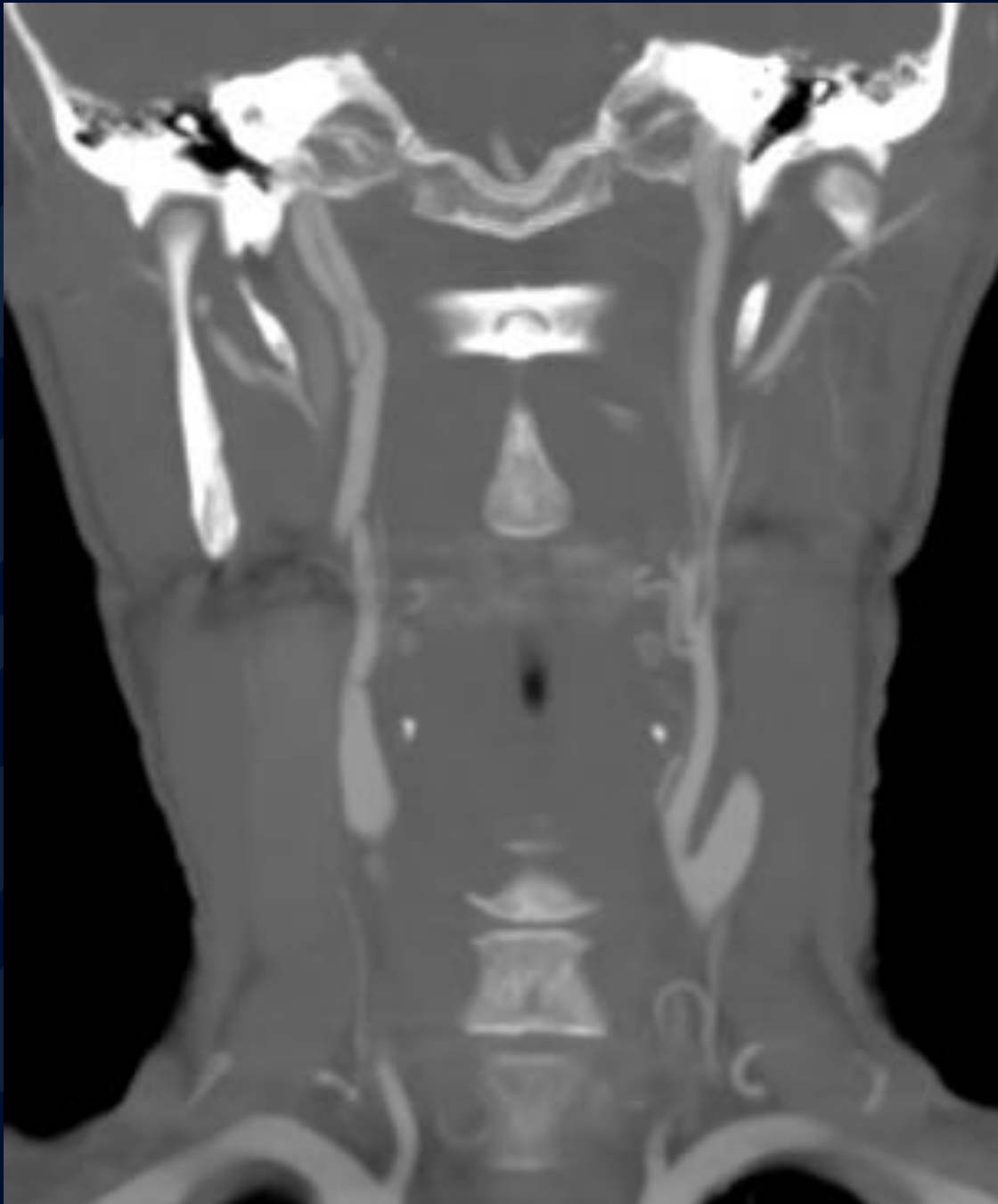
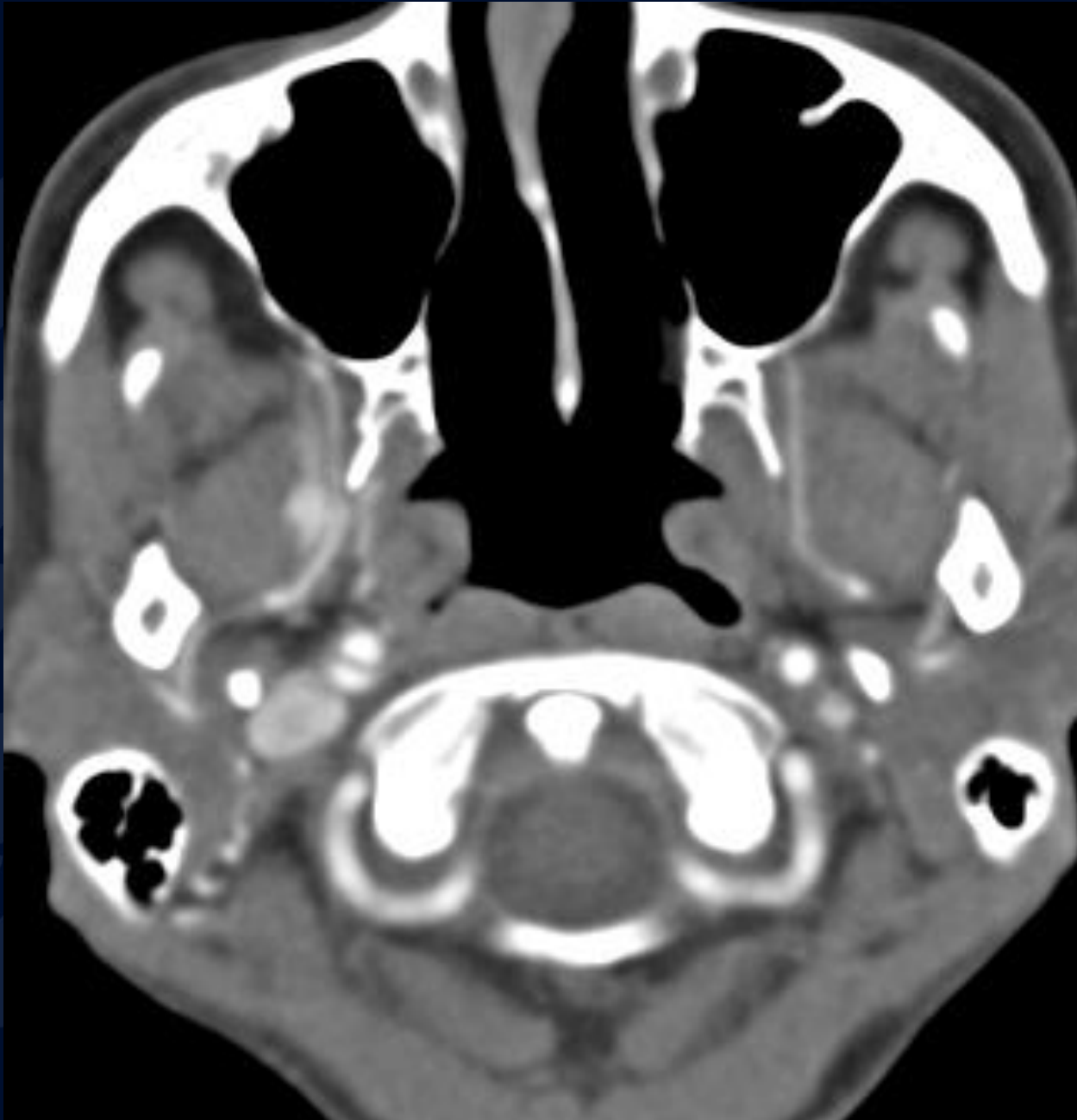


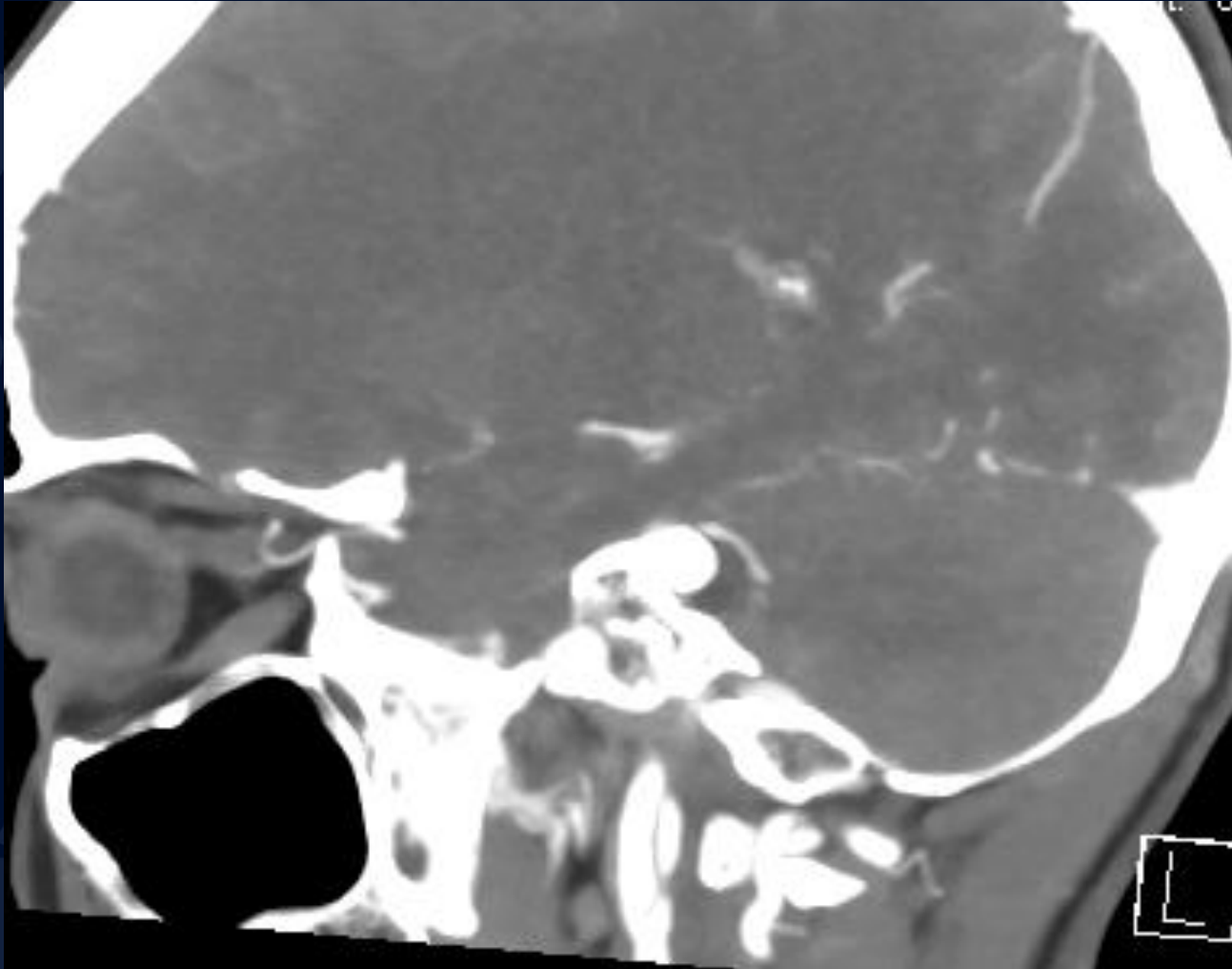
62 y/o woman with sudden intense headache followed by bouts of vomiting.

Rishal Ambaram, MD

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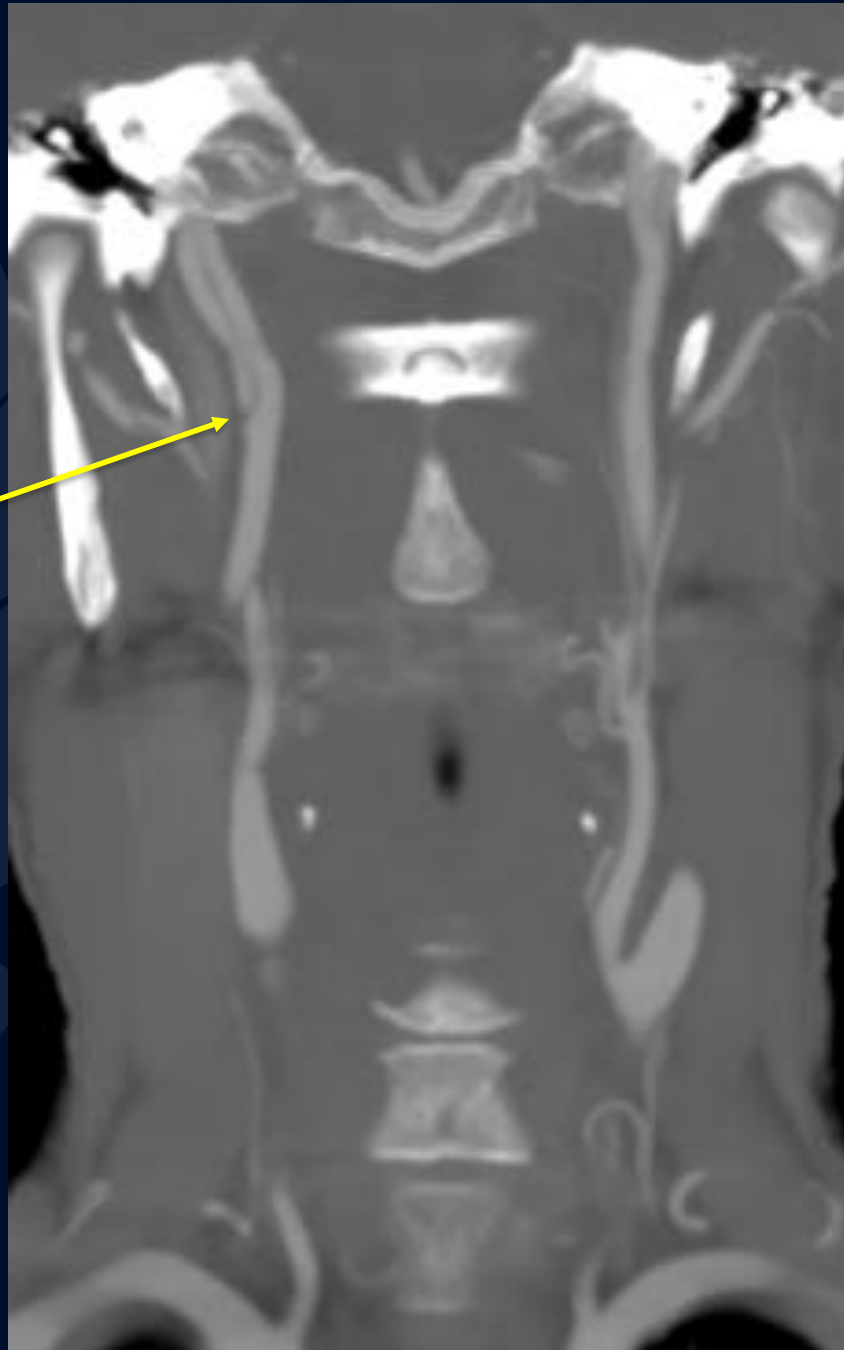




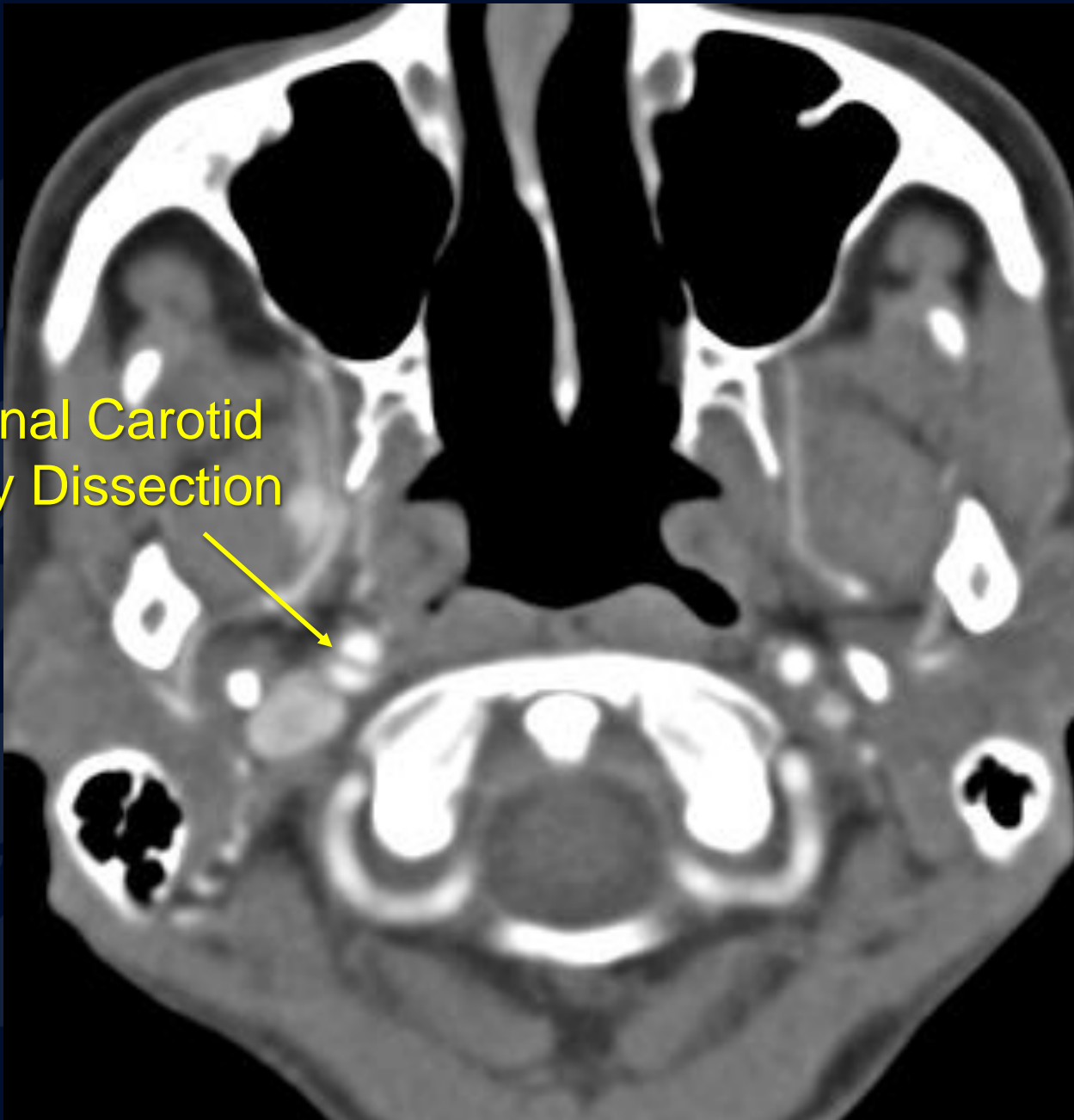


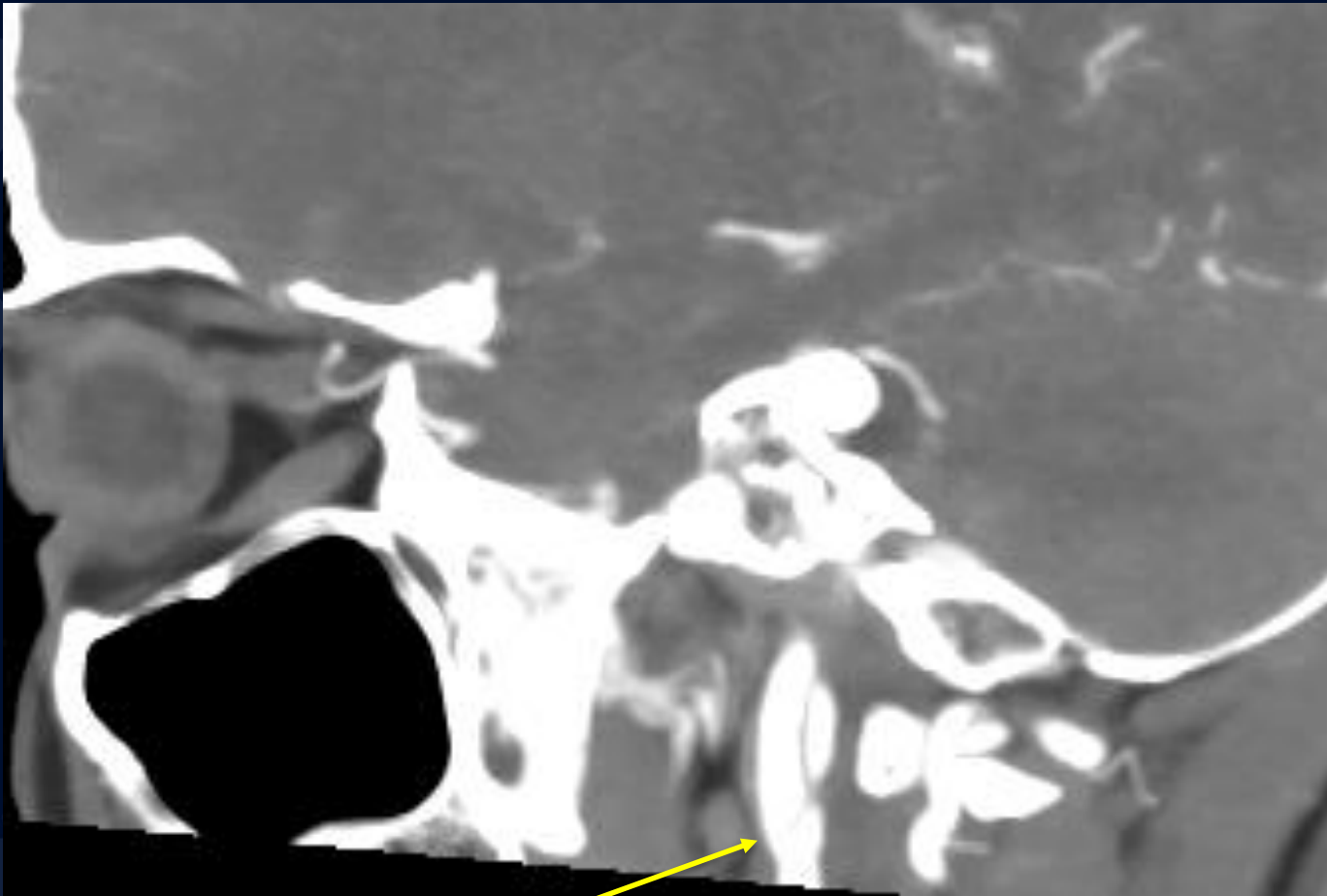
Internal Carotid Artery Dissection

Internal Carotid
Artery Dissection



Internal Carotid
Artery Dissection





Internal Carotid
Artery Dissection

Internal Carotid Artery Dissection

- Separation of arterial wall layers resulting in a false lumen
- Hemorrhage may be due to an intimal tear or other pathology of the vasa vasorum
- Spontaneous dissection of cervical arteries occur in about
- 3 cases per 100,000 individuals across all ages
- Patients with spontaneous cervical artery dissections due to connective tissue or vascular disorders is low
- Most common association is with Fibromuscular dysplasia
- Most often presents with ischemic stroke or TIA

Internal Carotid Artery Dissection

Associated Disorders:

- Fibromuscular dysplasia (FMD)
- Ehlers Danlos Syndrome
- Marfan Syndrome
- Osteogenesis imperfecta
- Cystic medial necrosis
- Alpha 1 antitrypsin deficiency

Internal Carotid Artery Dissection

- Symptoms include: head/neck pain, headache of gradual onset (although some have sudden and severe pain “thunderclap” headache, tinnitus, scalp tenderness.
- Horner syndrome occurs in 25% of cases – distention of sympathetic fibers spanning the external surface of the ICA (usually ptosis and miosis)
- Diagnosis made by neuroimaging showing long tapered arterial stenosis, a tapered occlusion, a dissecting aneurysm, an intimal flap, a double lumen, or an intramural hematoma.
- Most common imaging performed: Brain MRI with MRA or CTA
- Fat-Sat T1 MRI of the neck and intracranial course of ICA best for subacute dissection due to Methemoglobin in vessel wall

References

Spontaneous Dissection of the Carotid and Vertebral Arteries | NEJM
<https://www.nejm.org/doi/full/10.1056/NEJM200108093450616>

Carotid and vertebral artery dissection syndromes | Postgraduate Medical Journal
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