A large, stylized oak leaf graphic in a dark blue color, positioned on the left side of the slide, partially overlapping the text.

35-year-old female with Horner's Syndrome, severe neck and left eye pain

Andrew Klufas, MD MBA
Racquel Helsing, MD

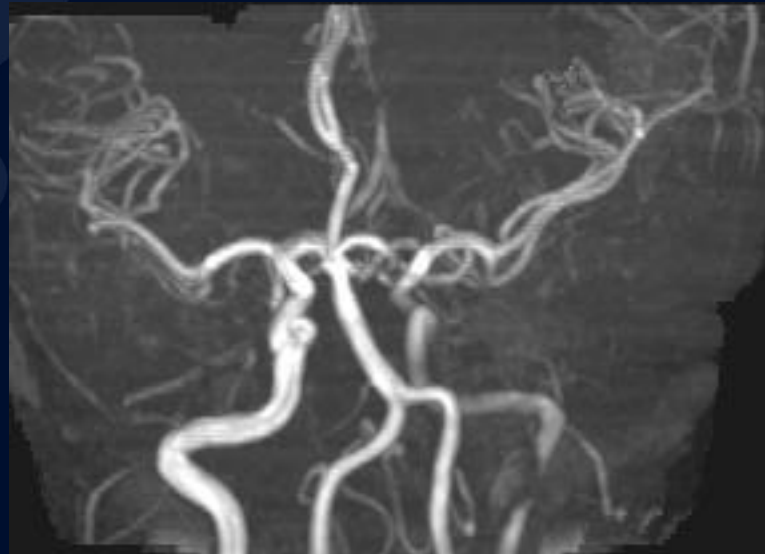
MR T1 FS



MR Angio Projection (Left Neck)



MR Angio-Projection





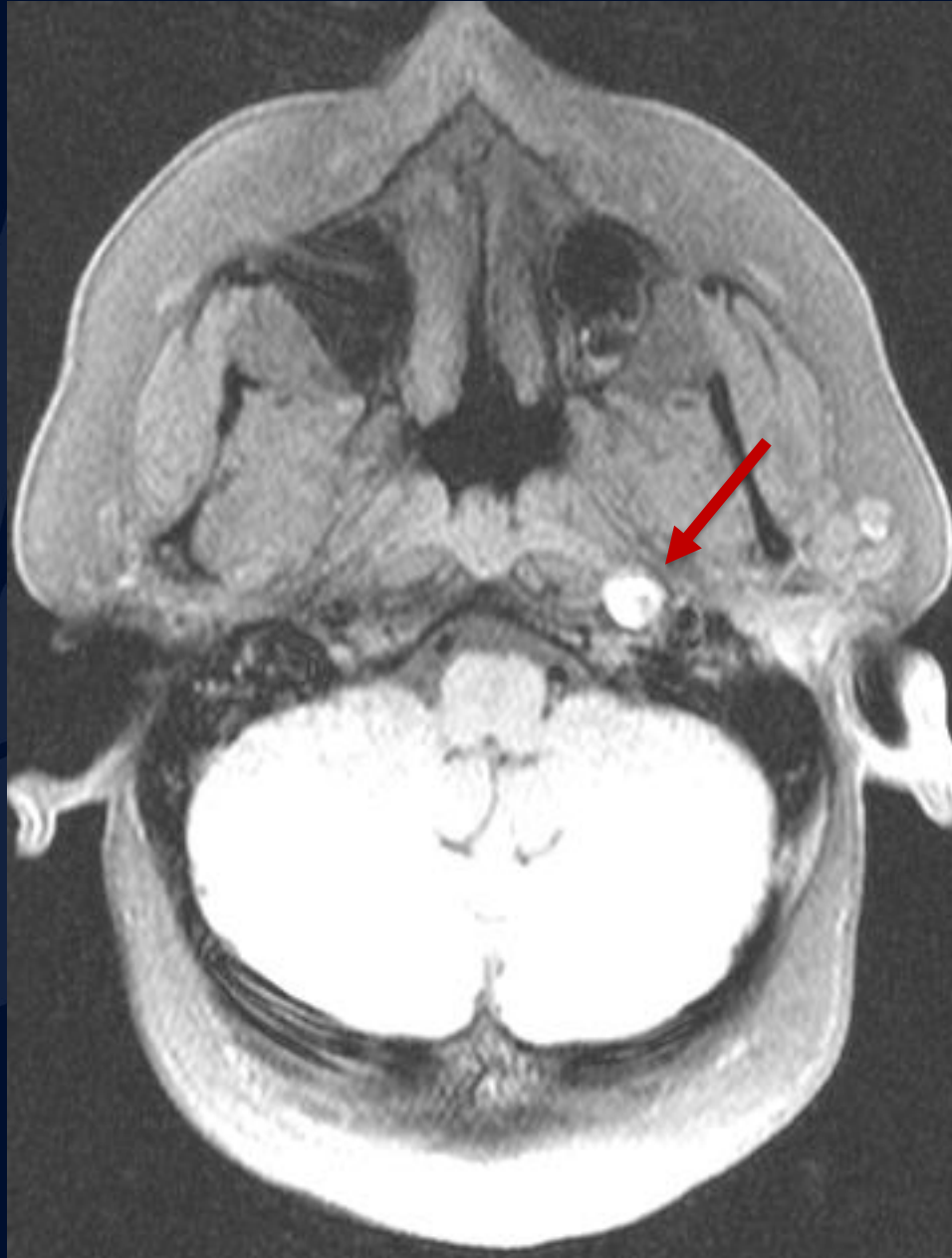
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A large, stylized oak leaf graphic in a dark blue color, positioned on the left side of the slide, partially overlapping the title text.

Acute Internal Carotid Artery Dissection

MR T1 FS

Crescent shaped
increased signal in
left internal carotid
artery

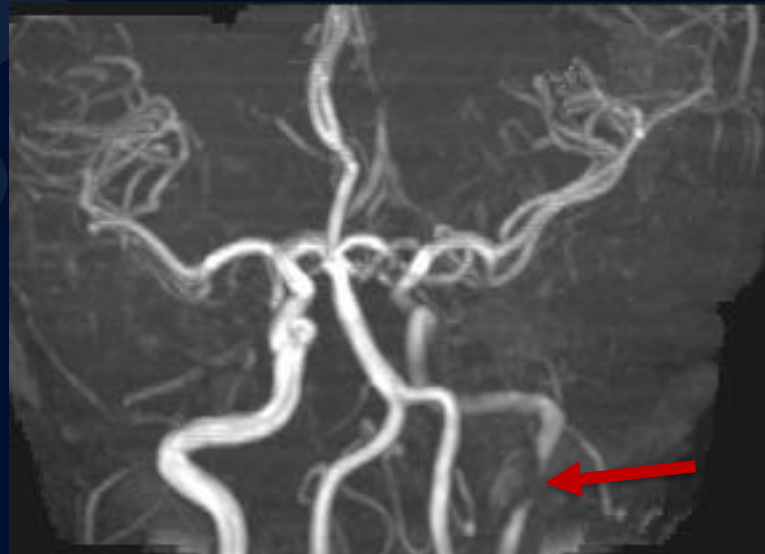


MR Angio Projection (Left Neck)



Cervical left internal
carotid artery filling
defect

MR Angio Projection



Filling defect in
cervical left internal
carotid artery

MR Angio Projection (Circle of Willis)

Above: Filling defect in
cervical left internal
artery



Below: Resolution post
intervention



Internal Carotid Artery Dissection

Clinical presentation: Classically presents with ipsilateral headache, neck pain, and Horner Syndrome, with evidence of ischemic stroke and retinal ischemia

Risk factors: HTN, migraines, trauma, and connective tissue disease

Etiology

- a) Spontaneous: Most often seen in patient's with Ehlers-Danlos, Marfan syndrome, Osteogenesis Imperfecta, or fibromuscular dysplasia
- b) Traumatic
- c) Iatrogenic

Pathophysiology: Tear of the tunica media result in blood entering the tunica intima, creating a false lumen with the classic "crescent sign" seen on imaging

Imaging Findings

- CTA
 - “Crescent Sign” seen with contrast leaking into the false lumen between the tunica media and intima
- MRI
 - T1 FS, T2, DWI: All show high signal crescent sign
 - MRA: Absent flow void or abnormal vessel contour
- Angiography/DSA
 - “String and Pearl Sign”
 - Double barrel lumen and intimal flap are less commonly seen

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