Adenomatous Neoplasia Presenting as Aural Polyp

Madhira Srivalli · Hamid Abdul Qaiyum ·
Prayaga N. Srinivas Moorthy · Kolloju Srikanth

Received: 16 September 2009 / Accepted: 18 October 2009 / Published online: 4 February 2011
© Association of Otolaryngologists of India 2011

Abstract Adenomatous neoplasia or glandular tumours in the ear are very rare to occur. We are reporting two patients who presented with polypoid mass in external auditory canal of whom one patient was diagnosed to have ceruminous adenoma of external auditory canal and the other adenomatous carcinoma of middle ear based on histopathology findings of biopsied specimen. Review of available literature shows that both ceruminous adenoma of external auditory canal and adenocarcinoma of middle are very rare to occur and are even difficult to diagnose histopathologically. We would like to emphasize the importance of considering even such rare pathologies while evaluating aural polyps.

Keywords Aural polyp · Ceruminous adenoma · Adenocarcinoma

Introduction

Aural polypi are a common finding in chronic suppurative otitis media but are also known to be associated with an underlying neoplasia of external auditory canal (EAC) or middle ear like a benign adenoma or a malignant carcinoma [1]. Adenomas of EAC are very rare to occur but usually arise from ceruminous glands which are modified

apocrine glands. Though ceruminous gland neoplasia are commonly benign in nature but rarely can they become malignant. Malignancy originating from middle ear is usually of squamous carcinoma variety but very rarely be an adenocarcinoma or an adenoid cystic carcinoma. All these lesions can clinically present as an aural polyp with blood stained ear discharge and hearing loss.

Case Report 1

A 57 year old male presented with complaints of blocked sensation in the right ear, mild hearing loss of 3 months duration. There was history blood stained ear discharge upon attempt to clean the ear. There was no history of dizziness, tinnitus, and ear ache. Examination of right ear revealed a polypoid mass filling the cartilaginous part of the right external auditory canal. The examination of nose throat and neck revealed no abnormality. Computerized tomography (CT) of temporal bones (Fig. 1a) revealed a soft tissue density lesion in the cartilaginous part of the right EAC without any bony EAC involvement or erosion. Excision biopsy of the mass revealed a tissue lined by squamous epithelium, with subepithelial tissue showing acinar pattern of polygonal cells with moderate eosinophilic cytoplasm and vesicular nuclei consistent with ceruminous adenoma. The patient is on regular follow up and showed no recurrence.

Case Report 2

A 60 year old male patient presented with complaints of hardness of hearing associated with bloodstained mucopurulent discharge from right ear since 1 year, and right

M. Srivalli · H. A. Qaiyum · P. N. S. Moorthy · K. Srikanth
Department of E.N.T.-Head and Neck Surgery, Princess Esra
Hospital, Deccan College of Medical Sciences, Hyderabad,
Andhra Pradesh 500065, India

M. Srivalli (✉)
H. No. 8-2-626/B, Road No. 11, Banjara Hills, Hyderabad,
Andhra Pradesh 500034, India
e-mail: drsrivalliant@yahoo.co.in

Fig. 1 **a** Coronal Ct of temporal bones showing soft tissue density lesion in the cartilaginous part of the right EAC. **b, c, d** CT scan of temporal bones and paranasal sinus showing extensive growth eroding right temporal bone, involving infra temporal fossa and extending intracranially

sided nasal obstruction since 1 month. Right ear examination revealed a pinkish polypoid mass in EAC arising from the middle ear which was bleeding on touch. Nasopharyngeal examination revealed a mass occupying the right choana with obliteration of Eustachian tube opening. The patient also had an ipsilateral palatal palsy. CT scan of temporal bones (Fig. 1b, c, d) and para nasal sinuses revealed an extensive growth involving EAC, middle ear, Eustachian tube, nasopharynx. There was extensive bone erosion with the growth involving infratemporal fossa and was extending intracranially through tegmen plate. Biopsy of aural polypoid mass and nasopharyngeal mass revealed glandular acini of various shapes with nuclear polymorphism, mitotic figures and extensive infiltration into surrounding tissues consistent with adenocarcinoma (Fig. 2). Patient was not willing for any radical surgical treatment and hence was advised radial external beam radiotherapy alone.

Discussion

Ceruminous adenoma which in our patient presented as aural polypoid mass is a rare benign tumour of EAC. Earlier it was called as ceruminoma, the term which is now been abandoned [2] as it does not imply the underlying benign or malignant pathology. Wetli et al. [3] distinguished four categories of ceruminomas, namely the ceruminous adenoma, the pleomorphic adenoma, the ceruminous adenocarcinoma and the ceruminous adenoid

Fig. 2 Histopathology revealing glandular acini of various shapes with nuclear pleomorphism, mitotic figures and infiltration into surrounding tissues consistent with adenocarcinoma

cystic carcinoma. Histopathological examination findings may sometimes be inconclusive [4] in terms of cell of origin and presence of malignancy and hence use of immunohistochemistry is advocated in such situations using tissue markers like cerumen pigment, CK5, 6, 7, S-100 protein, and p63 [5]. Benign adenomas need only local excision and regular follow up where as malignant carcinomas are treated with wide local excision with adequate margin and followed by radiotherapy. Malignancy arising from middle ear cleft is commonly squamous cell variety which occurs because of metaplasia of mucosal

epithelium in chronic suppurative otitis media. Adenocarcinoma and adenoid cystic carcinoma in middle ear cleft are very rare [6] and are known to arise from lining epithelium of Eustachian tube. The prognosis of such malignancies is generally poor as they present late and wide surgical excision is a challenging task.

Conclusion

Even rare benign tumors and potentially lethal malignant tumors may present clinically as aural polyps and hence such pathologies should always be considered when evaluating patients presenting with aural polyps. When there is a difficulty in differentiating benign and malignant lesions or tissue of origin by histopathology, usage of immunohistochemistry with tissue markers can be of great help.

Conflict of Interest None.

References

1. Kim CW, Rho YS, Cho SJ, Lee CH, Bae WJ (2008) A case of ceruminous adenocarcinoma of the external auditory canal presenting as an aural polyp. *Am J Otolaryngol* 29(3):205–208
2. Mills RG, Douglas-Jones T, Williams RG (1995) ‘Ceruminoma’—a defunct diagnosis. *J Laryngol Otol* 109(3):180–188
3. Wetli CV, Pardo V, Millard M, Gerston K (1972) Tumors of ceruminous glands. *Cancer* 29:1169–1178
4. Lassaletta L, Patrón M, Olóriz J, Pérez R, Gavilán J (2003) Avoiding misdiagnosis in ceruminous gland tumours. *Auris Nasus Larynx* 30(3):287–290
5. Thompson LD, Nelson BL, Barnes EL (2004) Ceruminous adenomas: a clinicopathologic study of 41 cases with a review of the literature. *Am J Surg Pathol* 28(3):308–318
6. Pallanch JF, Weiland LH, McDonald TJ et al (1982) Adenocarcinoma and adenoma of the middle ear. *Laryngoscope* 92(1):47–54