Mastoid Osteoma: Report of An Unusual Case

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ABSTRACT

Objective: Mastoid osteomas are rare asymptomatic lesions. When symptoms are present, surgical resection is the treatment of choice. Case report: The authors report a case of mastoid osteoma in a 56-year-old woman. Computed tomography performed because of a retroauricular mass identified a large osteoma of the mastoid. Surgery carried out because of conductive hearing loss. Results: Conductive hearing loss is an indication for surgical management of mastoid osteoma. Conclusion: Mastoid osteoma is rare and surgery indicated in symptomatic cases.

Keywords: osteoma; mastoid

INTRODUCTION

Osteomas are benign bone tumors of the head and neck that are frequently found in the frontal-ethmoid region. Mastoid osteomas are rare; they are usually asymptomatic, present as a hard, painless, retroauricular mass.

Even though most mastoid osteomas do not cause significant symptoms, they should be given attention by the Otorhinolaryngologists because they can lead to esthetical alterations and occasionally to functional ones.

Case reports

A 56-year-old female presented with the complaint of right posterior auricular mass for 15 years. The retroauricular mass was painless with a gradual increase in size. There was no history of trauma, symptoms of inflammation but it resulted in right external auditory canal occlusion. Treatment was sought on functional grounds. Examination revealed a 2 · 1.5 cm mass over the right mastoid region. It was hard, non-tender with no overlying skin changes.

Tympanometry could not be done in right side because of the mass effect. Pure Tone Audiometry showed conductive hearing loss. Temporal computed tomography done reported a bony protuberance arising from the right mastoid bone cortex with slightly extension to external auditory canal (Figure 1). There was no evidence of bony destruction or infiltration into the mastoid air cells. Middle ear cavity was normal. The visualized sinuses and mastoid air cells were clear. A diagnosis of benign right mastoid osteoma was made based on history, examination and radiological findings. This was confirmed by a histopathological report. We proceeded with excision of the mastoid osteoma because of right side hearing loss due to mass effect (Figure 2).

DISCUSSION

Fibro-osseous tumours such as osteomas are not uncommon benign, slow-growing neoplasms arising mainly in the frontal and ethmoid paranasal sinuses. Osteomas are benign osteoblastic tumours of mesenchymal origin.
In the temporal region, osteomas are essentially reported in the external auditory canal, or more rarely in the middle ear, along the auditory canal or the styloid process, in the temporomandibular joint, in the apex of the petrous temporal bone or in the internal auditory canal. Osteoma of the mastoid is a rare benign bone-forming tumor composed by bone tissue. It is a slow growing tumor that is kept stable for years. Normally it is asymptomatic, although it may cause cosmetic deformities most of the time. It may produce pain by invasion of neighbouring structures or widening of periosteum. The complications are recurrence, facial nerve affection, sigmoid sinus damage and sensorineural hearing loss by nervous compression of inner ear.

There are cases in which conducting hearing loss develops due to pushing forward of the posterior canal wall by the mastoid osteoma. As occurred in our patient. Occlusions of the external ear canal may cause recurrent ear infection.

The clinical and radiological findings along with histopathologic evidence demonstrate the diagnosis of mastoid osteoma. Asymptomatic patients can be followed up with observation and monitored with regular imaging. When symptoms are present, surgical resection is the treatment of choice. The surgery should include careful removal of periosteal cover and safe margin of the mastoid cortical around it. Malignant transformation is yet to be reported.

REFERENCES


