External Auditory Canal Hemangioma: Case Report

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1. Abstract
A patient with a hemangioma completely within the external auditory canal reported.

2. Case Report
A 41-year-old man presented with complaints bleeding from right ear for 3 years and itching with sensation of foreign body in his right ear. Bleeding was sudden in onset, intermittent one episode per week. Blood was fresh and there were 20-25 drops in every episode. H/o headache on right side. He had no symptoms of dizziness, otorrhea, pain, or tinnitus.

On otoscopic examination, a mass was seen filling the right External Auditory Canal (EAC). Its meatal extent could be visualised. In right external auditory canal there was 1.5 cm x 1.5 cm patch of elevated hyperemic skin area at the junction of EAC and concha anteriorly. There was CP, dry with myrigosclerosis right ear. Auricle was wnl. But scaly lesions were present over pinna and EAC. The EAC was patent so was normal. A HRCT of temporal bone showed grossaly normal study but there was mild narrowing of right EAC comparative to left EAC due to skin and subcutaneous tissue thickening was seen. There was mucosal thickening of maxillary, ethmoid and sphenoid sinuses. An excision biopsy of lesion was performed that showed variably autolysed tissue showing skin with underlying vascular proliferation and chronic inflammation with eosinophils. Suggestive of epitheloid (hysyiocytoid) hemangioma. No evidence of malignancy Before excision biopsy FNAC was done twice that showed its time (A ceromucinous adenoma) and second time ( Reactive lymphoid hyperplasia, Benign salivary aspirate) The patient was given option of observation or surgical resection. He chose to undergo surgery. Complete surgical resection was performed via a postaurical approach. The skin of EAC was reconstructed with the use of a split thickness skin graft measuring 0.008-inch-thick and obtained from post auricular area. The patient healed well after surgery with no chances of recurrence. (figures)
3. Discussion
The patient was diagnosed with a hemangioma of the EAC. There have been few reports in the English literature of a hemangioma residing entirely within the EAC. Most hemangiomas of the EAC are extensions from auricular skin. The first report of a hemangioma within the EAC was by Freedman and colleagues in 1972. They described two men in their sixth decade with vascular lesions of the EAC that extended onto the tympanic membrane. In the first patient, excision of the lesion included the posterior canal skin and half of the tympanic membrane via an end aural approach. At last follow-up (5 years), the patient showed no recurrence of the tumor. He had no change in hearing after surgery or at last follow-up. The second patient underwent transcanalicular excision of the lesion, which included resection of the tympanic membrane. At his 18-month follow-up, the patient showed no evidence of recurrence and his hearing was unchanged from baseline. In 1983, Kemink and associates reported on a 52-year-old man with a hemangioma who underwent tympanoplasty with mastoidectomy to excise the lesion. The patient initially underwent excision of the lesion on the posterior canal wall via a post-auricular approach. However, the bone deep to the lesion appeared soft and bled easily. Although the mastoid cavity was entered, no tumor was identified there. In 1990, Jackson and colleagues reported the first EAC hemangioma in a woman. Their patient, 60 years old, presented with an EAC lesion initially misdiagnosed as otitis externa. Excisional biopsy revealed findings consistent with hemangioma. Two months after her initial diagnosis, the patient had a recurrent mass filling the EAC and conductive hearing loss. She underwent temporal bone resection. At surgery, the tumor was seen to involve the posterior wall of the EAC and tympanic membrane but not the middle ear or ossicles. The patient underwent meatoplasty with tympanoplasty. These initial reports of hemangiomas in the EAC included involvement of the tympanic membrane. In our case, as in that of Hawke and van Nostrand, the tympanic membrane was also involved. Furthermore, neither the middle ear nor the ossicular chain was involved in any of the cases. The pathologic description of these tumors typically shows a surface of keratinized, stratified, squamous epithelium. Beneath this level is dense fibrous connective tissue with numerous large, thin-walled, vascular spaces. In the report by Hawke and van Nostrand, the endothelial lining stained positively for both antifactor-VIII antibody and Ulex europeus I agglutinin, which provided additional evidence that the vascular channels were lined with vascular epithelium.

4. Summary
Although hemangiomas arising solely in the EAC are rare entities, they should be considered in the differential diagnosis of vascular-appearing masses in the EAC. A biopsy can be performed in clinic but is not prudent because significant bleeding can occur. CT with contrast or MRI with gadolinium may better delineate the vascular nature of the mass without the risk of biopsy complications. Every case thus far reported has been easily treated with complete surgical excision with no reported morbidities. That these lesions do not involve the middle ear means that complete excision, while being curative, can also be accomplished with minimal risk to hearing.

References