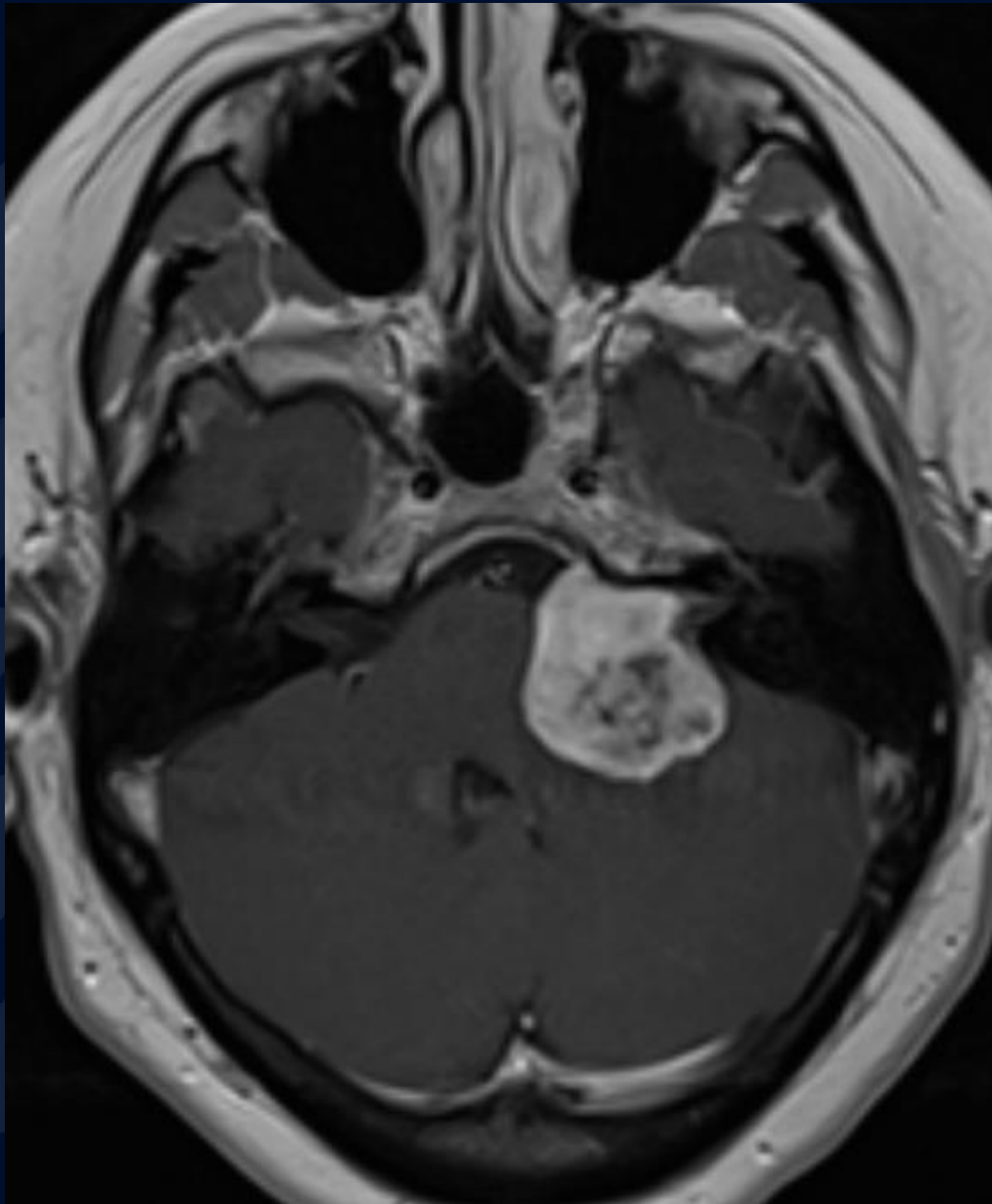


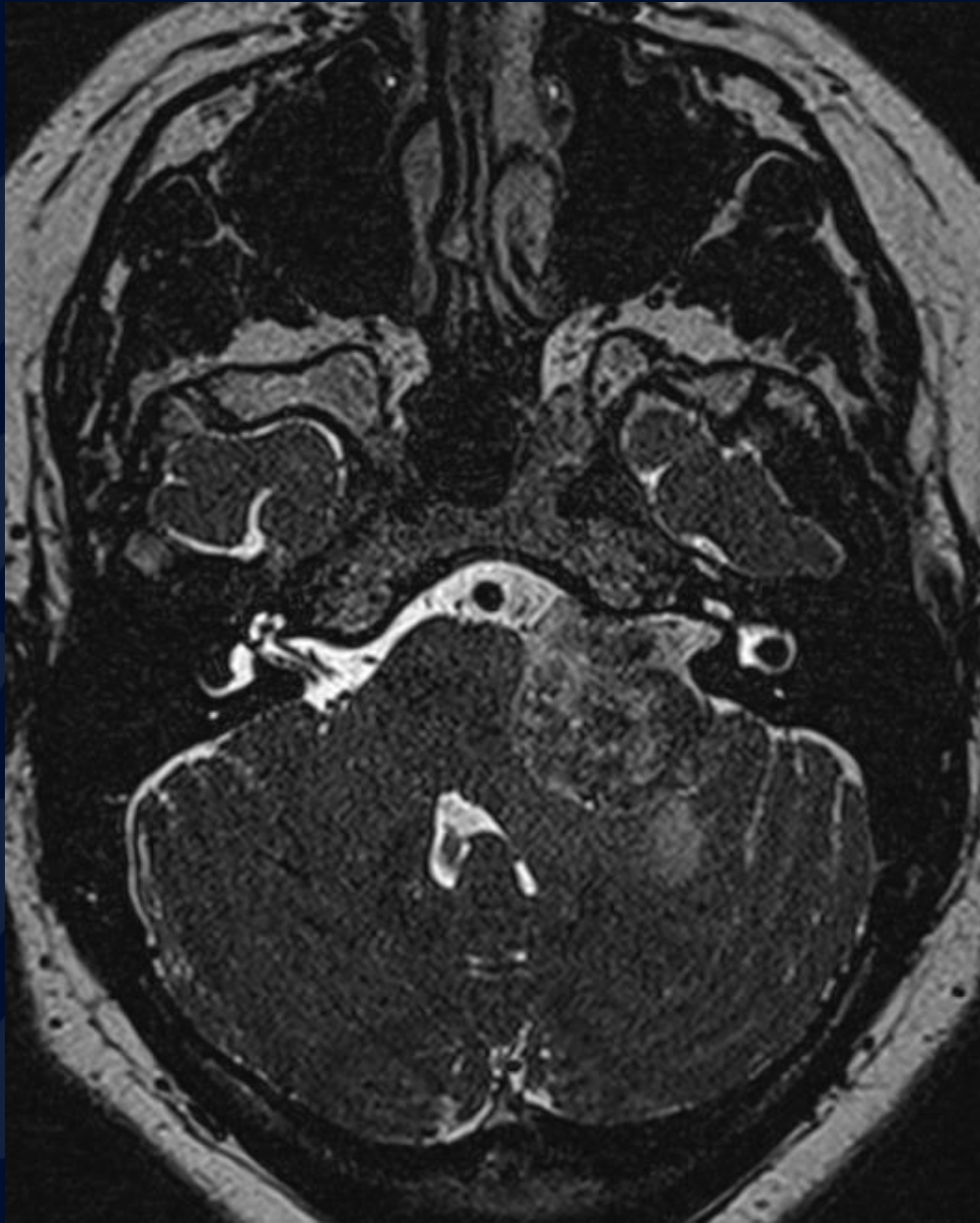
42 y/o female with left sided hearing loss

Atul Kumar, MD, MS

Leo Wolansky, MD



Axial T1
Post Contrast

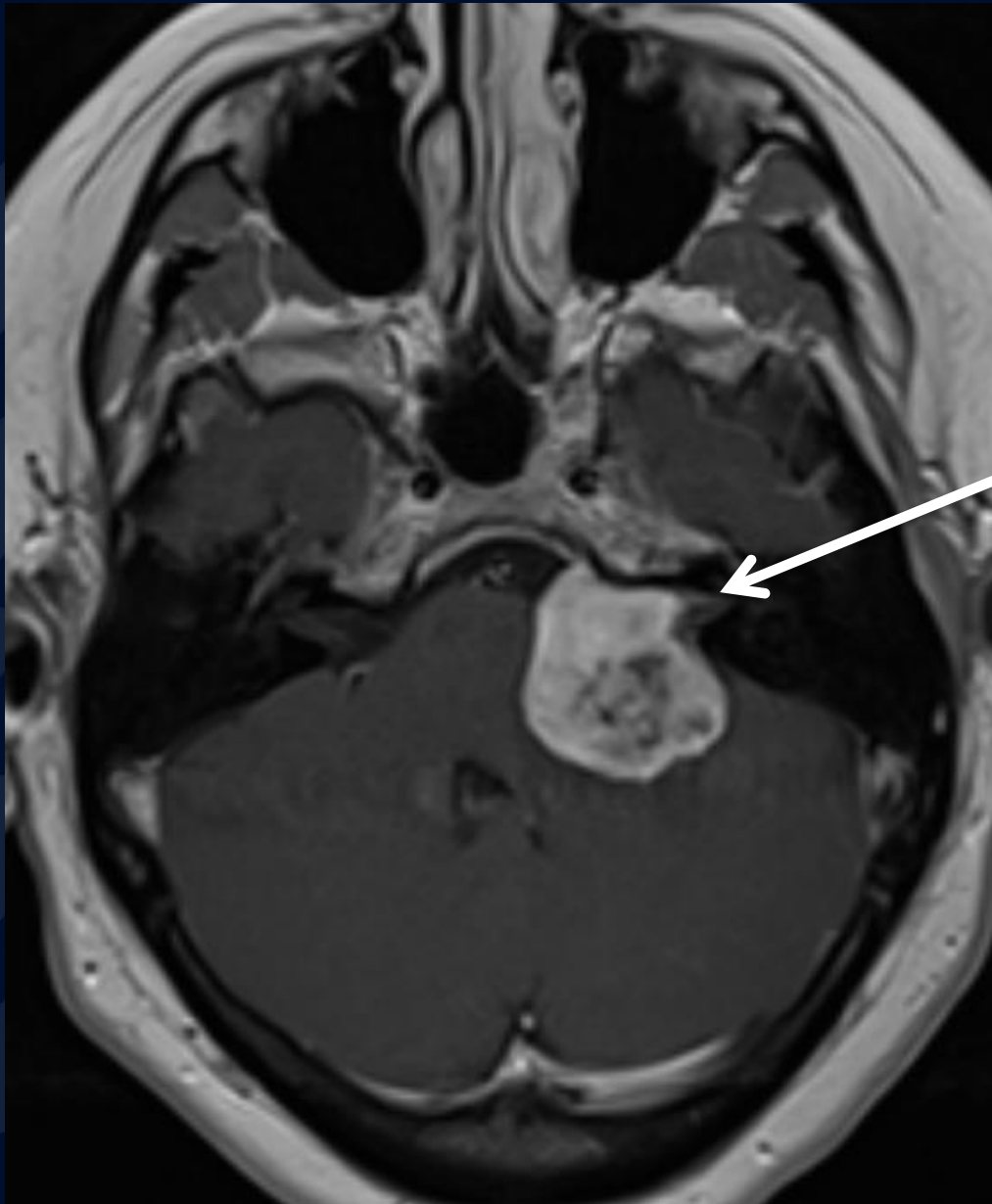


Axial T2
SPACE

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.

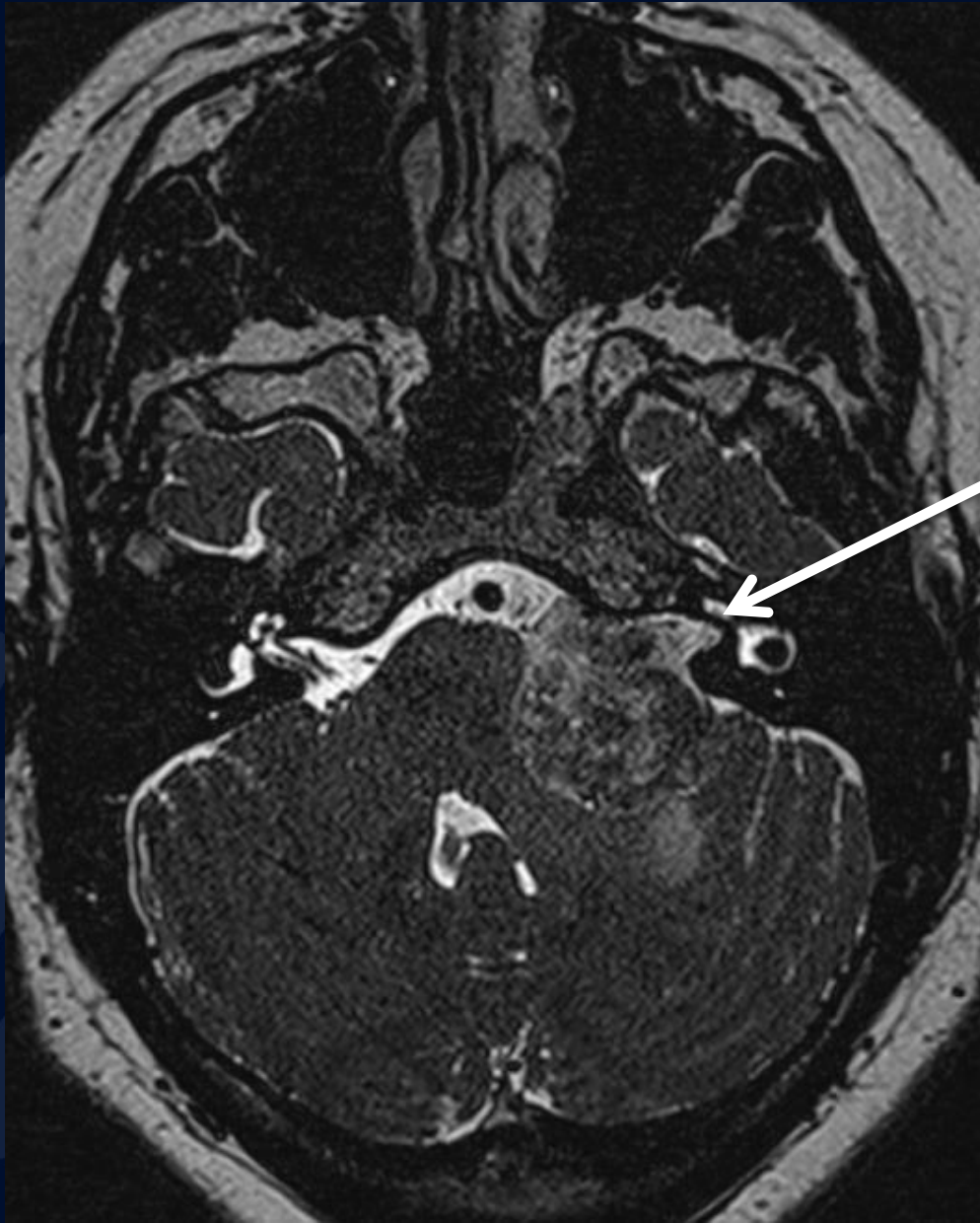
?

Vestibular Schwannoma



Enhancing
mass centered
at porus
acusticus

Axial T1
Post-Contrast



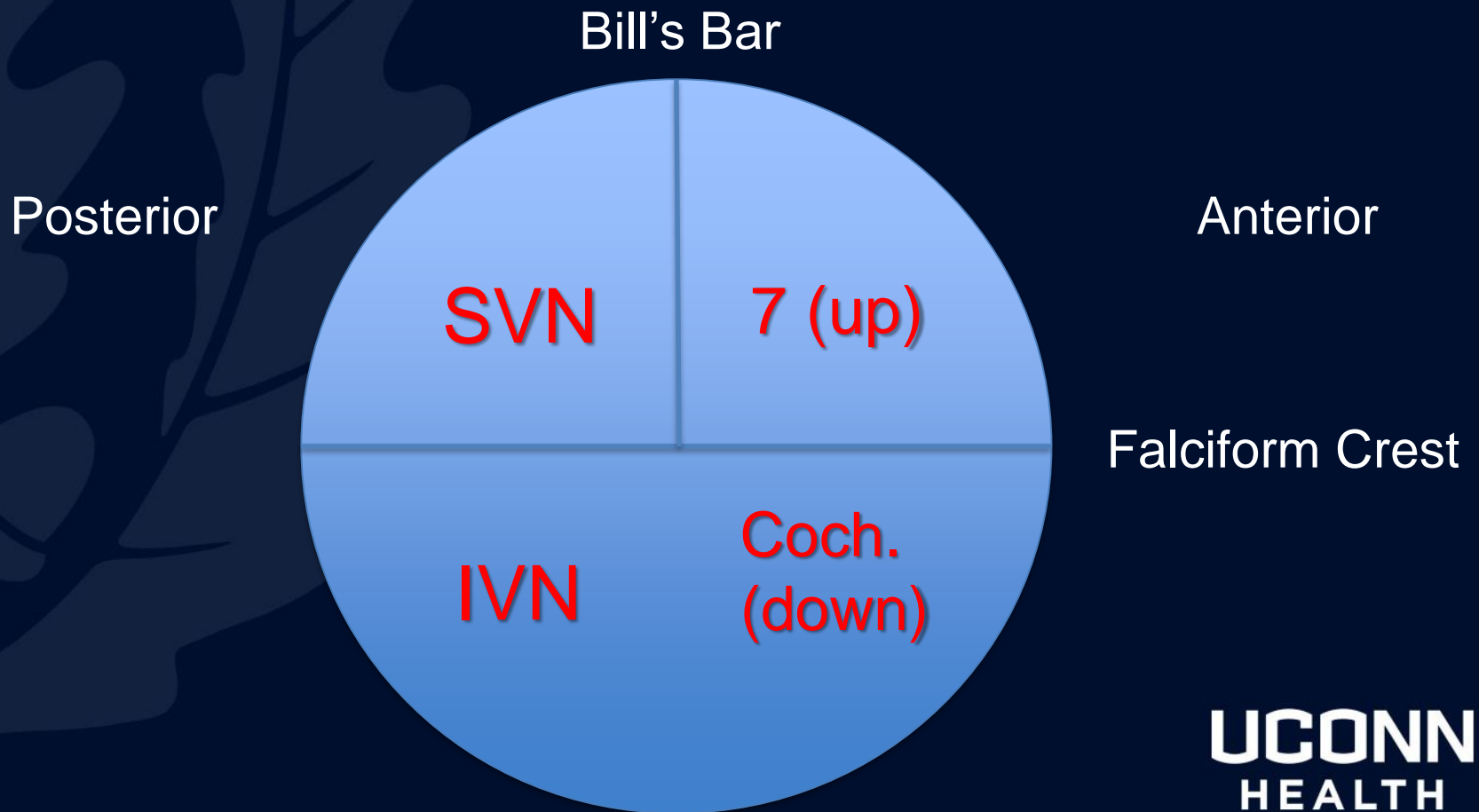
Hyperintense
CSF filling
defect

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
- www.radiopedia.org

