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Case Report

UNROLLING STONE GATHERS NO MOSS! ASYMPTOMATIC LONG-STANDING FOREIGN BODY IN THE EXTERNAL EAR- A CASE REPORT

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ABSTRACT
Foreign bodies of the ear are very common. They occur more commonly in children than in adults. This is a rare case report of an adult with an asymptomatic retained foreign body in the left ear canal for nearly a decade! A 20 years old male patient presented to our ENT-OPD with pain and sensation of fullness in the left ear for two days after he cleaned his ear with ear buds. Left ear otoscopic examination showed a white elliptical mass in the ear canal at the bony cartilaginous junction. Tympanic membrane appeared intact. Audiological evaluation showed minimal conductive deafness in left ear. Radiology showed a radio opaque mass in the left ear canal. Aural syringing along with hooking out was tried and a pebble 1.2cm x 0.6cm x 0.3cm was removed. History from patient's mother later on revealed untreated foreign body ear when he was around 10years old. Since ear canal acquires adult size at 9 years of age, this foreign body was not extruded out spontaneously (Carsten *et al.*, 2007; Chiarella *et al.*, 2009; Farkas, 1990). This case is presented for its rarity of long standing foreign body presentation in the ear canal with no symptoms.

Keywords: *External Ear, Stone*

INTRODUCTION
Contrary to the popular saying, Rolling stone gathers no moss, we report a patient who presented with a pebble in the ear canal, which remained symptom-free for nearly a decade's time. Foreign bodies of the ear are very common. They occur more commonly in children than in adults. This is a rare case report of an adult presenting with retained foreign body in the left ear canal for nearly a decade's time.

CASES
A 20 years old male patient presented to our ENT-OPD with pain in the left ear for two days after he cleaned his ear with ear buds. He also has a sensation of fullness and mild hard of hearing in the left ear for nearly 10 years duration. No history of recent foreign body entry in the ear was noted. No history of trauma or ear discharge was noted.

Figure 1: The patient

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On Examination: Left earotoscopic examination showed a dirty white elliptical mass in the ear canal at the bony cartilaginous junction. On probing with a cotton swab it was mobile and its attachment could not be clearly made out, because of its tight proximity to the posterior and superior canal wall. Tympanic membrane was not completely visible.

Tuning Fork Test

Rinne's test: Negative on left ear for 256Hz and Positive for 512Hz. Positive on right ear.
Weber's test: Lateralized to left ear.

Management:

Investigations:

Pure tone audiometry: Revealed minimal hearing loss on left ear and normal hearing sensitivity in right ear.
Radiology: CT scan of temporal bone showed a radio-opaque mass measuring 1.2x0.6x0.3 cm in the left ear canal and normal middle and inner ear anatomy.

Figure 2: CT Scan

Differential Diagnosis

- Foreign body impaction,
- Tumours like osteoma, etc.

Treatment: Under local anesthesia, aural syringing was attempted in the left ear canal. This moved the mass freely, of its attachment to walls with coated cerumen. Then along with aural syringing, hooking-out with probe of the mass was done to extrude out the mass. Post-syringing tympanic membrane was found to be intact and no bleeding or canal injury was identified.

The removed mass was a pebble measuring 1.2x0.6x0.3cm. Past history of the patient derived from his mother later, revealed accidental foreign body insertion into the ear by the patient himself during his childhood when he was around 10 years old, which was not addressed properly.

Figure 3: The pebble removed

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DISCUSSION

Embryology: Full canalization of the external auditory canal occurs by the 28th week of intra-uterine life. At birth, the tympanic membrane, ossicles and otic capsule are all of adult size, but the external canal undergoes changes till about 9 years of age. In neonates the shape of the external canal is nearly straight. By the age of 9years the external canal elongates and nearly reaches adult size (Carsten *et al.*, 2007; Chiarella *et al.*, 2009; Farkas, 1990).

Since this patient has most probably impacted the pebble at around 10 years of age, the canal has not much altered after that and remained of the same size as that of adulthood. Hence the pebble has not come out of its own and has remained impacted in the canal for nearly 9 years duration. Since it is inorganic it has remained inert and not caused any symptoms until the patient has probed it with a cotton swab recently to move it and cause pain because of pressure effect.

Conclusion

Diagnosing a foreign body in a normal adult patient with no history of foreign body requires a high index of suspicion. For cases of mass in external ear canal, history of foreign body insertion in childhood has to be carefully elicited even from reliable patient-attenders. This should be highlighted, as the treatment is out-patient based and reduces the cost of hospital stay for the patient. X-Ray as an investigation provides no clue to the diagnosis whereas computed tomography is diagnostic with the Hounsfield units confirming it.

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