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Excerpta Abstract
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Rare Case of IAC Meningioma

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Clinical History

A 74-year-old female with history of mixed collagen vascular disease, generalized anxiety disorder, and asthma presented for vertigo with head turns that lasted seconds in duration. Physical examination demonstrated cerumen impaction. The patient had CT and MRI examinations performed. Due to limited records, further follow-up could not be obtained.

Imaging Findings

CT temporal bones without contrast: 0.4 cm focal calcification within the midportion of the left internal auditory canal, approximately half-way between the porus acusticus and fundus of the IAC (A, B). There is focal widening of the IAC around the calcification.

MRI brain/IAC with and without IV contrast: 0.4 cm T2 hypointense mass within the midportion of the left internal auditory canal (C, D). Peripheral enhancement of the mass with central non-enhancement (E, F). These findings correlate with the focal calcification visualized on prior CT. Redemonstration of focal widening of the IAC around the mass. There is no mass at the cerebellopontine angles. No restricted diffusion.

Discussion

While both schwannomas and meningiomas are often encountered masses at the cerebellopontine angle, the vast majority of exclusively intracanalicular masses are schwannomas with meningiomas being very rare. Schwannomas tend to display intense contrast enhancement, can remodel adjacent bone with smooth corticated edges, and may contain cystic degenerative and hemorrhagic components. However, calcification is typically not present in schwannomas. Meningiomas typically display intense enhancement and can have calcification. In previously reported intracanalicular meningiomas, the otherwise typical meningioma characteristics of a broad tumor base and dural tail enhancement were seen in some cases but not in others. In the case presented here, calcification of the mass seen on CT favors a calcified meningioma that may arise from the crista falciformis.

Teaching Point

Although the vast majority of exclusively intracanalicular masses in the IAC are schwannomas, a meningioma is an important consideration in the differential diagnosis, especially when a mass presents with findings atypical for a schwannoma such as calcification.

References

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Figures