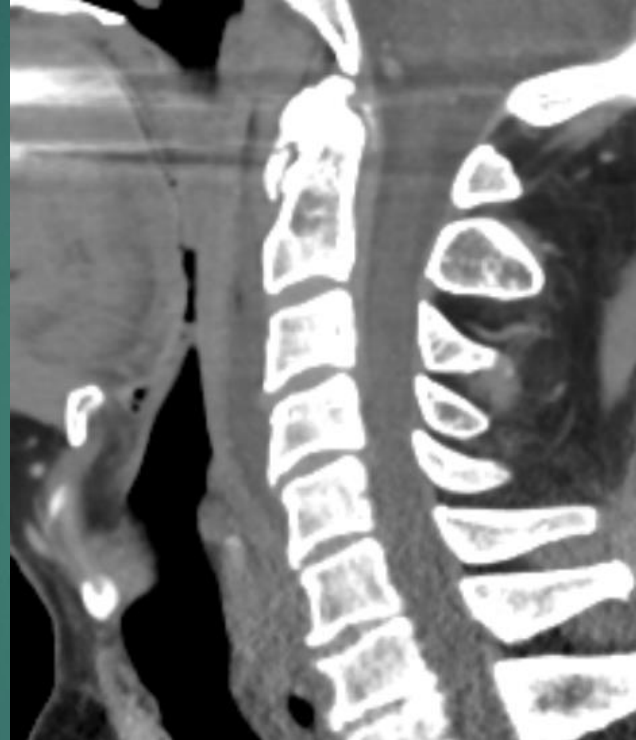
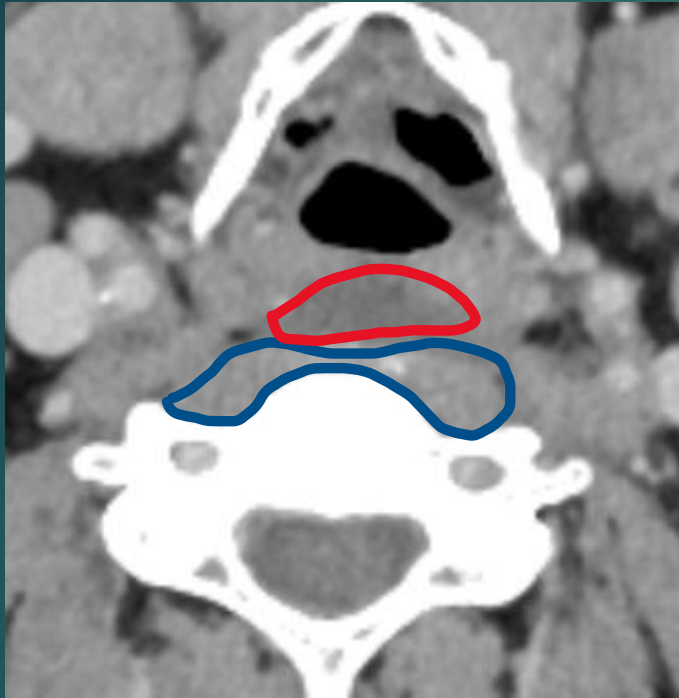


Adult male with left neck swelling, rapidly increasing over past few days –redness and tenderness

Neck abscess ???

Diagnosis: Metastatic node with probable superimposed infection

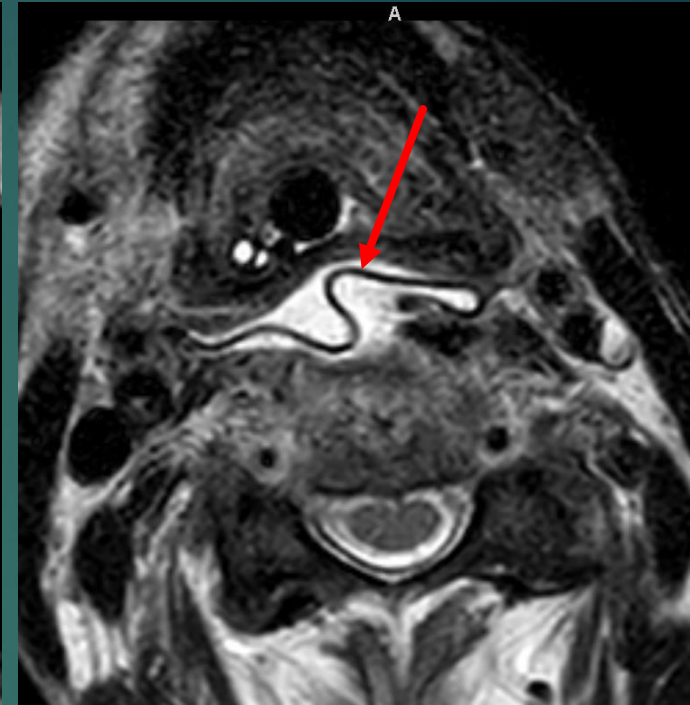
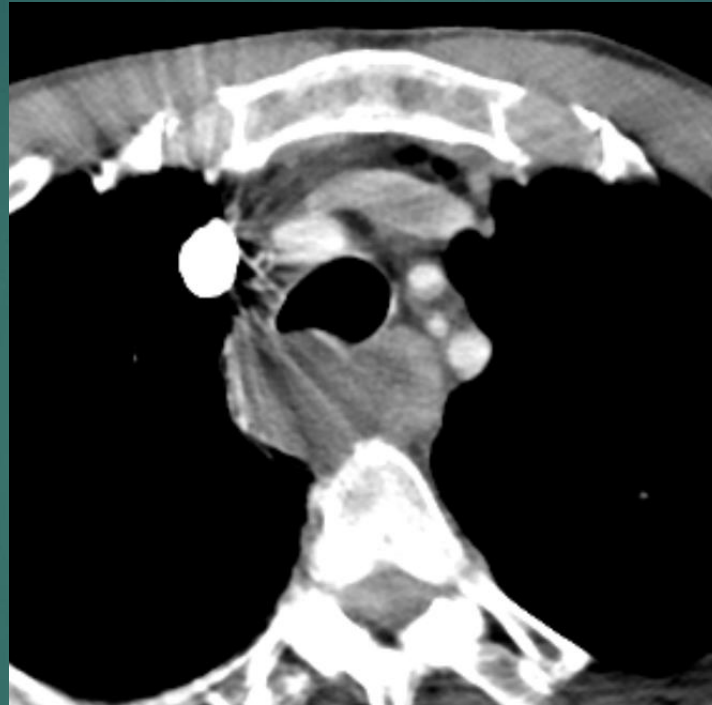
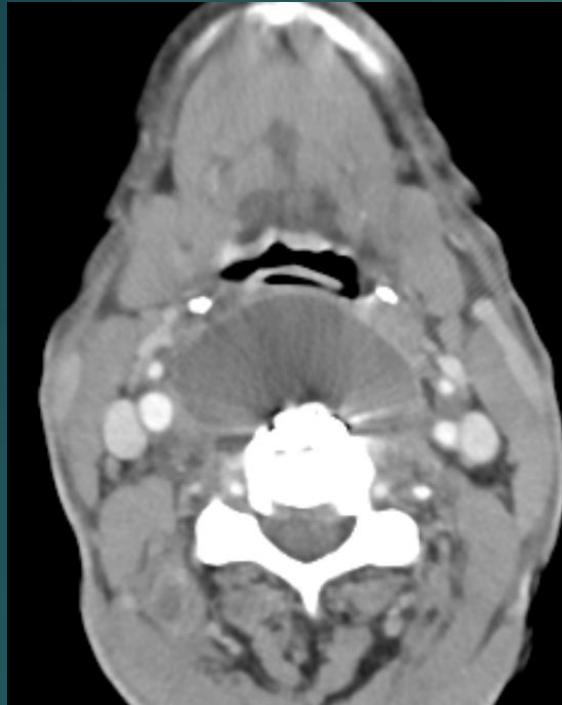
68-year-old with neck pain and dysphagia



Retropharyngeal effusion from calcific tendinitis

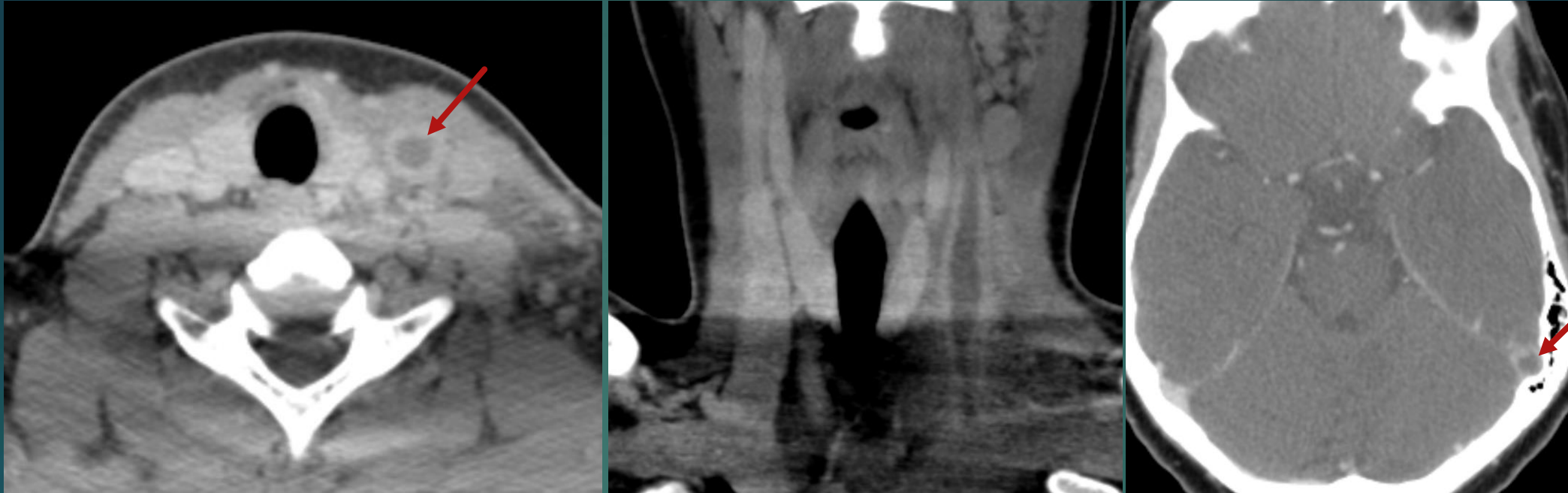
Longus colli calcific tendinitis, an uncommon cause of neck pain. A short series of cases and review of literature International Orthopaedics (2026) 50:87–92

Worsening dysphagia -3 weeks. Went to ER for sudden difficulty breathing



Retropharyngeal space (specifically danger space) abscess extending to mediastinum

13-year-old with neck pain and fevers for 2 weeks

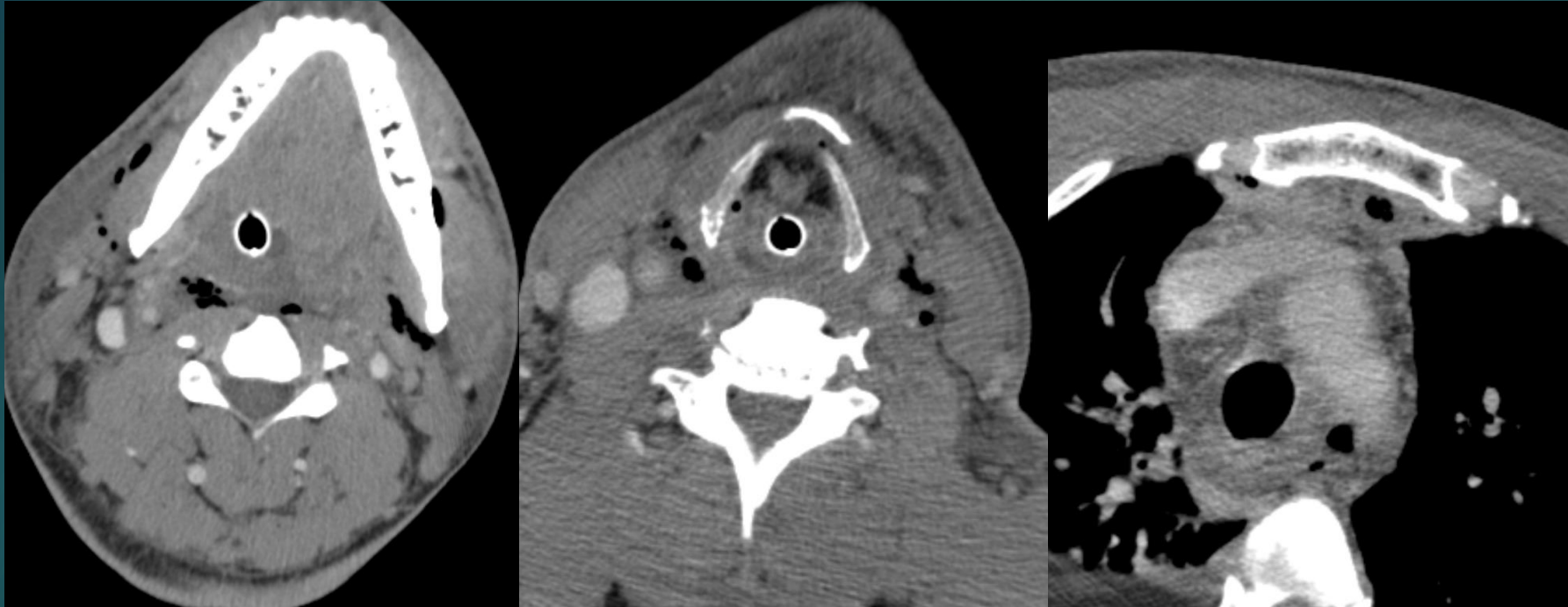


Lemierres syndrome; Infectious thrombophlebitis of the IJV – *Fusobacterium necrophorum*

CT chest recommended to identify septic spread to lungs

Treatment- Antibiotics (4-6 weeks) and Anticoagulants

Limited history- transferred from outside hospital-
intubated for airway protection after arrival



Necrotizing fasciitis-

Gas formation, fluid tracking along fascial planes
Subcutaneous and deep soft tissue involvement
No rim enhancing collections

Broad spectrum antibiotic against Anerobic bacterial



THANK
YOU