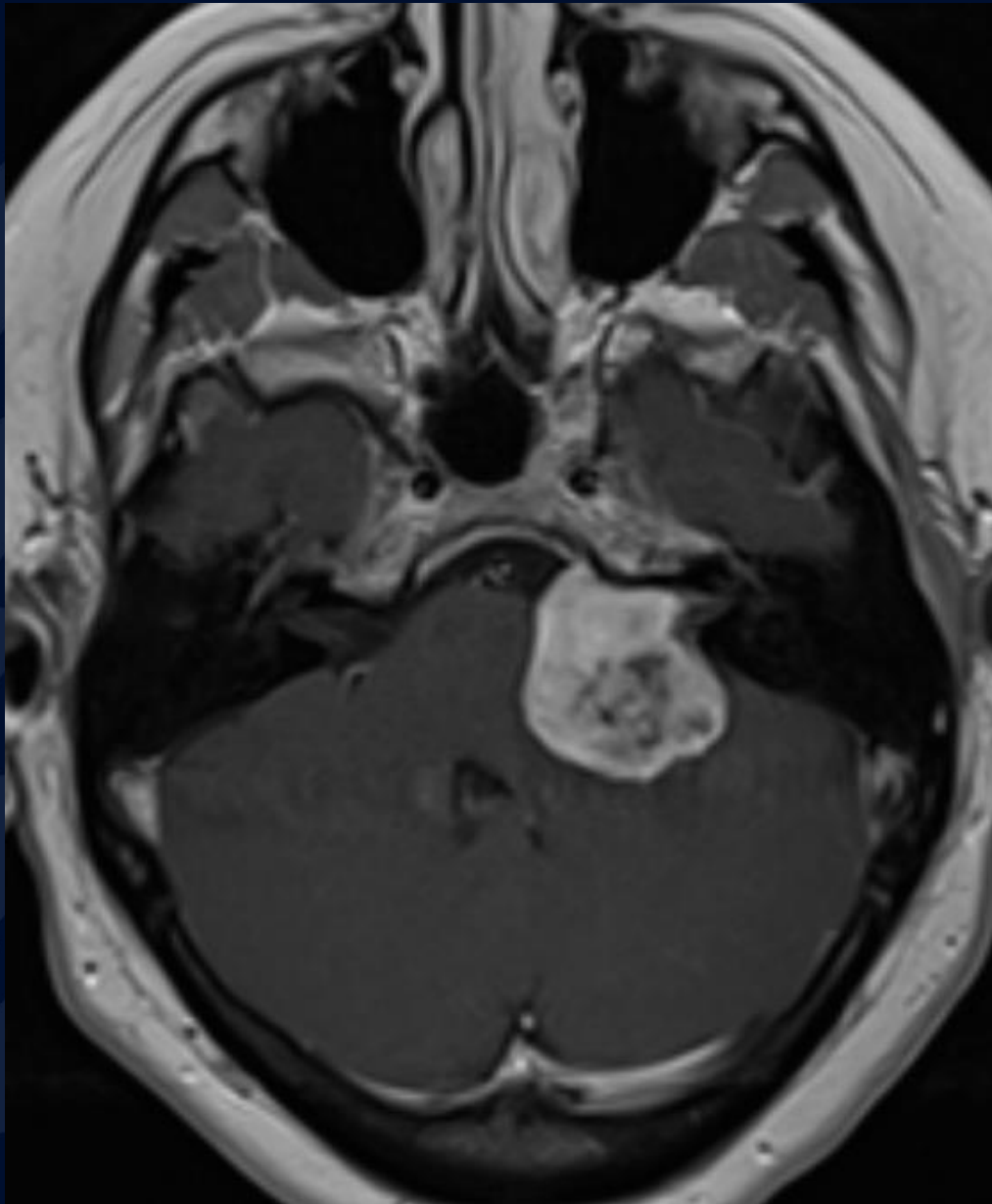


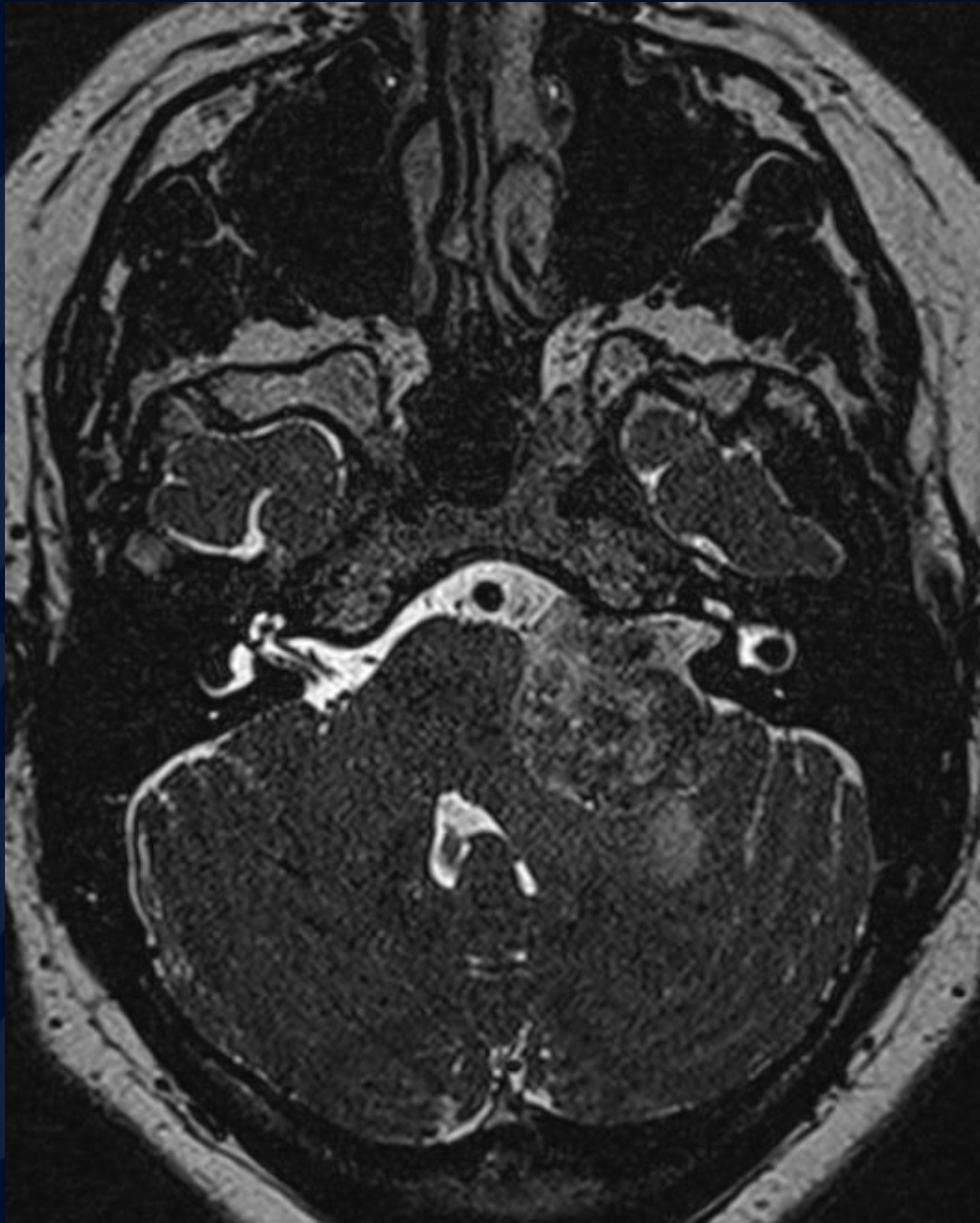
# 42 y/o female with left sided hearing loss

Atul Kumar, MD, MS

Leo Wolansky, MD



Axial T1  
Post Contrast

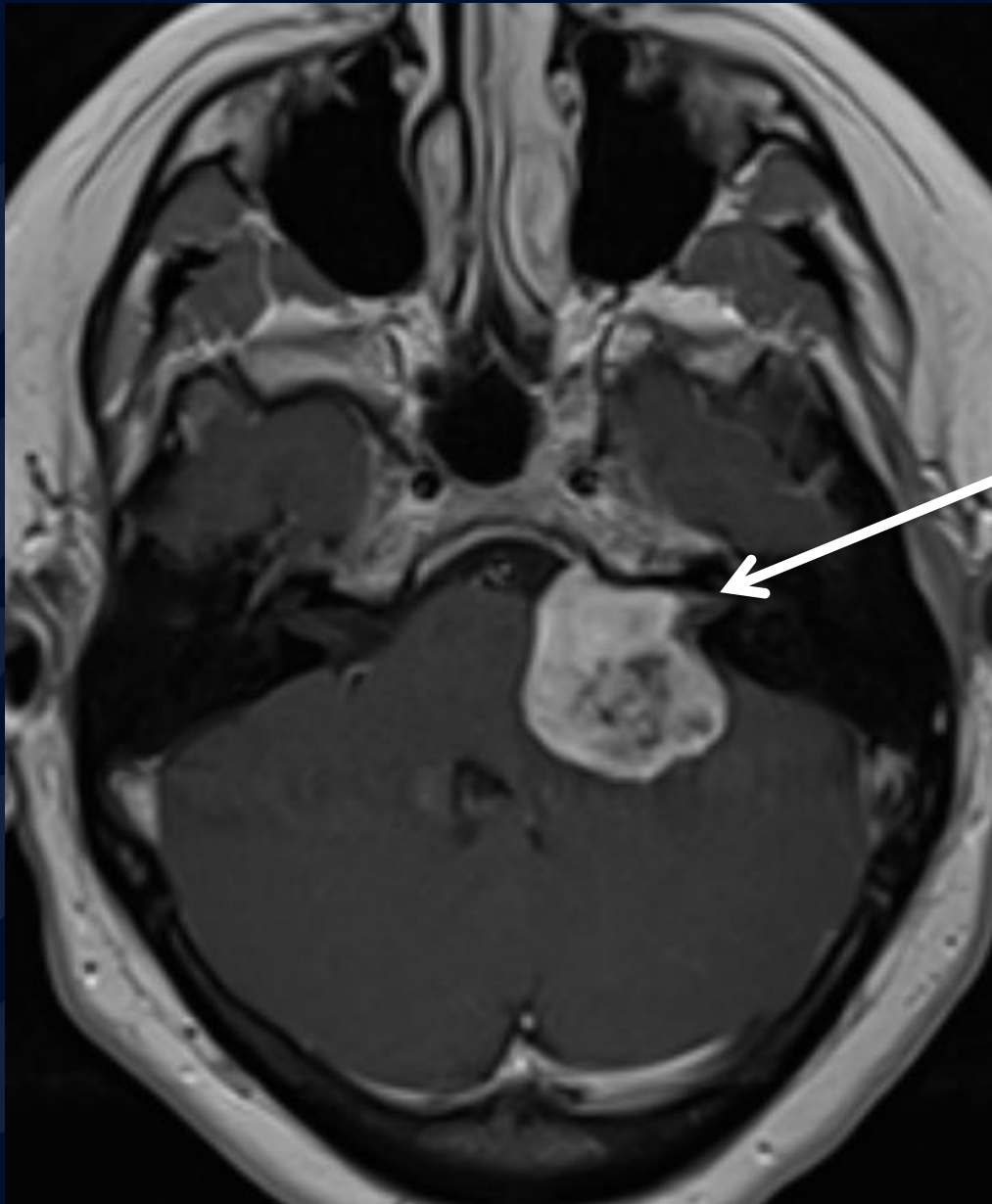


Axial T2  
SPACE

A large, stylized oak leaf graphic in a dark blue color, positioned on the left side of the slide. It features detailed vein patterns and a lobed edge.

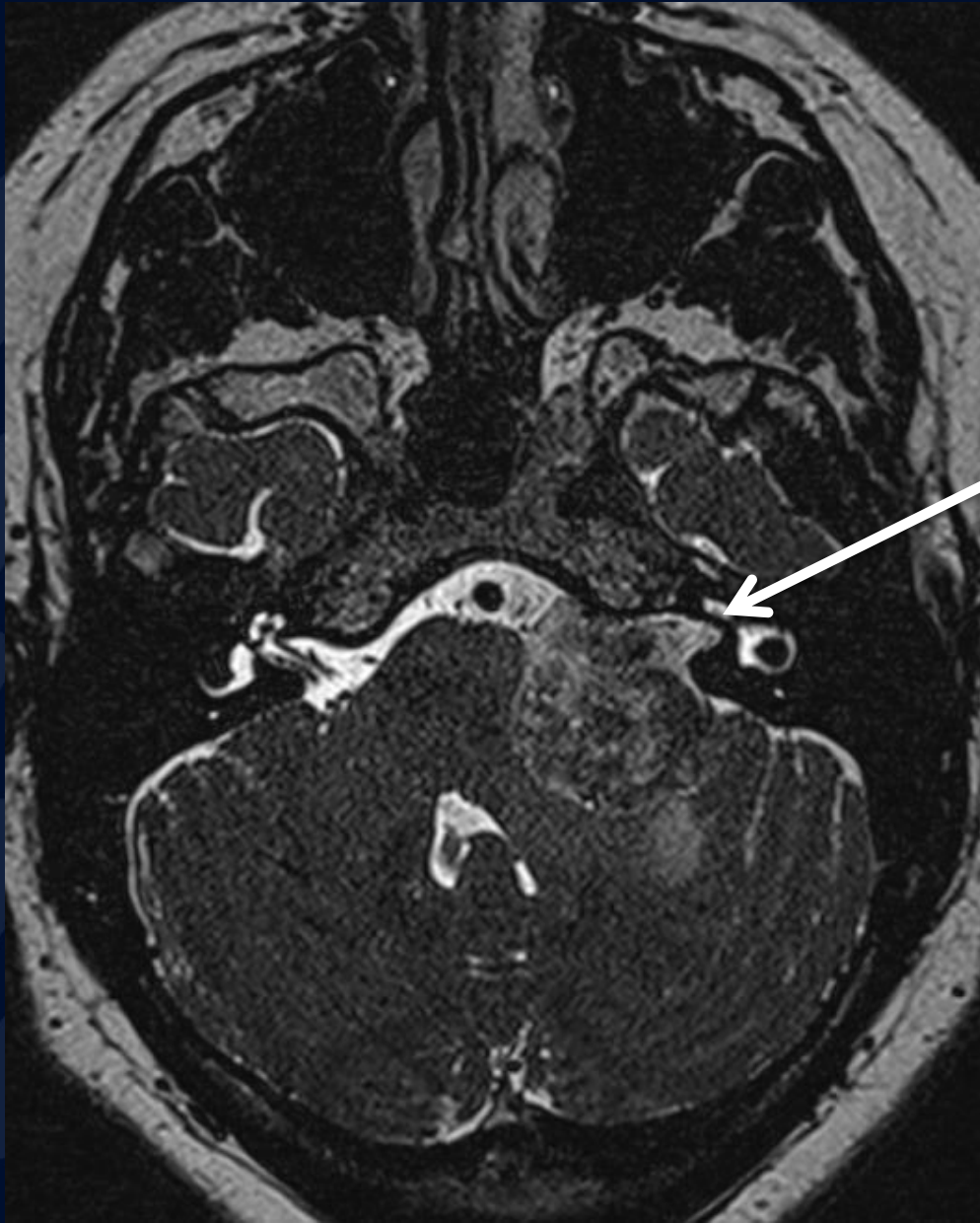
?

# Vestibular Schwannoma



Enhancing  
mass centered  
at porus  
acusticus

Axial T1  
Post-Contrast



Hyperintense  
CSF filling  
defect

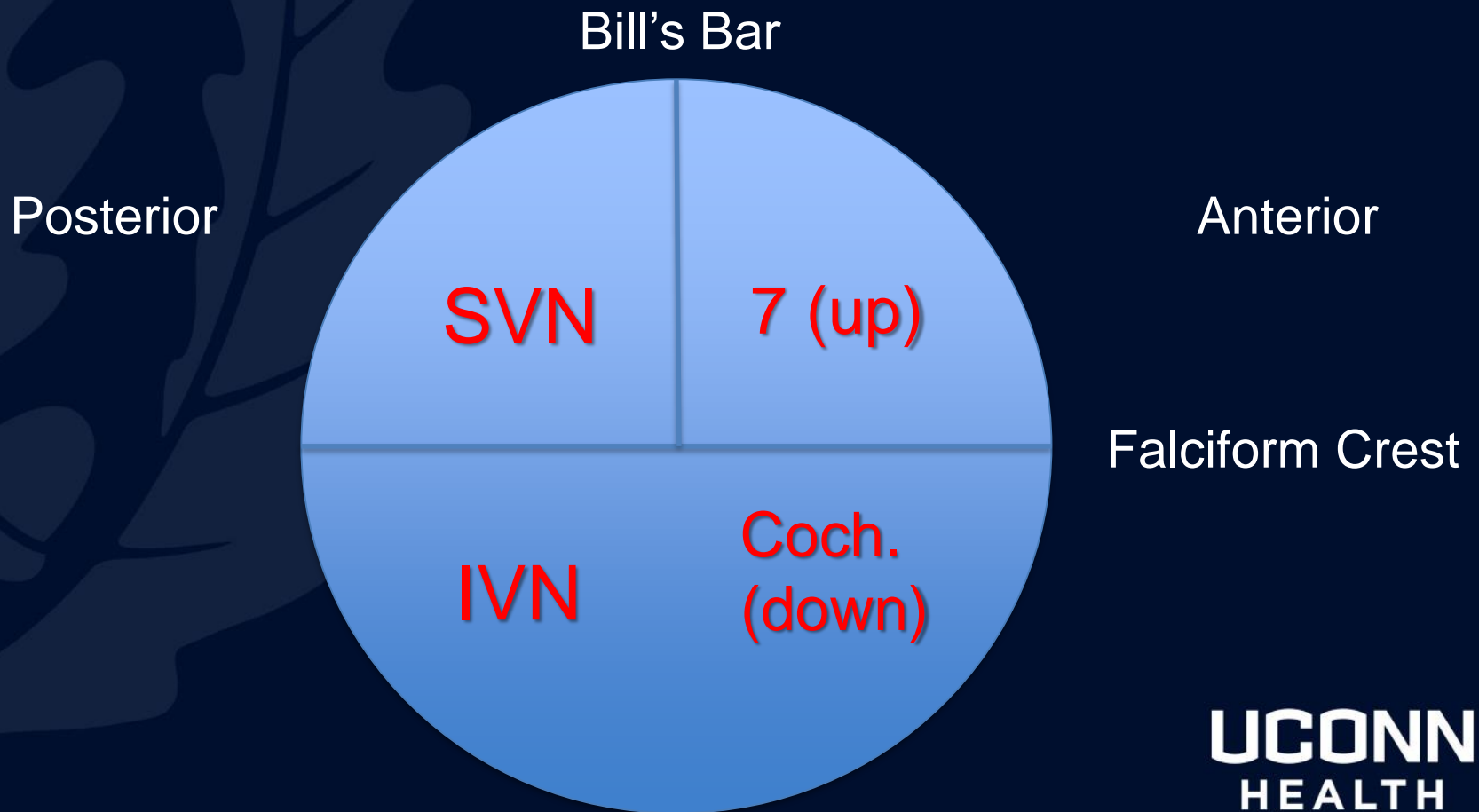
Axial T2  
SPACE

# Vestibular Schwannoma

- Benign Schwann cell tumor
- Common origin: inferior division of vestibular nerve
  - 91% of cases
  - Obersteiner-Redlich zone
- 85% of cerebellopontine masses
  - Differential Diagnosis
    - Meningioma
    - Epidermoid Cyst
    - Arachnoid Cyst
- Bilateral CPA Schwannomas = Neurofibromatosis type II
- Presents with unilateral sensorineural hearing loss or tinnitus



# IAC Anatomy CN VII & CN VIII



# Vestibular Schwannoma Imaging

- Intracanalicular and Cerebellopontine Angle component
  - “Ice Cream on Cone”
- Porus acusticus widening
- CECT: enhancing mass without calcifications
- T1 fat sat + IV Contrast: enhancing mass centered at porus acusticus
- T2 SPACE: hyperintense CSF filling defect at CPA-IAC

# Vestibular Schwannoma Treatment

- Middle Cranial Fossa Approach
  - Small intracanalicular tumors with less than 1 cm CPA extension
  - Hearing and inner ear structures preserved
- Suboccipital Approach
  - Greater exposure to CPA, but limited access to lateral IAC
  - Hearing preserved
- Translabyrinthine Approach
  - Hearing lost
  - Lowest tumor recurrence
- Postoperative, linear IAC enhancement routine for up to 6 months

# References

- RadioGraphics Article: Surgical Approaches to Vestibular Schwannomas: What the Radiologist Needs to Know
- [www.my.statdx.com](http://www.my.statdx.com)
- [www.radiopedia.org](http://www.radiopedia.org)

