50 y/o female with headache

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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\textsuperscript{nd} most common CP angle mass (In CPA, acoustic tumors outnumber meningiomas 4:1).
  - F > M at a 4:1 ratio
  - Peak: 5\textsuperscript{th}-6\textsuperscript{th} 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
