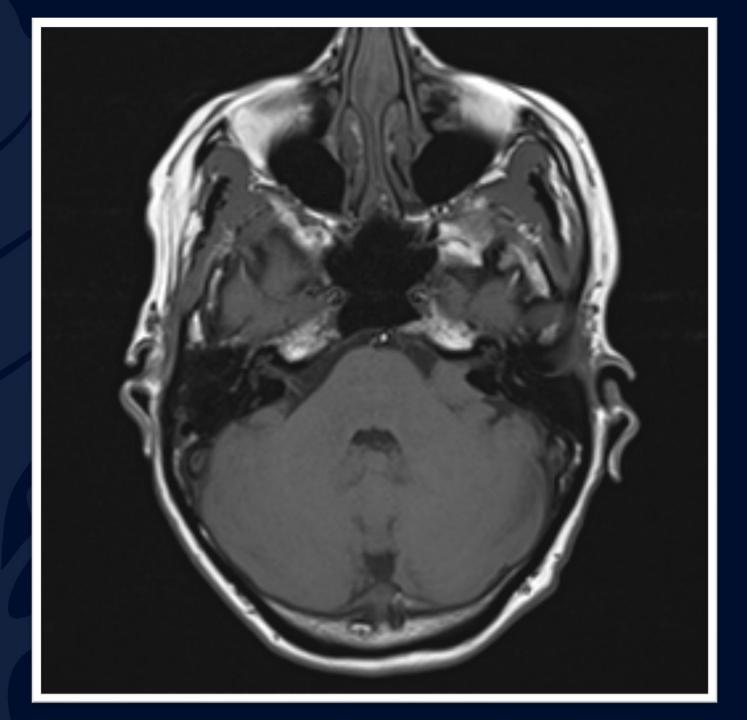
### 50 y/o female with headache

#### Edward Gillis, DO

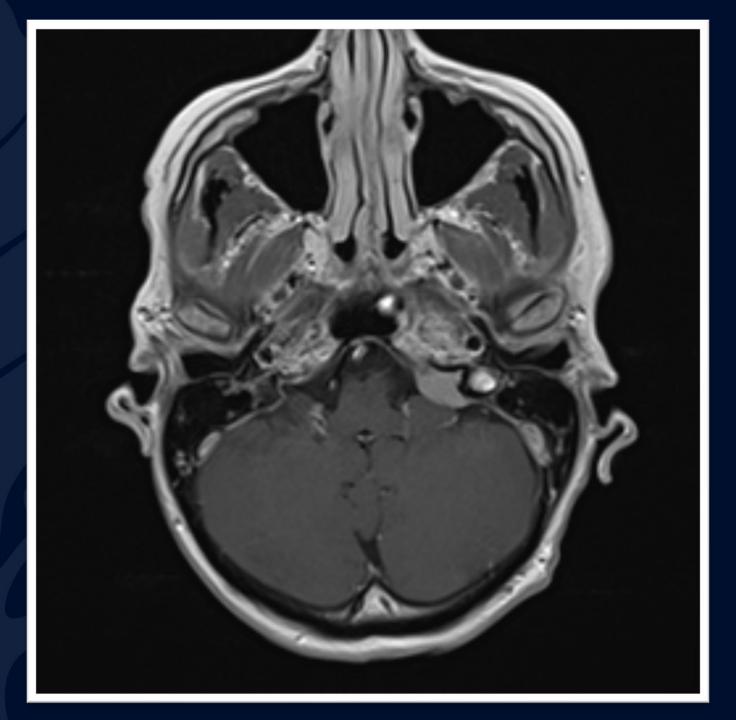












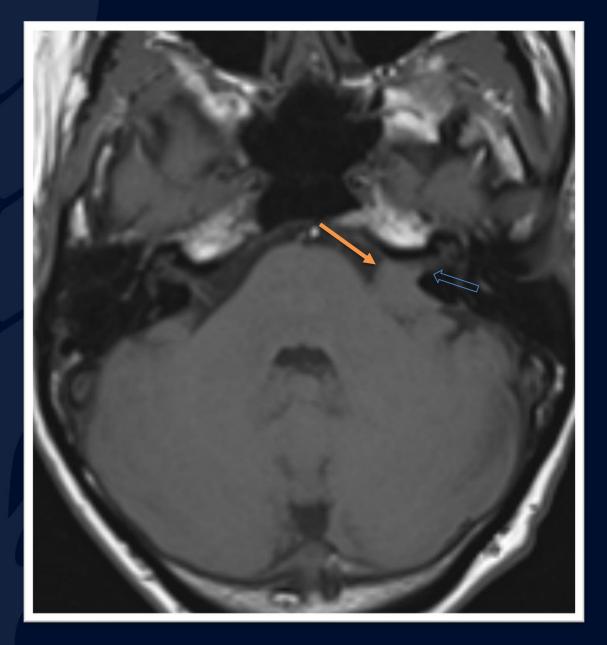






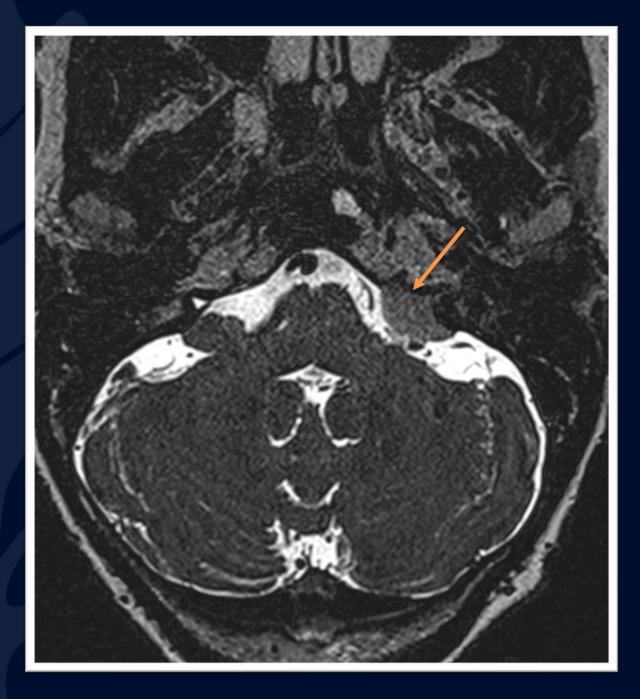
## Cerebellopontine angle Meningioma





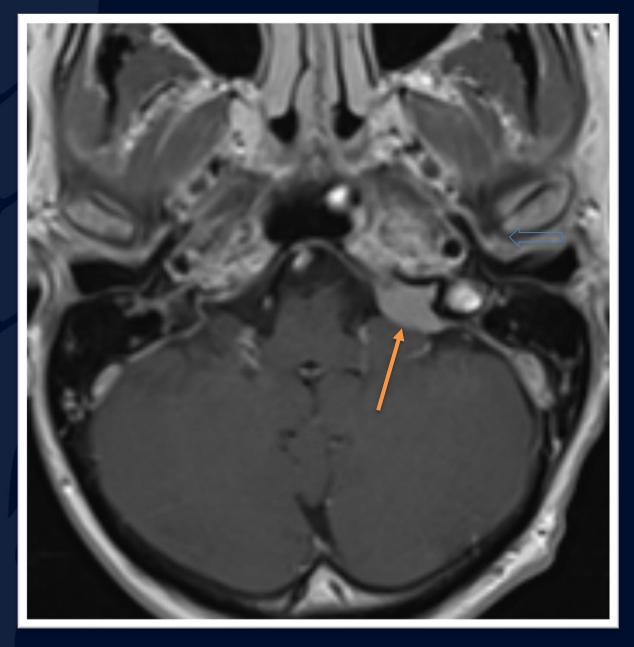
TW1: Extra-axial mass is seen involving the left cerebellopontine angle (orange arrow) that is isointense to the brain. Slight extension into IAC is present (blue arrow).





T2W: Extra-axial mass involving the left cerebellopontine angle that is slightly hyperintense to the brainstem (arrow).





T1W C+: Homogenously enhancing dural based mass involving the left cerebellomedullary angle (arrow).



# Meningioma

#### **Imaging Features**

- Lobulated extra-axial mass that enhances homogenously with contrast
- Broad dural base
- Iso/hypointense to gray matter on T1W images
- Iso/hyperintense to gray matter on T2W images
- Avid, homogenous enhancement
- Dural tail extends from mass on post contrast images
- Vascular or CSF cleft between the tumor and the brain (best seen on T2W images)
- When very large, displacement of vessels helps determine whether extra-axial or not.
- MRA and MRV can be needed when important vessels are near mass.
- Fat suppression is recommended with Gd because osseous involvement is common.



## Meningioma

#### General Features

- Arise from arachnoid cap cells
- Most common nonglial primary neoplasm of the CNS
- > 95% are WHO grade 1
- 2<sup>nd</sup> most common CP angle mass (In CPA, acoustic tumors outnumber meningiomas 4:1).
- -F > M at a 4:1 ratio
- Peak: 5<sup>th</sup>-6<sup>th</sup> decade
- Hormonally sensitive and may enlarge during pregnancy



# Meningioma

#### Locations:

- Parasagittal/convexity 50%
- Sphenoid wing 20%
- olfactory groove 10%
- Parasellar 10%
- Miscellaneous locations 10%
  - Ventricles (most common site in children)
  - If infratentorial, CPA is most likely to be involved



### References

- 1. Brant, W. E., & Helms, C. A. (2012). *Fundamentals of diagnostic radiology*. Philadelphia: Wolters Kluwer Health/Lippincott Williams & Wilkins
- Buetow, M. P., Buetow, P. C., & Smirniotopoulos, J. G. (1991). Typical, atypical, and misleading features in meningioma. *RadioGraphics*, 11(6), 1087-1106. doi:10.1148/radiographics.11.6.1749851

