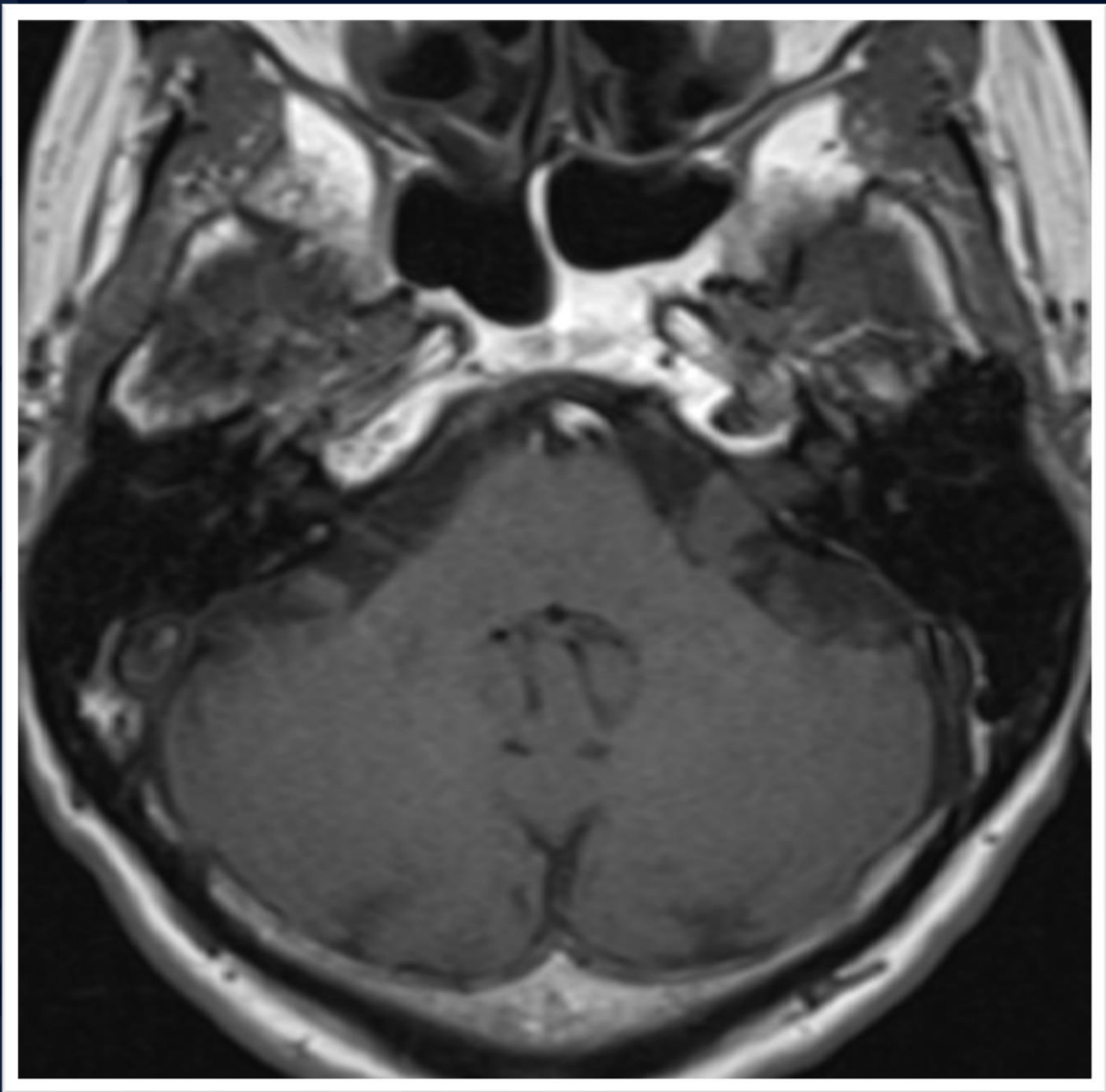
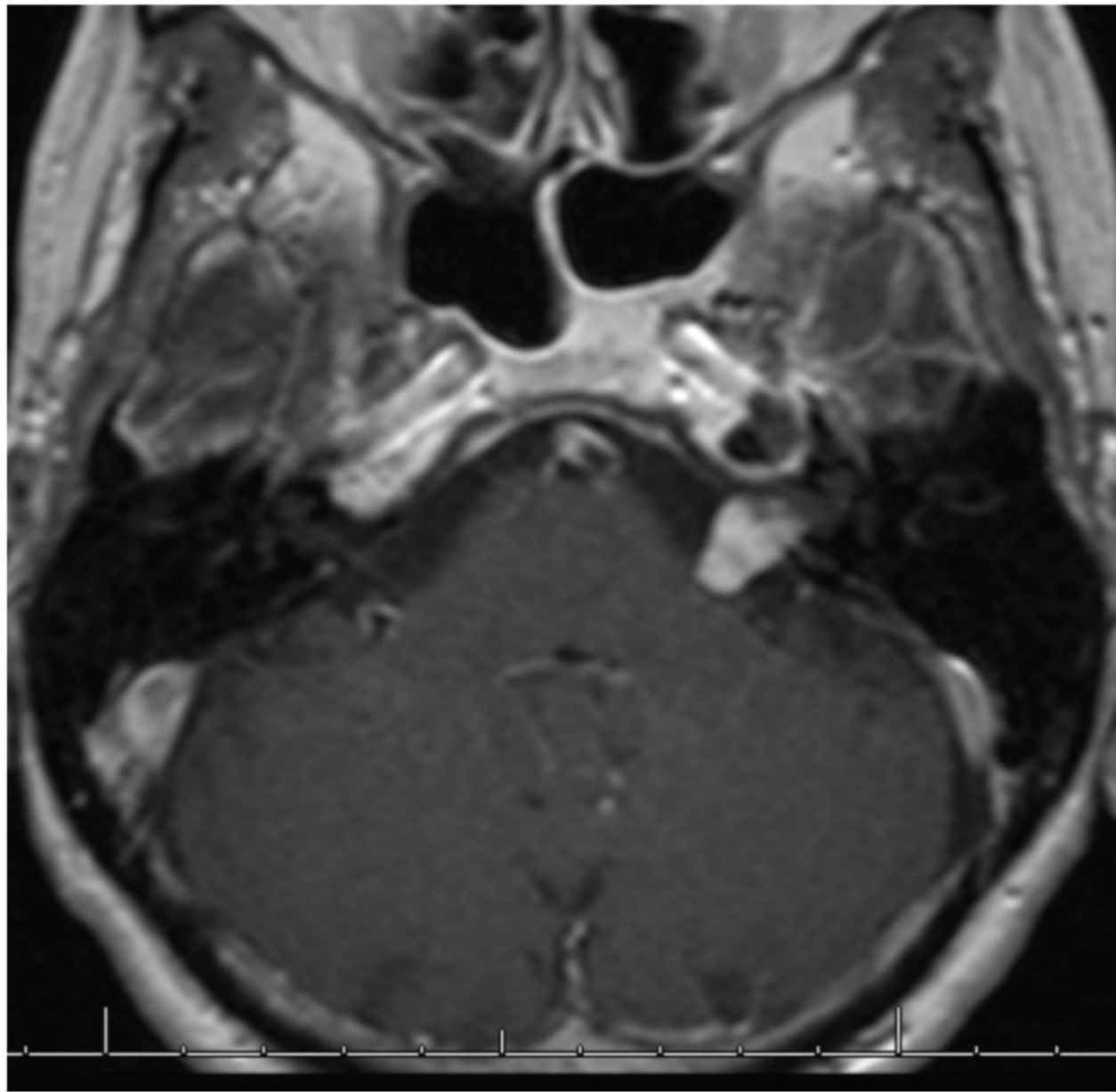


# 66 y/o female with unilateral hearing loss

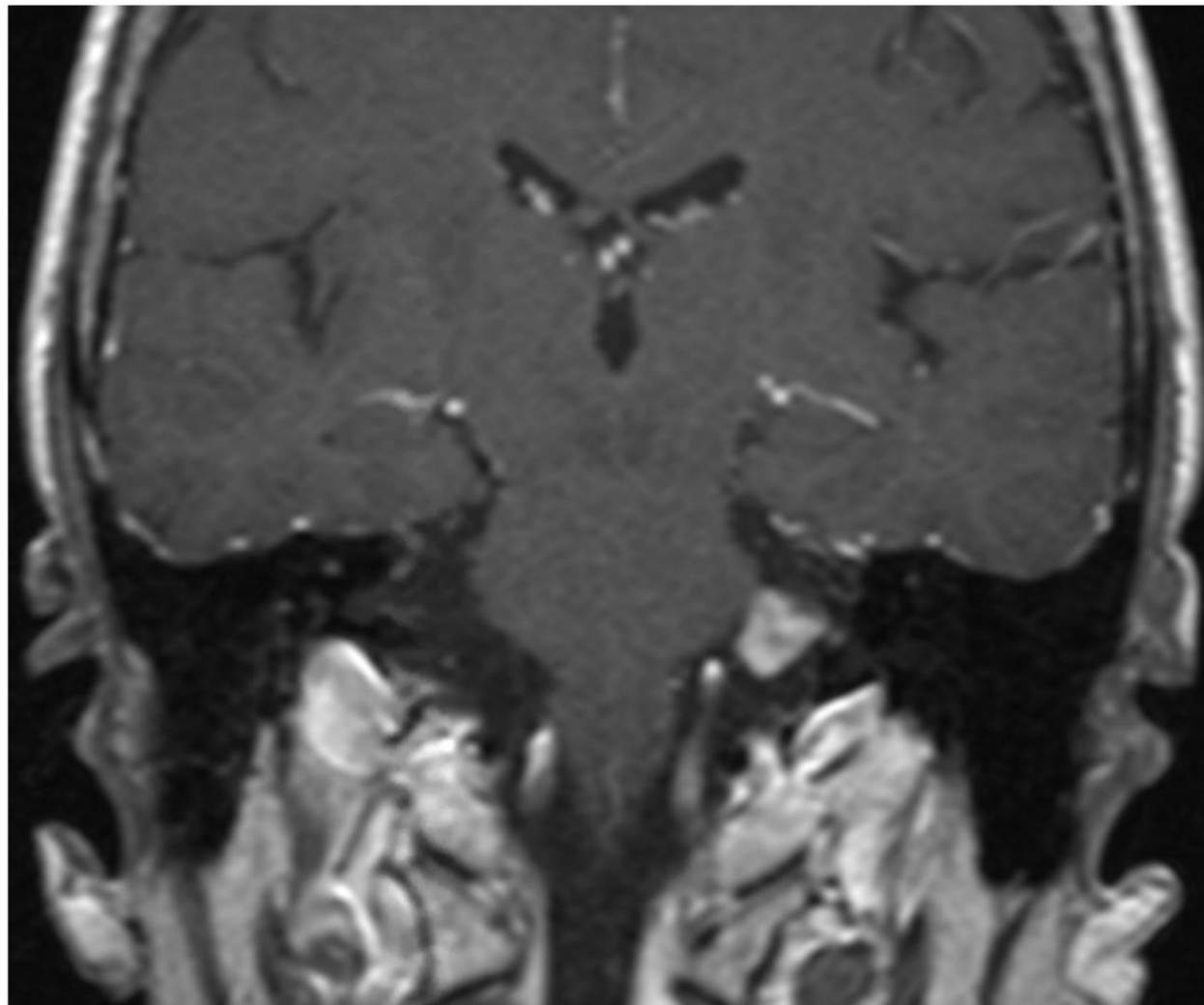
Edward Gillis, DO



Axial T1W



Axial T1-Gd



Coronal T1-Gd



?

A large, stylized oak leaf graphic in a dark blue color, positioned on the left side of the slide. The leaf has a prominent central vein and several smaller veins branching off it. The leaf's edge is serrated.

# Vestibular Schwannoma

# Vestibular Schwannoma

## Epidemiology

- Also known as acoustic neuroma, acoustic tumor
- 7-8% of all intracranial tumors
- 75-90% of cerebellopontine angle masses
- 95% sporadic
- Bilateral or multiple vestibular schwannomas are diagnostic of neurofibromatosis type 2
- Rare in children unless associated with NF2
- Peak at 40-60 years of age

# Vestibular Schwannoma

## Pathology

- Benign WHO grade 1 tumors
- Arise from the intracanalicular segment of the vestibular portion of the vestibulocochlear nerve – cranial nerve VIII
  - At the glial-Schwann cell junction
  - Usually arise from the inferior division of the vestibular nerve



# Vestibular Schwannoma

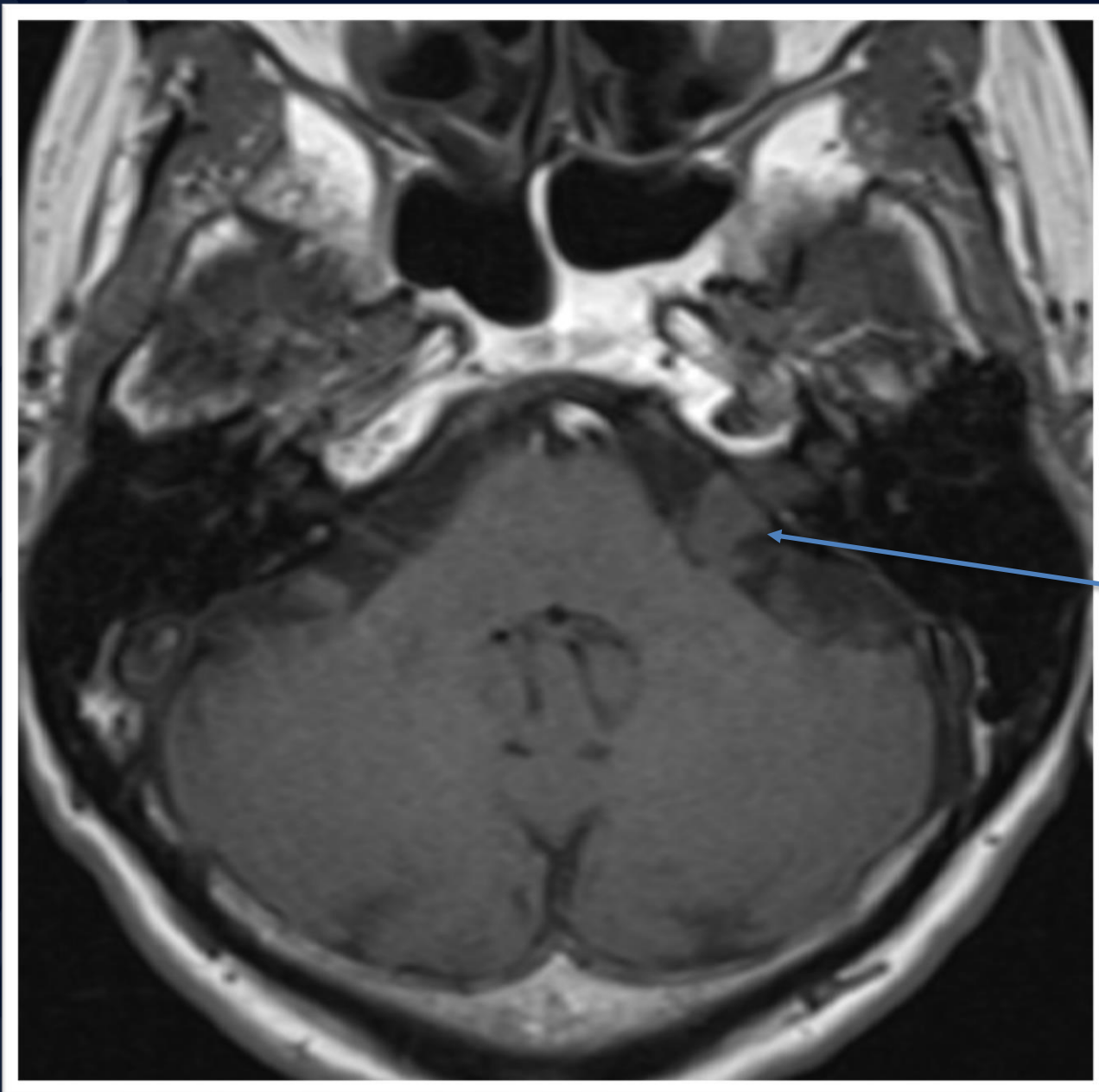
## Clinical Presentation

- Slowly progressive unilateral sensorineural hearing loss or tinnitus
- Dysequilibrium
- Symptoms can go unnoticed
  - Delayed presentation
  - Present with symptoms related to mass effect

# Vestibular Schwannoma

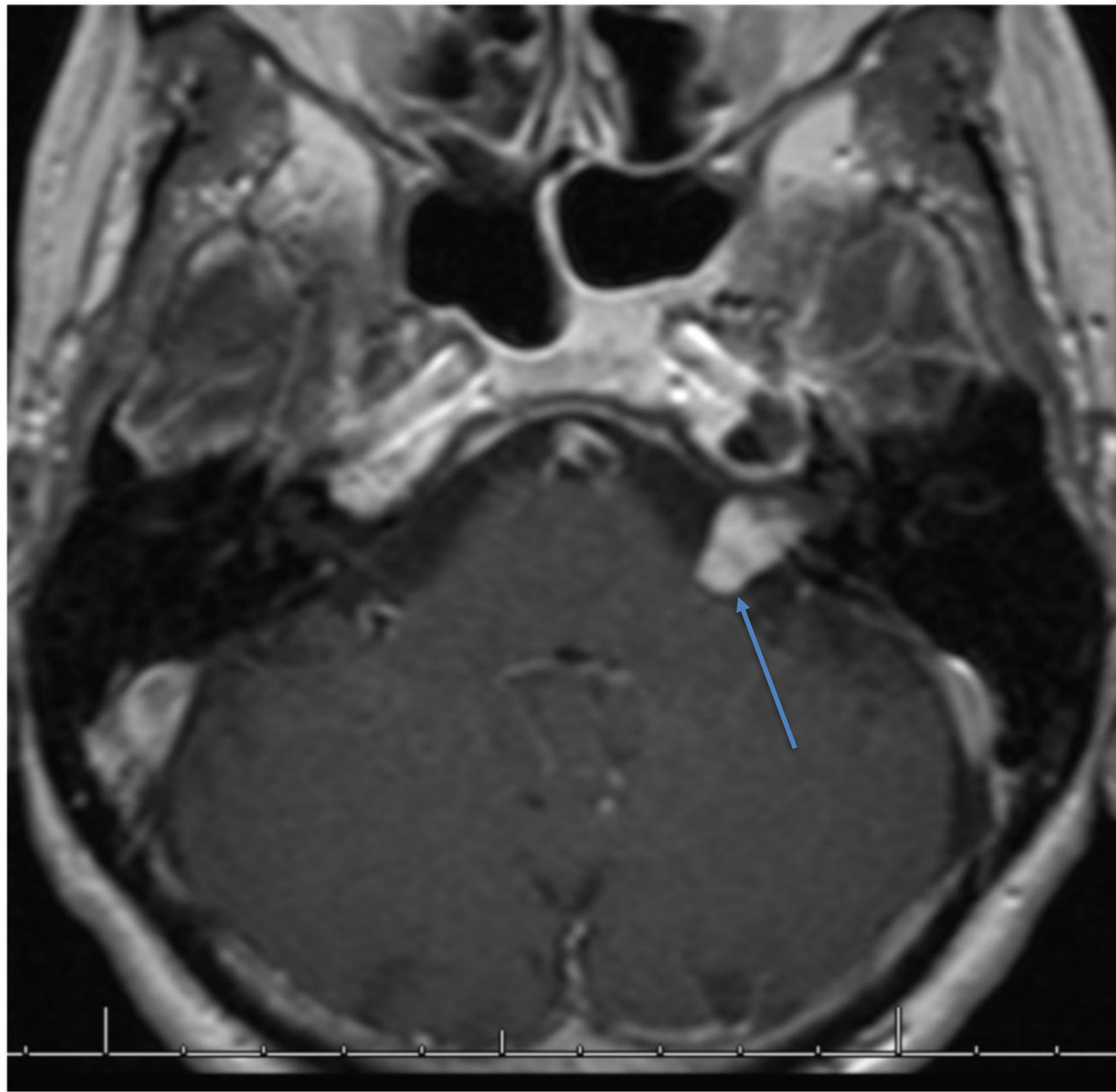
## Radiologic Features

- T1W post contrast MR is gold standard
- Volumetric T2 (can detect ~ 98% of vestibular schwannoma)
- T1W Post contrast
  - Focal, enhancing mass at the CP angle
  - All enhance strongly
- FLAIR
  - Increased cochlear signal from increased perilymph protein



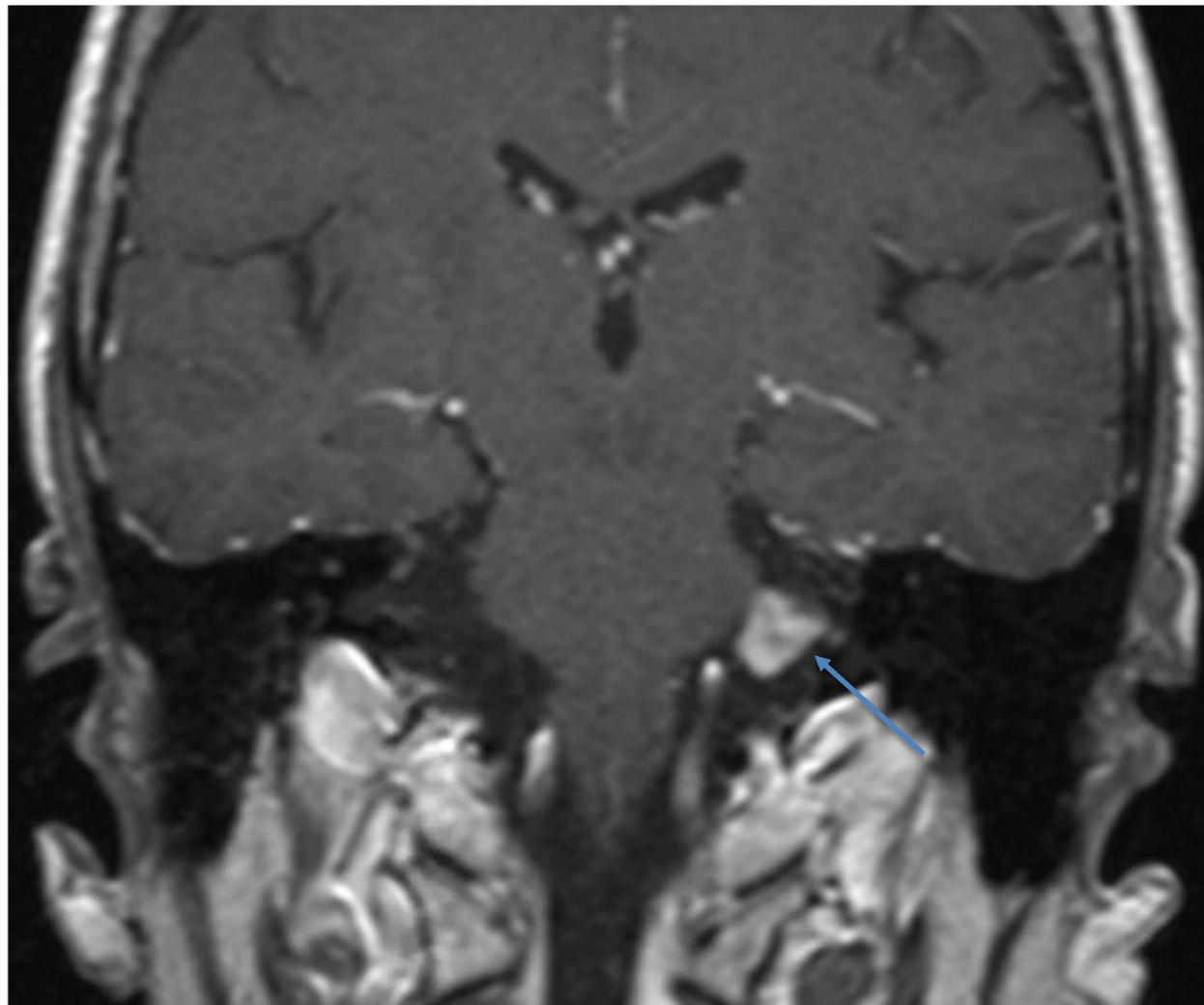
Axial  
T1W

Mildly  
hypointense to  
brain  
parenchyma.  
Absence of CSF  
in the IAC.



Axial T1-Gd

Avidly  
enhancing CP  
angle mass  
(arrow).



Coronal T1-Gd

Avidly enhancing,  
well circumscribed  
mass at the left CP  
angle

# References

- Surgical Approaches to Vestibular Schwannomas: What the Radiologist Needs to Know. Portia S. Silk, John I. Lane, and Colin L. Driscoll. RadioGraphics 2009 29:7, 1955-1970