



Unusual foreign body in ear - A case report

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ABSTRACT

Foreign bodies in the external auditory canal (EAC) are common in children, mostly seeds and small stones, plastic, etc. Ear foreign body in sane adolescents or adults is rare. Adequate skill and high accuracy is needed for the removal of these foreign bodies in ear, as failures and traumatic removals can cause lifelong deafness and discharging ear. We report a case of an adult who borne a foreign body (adhesive glue) in ear canal in a freak accident. The glue hardened after some time in the canal making its removal difficult with routine methods.

Usually all ear foreign bodies can be routinely removed in clinics by conventional methods. Ear foreign bodies like dried adhesive glue, pose a serious challenge because of the lack of literature regarding their removal. Thus innovative methods have to be used for safe and complete removal of such rare foreign bodies.

INTRODUCTION

Ear foreign bodies are commonly encountered cases in the ENT clinics[1]. Removal of ear foreign bodies requires proper skill and technique [3,6]. Difficult removal attempts by untrained persons or inappropriate instrumentation results in trauma to the EAC or impaction within the middle ear cavity [2,8]. Depending on the location and degree of impaction within the ear the foreign bodies can be removed using various techniques like syringing, suctioning, removal by forceps, and surgery [1,5]. Organic foreign bodies which swell up or adhesive agents, corrosive batteries which get impacted pose a real problem in removal using routine procedures [4].

CASE REPORT

A 21-year-old female patient presented to the outpatient department with complaints of ear block and foreign body sensation in right ear since two days. There was no history of trauma to the ear.

Two days before when patient was sleeping on the floor at home, the adhesive agent kept on window fell on her face and a part of it entered into the EAC, following which she went to a nearby hospital. The adhesive agent over the ear pinna was cleaned and the patient was discharged with conservative management. The patient later visited our hospital with complaints of ear block and foreign body sensation.

On otoscopic examination patient was found to have a white mass (foreign body) in the right EAC. On probing the mass was found to be hard, solidified and filling the entire EAC. It was not possible to remove the foreign body in the outpatient department

with routine procedures like syringing, suctioning or probing, so it was planned for removal under general anaesthesia (GA) in operation theater. Solvents known to dissolve the hardened glue were tried but not found to be of any benefit. Under GA foreign body removal was tried with curette but two broke without any success, then it was decided to use the microdrill. The foreign body was then broken into pieces using microdrill and removed in piecemeal. Tympanic membrane was found to be intact. The EAC was the packed with antibiotic gauge pack for twenty four hours. On subsequent follow up granulation tissue was found in the ear canal, which was treated with antibiotic and steroid ear drops. Patient was reexamined after one month and found to have normal EAC and tympanic membrane.

DISCUSSION

Ear foreign bodies are common otorhinolaryngological emergencies encountered in our clinic[1]. Foreign bodies in ear are most commonly seen in children and rarely in adults, because of their curiosity to explore body orifices[3]. Adults with insanity or accidents can present with ear foreign bodies[3,4]. Removal of ear foreign bodies can be done in the clinics with routine techniques like syringing, suction, probe etc. some of the foreign bodies may need special skill and technique for removal[1,6,8].

In our case the patient was involved in a freak accident which resulted in a foreign body in the ear. The foreign body being a dried and hardened adhesive glue removal by routine procedures was not successful and ultimately removed using microdrill under anaesthesia. The adhesive agent most commonly used is PVA (polyvinyl acetate) which gets bonded to the surface applied[7]. A lot of adhesive glue removers are available in the market, among



Figure 1: Drilling of the dried adhesive glue.



Figure 2: Dried adhesive glue removed in piecemeal.



Figure 3: Normal TM and external canal after removal of dried glue.

which Solvent- based removers are the toughest type of adhesive removers[12]. They are typically capable of penetrating deep surfaces and dissolving the toughest, most established glues[7]. They are thirty percent Xylene, sixty percent Naphtha, thirteen percent Ethylbenzene, with the remaining parts consisting of toluene and benzene[12,7]. The safety of these agents when used on skin and mucosal surfaces is not established and they should be used with high degree of caution[10].

CONCLUSION

Removal of ear foreign bodies should always be done by competent persons with appropriate instruments and methods to avoid any serious complications. Routinely all foreign bodies can be removed using the common methods, whereas rare foreign bodies like adhesive glues can pose a serious challenge in removal and innovative methods have to be used for their safe removal.

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