Cavernous Hemangioma of the Bony External Auditory Canal

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CLINICAL PHOTO

Cavernous hemangioma of the bony external auditory canal

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A 72-year-old female patient was referred to our department for a left external auditory canal (EAC) tumor incidentally found during her health examination. Otoscopic examination revealed a reddish mass arising from the roof of the medial end of the osseous EAC (Fig 1), which measured about 5 mm in diameter. There was no history of otorrhea or pulsatile tinnitus. The tympanic membrane seemed to be uninvolved. She was healthy except for hypertension, which was under good medical control. Pure-tone audiometry showed mild-to-moderate sensorineural hearing loss of both ears, and the tympanograms were both type A. A high-resolution CT scan of the temporal bone showed a small soft-tissue mass occupying the left EAC without involvement of the epitympanum and adjacent bony wall. Under general anesthesia, this lesion was smoothly excised under an otomicroscope via a transcanal approach. The postoperative course was uneventful. The pathologic report was a cavernous hemangioma (Fig 2). There was no recurrence 3 months after the operation.

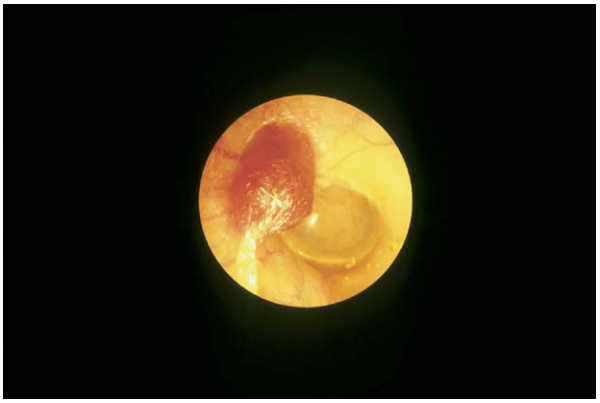

Figure 1 The otoscopic view of the hemangioma of the left bony external auditory canal.

DISCUSSION

Hemangioma of the EAC is an extremely rare clinical entity. To our knowledge, only 9 cases have been reported in the literature.[1-3] Among the 10 reported cases, including the case reported here, 6 were men and 4 were women. The patients' age ranged from 52 to 72 years, with an average of 59 years. Hemangiomas are usually seen as benign childhood lesions that regress with age.[4] The mechanism of occurrence of hemangiomas of the EAC in adult patients older than 50 years remains obscure. Histologically, 8 of the 10 lesions were cavernous hemangiomas, 1 was a capillary hemangioma, and the other was a mixed type hemangioma. The presenting symptoms include blood-tinged otorrhea, tinnitus, aural fullness, and hearing loss. Otherwise, it may be asymptomatic and found incidentally.

Otoscopic examination revealed a purple, red, or violaceous vascular mass in the EAC.[1-4] The size of the tumor varied from 5 mm to 3 cm in diameter,[4] and the tumors partially to completely filled the EAC. Involvement of the tympanic membrane was found in 6 of these 10 patients, and involvement of the mastoid was found in 1. The differential diagnosis includes attic cholesteatoma with aural polyp, glomus tumor, arteriovenous malformation, granulation tissue, and carcinoma of the EAC. Preoperatively, a high-resolution CT scan of the temporal bone is helpful to delineate the extent of the tumor. With an advanced lesion,

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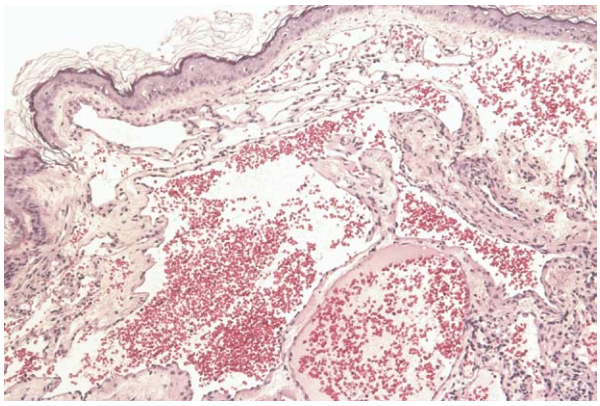

Figure 2 Pathologic examination revealed the typical picture of cavernous hemangioma.

angiography may be necessary to identify the blood supply to the mass and to embolize any feeding vessels preoperatively.[2] The treatment of choice is complete excision. The treatment modality depends on the extent of the tumor. Small lesions confined to the EAC, as occurred in our case, could be treated with transcanal excision.[2] Large lesions extending to the tympanic membrane and mastoid need tympanoplasty with mastoidectomy and maybe even partial temporal bone resection.[3,4] Recurrence of EAC hemangioma because of inadequate excision has been reported.[4]

REFERENCES

1. Hawke M, van Nostrand P. Cavernous hemangioma of the external ear canal. J Otolaryngol 1987;16:40–2.
2. Limb CJ, Mabrie DC, Carey JP, et al. Hemangioma of the external auditory canal. Otolaryngol Head Neck Surg 2002;126:74–5.
3. Reeck JB, Yen TL, Szmit A, et al. Cavernous hemangioma of the external ear canal. Laryngoscope 2002;112:1750–2.
4. Jackson CG, Levine SC, Mckennan KX. Recurrent hemangioma of the external auditory canal. Am J Otol 1990;11:117–8.

CORRECTION

The article by Douglas et al in the January 2006 issue (Douglas SA, Webster S, El Badawy MR, et al. The development of a snoring symptoms inventory. Otolaryngol-Head Neck Surg 2006;134:56–62) contains a questionnaire that appears only in an online appendix. The article said "(see Appendix)" but did not give the online address for the Journal website. It can be found at: http://journal.entnet.org.

When reading the article online, click the blue phrase "online extra" to see the appendix, or simply scroll to the end of the article.