Lipochoristoma of the IAC – 10 year follow up

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Background

- Most (90%) cerebellopontine angle (CPA) and internal auditory canal (IAC) tumors are vestibular schwannomas
  - These generally need to be resected
  - Risk of growth
- Very small percentage (0.1%) are lipochoristomas
  - Aka lipomatous choristoma

- Choristoma: histologically normal tissue in abnormal location
- Lipoma: adipocytes in normal location
- Lipochoristoma: adipocytes in a non-native location, may have other fibrous mesenchymal elements
- Theory: embryologic anomaly from meningeal mesenchyme, rather than a neoplasm
- Previously called lipoma of IAC or CPA

Case

- 36 year old woman with bilateral non-pulsatile tinnitus and headaches.
  - Tinnitus worse on the left, present for a few years.
  - No subjective hearing impairment; audiogram revealed no hearing impairment.
- MRI: 4mm T1 hyperintense lesion in left distal IAC.
  - With fat suppression, no significant enhancement
  - No T2 hyperintensity
- Lesion was present on prior MRIs performed for headaches over the prior 6 years.
  - The decision was made to observe the lesion.
  - To date, the patient has had imaging for 10 years with no significant change in lesion size

Discussion

- Lipochoristomas can be observed in asymptomatic patients
  - This case demonstrated no growth in 10 years, longest documented in literature
  - Relatively asymptomatic, benign, indolent
- Surgery is difficult in lipochoristomas, with substantial morbidity\(^2,3\)
  - Harder to resect off the nerves, with high risk of hearing loss
  - Higher complications
  - May avoid surgery because less chance to grow and cause symptoms
- Most often “Don’t touch” lesions; important to prospectively diagnose to avoid surgery
  - Easy to distinguish lipochoristomas from other IAC/CPA lesions
  - T1 hyperintense (vs T1 hypointensity of vestibular schwannomas)
  - Fat suppression (unlike vestibular schwannomas)
  - No contrast enhancement (unlike vestibular schwannomas)

References