

Case Report

A rare case of chronic suppurative otitis media with foreign body in external auditory canal and mastoid antrum

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ABSTRACT

Foreign bodies in External Auditory Canal (EAC) are common in both adults and children. Removal of foreign body requires skill but usually successfully performed in the ENT department. A 40 year old female patient presented with right ear discharge with decreased hearing. On examination, a pale, scanty, mucopurulent discharge, foul smelling with blood tinge, persisting even after medications. After aural toileting, tympanic membrane was perforated with granulation tissue in middle ear. Multiple broom sticks were found in the external auditory canal, mastoid antrum was removed via post auricular approach with excision of polyp with radical mastoid exploration. Removal of foreign body from EAC is an essential skill for ENT surgeon. Careful removal can prevent further trauma and complications. An aural polyp with ear discharge, never attempt to pull/avulsion.

Keywords: Foreign body-broom sticks, Middle ear-auditory canal

INTRODUCTION

Foreign bodies in the EAC are common cases in both adults and children. The most common complications of foreign bodies in the ear are: bleeding, fetidness and otitis externa. Removal of foreign body requires skill and usually performed in ENT department. Inexperienced handling may lead to iatrogenic complications including auditory canal lacerations, bleeding, infection and perforation of tympanic membrane. We report a case of 40 year old female with right ear discharge with decreased hearing. During surgical exploration of mentioned, was found with multiple broom sticks in EAC and mastoid antrum was removed with polypectomy.

CASE REPORT

A 40 year old female patient presented to our hospital with history of right ear discharge with decreased

hearing. Otoscopic examination revealed a small pale to pinkish mass protruding into the EAC, completely occluding the EAC with foul smelling scanty mucopurulent discharge. After aural toileting with mopping and suction, on probing mass is non-tender, soft in consistency, mobile, doesn't bleed on touch, insensitive to touch. Probe can be passed all around the mass without adhering to the four quadrants of EAC and mass was extended towards the middle ear. Tympanic membrane was not visible. The tuning fork test showed Rinne's test - Negative (right ear), Weber's test - Lateralized to the affected ear and ABC test - Decreased in right ear.

Intravenous antibiotics for one week were prescribed. After the IV antibiotics administration, mucopurulent discharge was reduced. Patient underwent right aural excision of polyp with right mastoid radical exploration under GA. During an attempt for excision of polyp, we

found multiple broom sticks which went inside the suction tube. After removing the suction tube, broom sticks were visualized under microscope and they were about 18 in number. This was followed by excision of polyp. Broom sticks were also found in mastoid antrum. Osteomyelitis of mastoid bone with purulent discharge was drained. Saline wash was given. Patient was discharged. After 1 week, sutures were removed without any complications.

Intravenous taxim one gram, b.d. for one week was prescribed. Then after discharge, patient was prescribed oral antibiotics for one week. Post-operative wound healed.

DISCUSSION

Clinical presentations of foreign bodies in the middle ear include otalgia, fullness, hearing loss, tinnitus and intermittent otorrhoea in chronic cases. Physical examination usually reveals inflammation of the external auditory canal, debris, granulation tissue and perforation of the tympanic membrane.^{1,2} In some cases, a foreign body may be seen through the perforated tympanic membrane.² Imaging studies are helpful in evaluating the nature and location of a foreign body in the middle ear.¹⁻⁴

Removal of a foreign body in the external auditory canal requires expertise. Many authors found that non-ENT personnel significantly associated with complications and emphasize that difficult or all cases should be managed by an otolaryngologist.⁵⁻⁷ Success depends on the type of foreign bodies, the co-operation of the patient, the type of instrument used and the experience and skills of the ENT surgeon.^{7,8}

CONCLUSION

Removal of the foreign bodies from EAC is essential skill for ENT surgeon. Careful removal; can prevent further trauma and complications when accidentally found like in our case, broomsticks in EAC and antrum during surgery were removed carefully to prevent further intracranial complications.

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REFERENCES

1. Eleftheriadou A, Chalastras T, Kyrmizakis D, Sfetsos S, Dagalakis K, Kandiloros D. Metallic foreign body in middle ear: an unusual cause of hearing loss. *Head Face Med.* 2007;3:23.
2. Simons JP, Eibling DE. Tympanic membrane perforation and retained metal slag after a welding injury. *Otolaryngol Head Neck Surg.* 2005;133(4):635-6.
3. Kohan D, Sorin A, Marra S, Gottlieb M, Hoffman R. Surgical management of complications after hearing aid fitting. *Laryngoscope.* 2004;114(2):317-22.
4. Jacob A, Morris TJ, Welling DB. Leaving a lasting impression: ear mold impressions as middle ear foreign bodies. *Ann Otol Rhinol Laryngol.* 2006;115(12):912-6.
5. Thompson SK, Wein RO, Dutcher PO. External auditory canal foreign body removal: management practices and outcomes. *Laryngoscope.* 2003;113(11):1912-5.
6. Singh GB, Sidhu TS, Sharma A, Dhawan R, Jha SK, Singh N. Management of aural foreign body: an evaluative study in 738 consecutive cases. *Am J Otolaryngol.* 2007;28(2):87-90.
7. Gregori D, Morra B, Berchialla P, Salerni L, Scarinzi C, Snidero S, et al. Foreign bodies in the ears causing complications and requiring hospitalization in children 0-14 age: results from the ESFBI study. *Auris Nasus Larynx.* 2009;36(1):7-14.
8. Benger JR, Davies PH. A useful form of glue ear. *J Accid Emerg Med.* 2000 Mar;17(2):149-50.

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