



AN UNUSUAL CASE OF EAR ITCHING

Otorhinolaryngology

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ABSTRACT

Itching in ear is a very common condition encountered by the general physicians/ Otorhinolaryngologist (ENT), dermatologist and even the psychiatrist. Itching in ears can be very disturbing at times which leads the patient to seek for doctor's advice. It is worthwhile to spend some time with the patient if the patient is seeking psychiatric help for it. Detailed history taking and careful clinical examination are mandatory in such a case. This complaint of ear itching can be very challenging to treat unless the cause is known. We are hereby presenting a very interesting and an atypical case of ear itching. This case also highlights the importance of otoendoscopy and noticing the small details. Otoendoscope is a good tool still not available in developing countries.

KEYWORDS

Ear itching; Otoendoscopy; Ear syringing

INTRODUCTION

Chronic itching of the ear most commonly results from a chronic inflammatory process of the ear canal. The inflammation can be allergic in nature caused by hearing aid casing material, earplugs, or nickel in jewellery piercing the tragus.[1] There are various infectious and systemic skin conditions which can lead to chronic ear itching. Excessive ear wax can also lead to ear itching but it is usually accompanied with other symptoms like earache, hearing loss and tinnitus.[2] Our case was managed with the help of otoendoscopy and the traditional ear syringing method. Otoendoscopy enables excellent access and direct visualization of the ear canal, tympanic membrane. It is a minimally invasive procedure utilising a 0 degree, 4mm endoscope with camera attachment.[3] Ear irrigation is a routine procedure used to remove excess earwax, or cerumen, and foreign materials from the ear. Ear irrigation can also be used for caloric stimulation.[4] With this background, we present an interesting case of ear itching and its management.

CASE REPORT

A 34 year old male belonging to the Sikh community presented to us with right ear itching since 5 months. The patient did not have any history of earache, trauma, ear discharge and hearing loss. He had previously consulted 5 ENT specialists, 2 Skin specialists and one Psychiatrist before reaching us. There was no history of prior acid reflux, skin disease.

Investigations:

Pure tone audiometry showed normal hearing, tympanometry revealed bilateral type A curve. Serum IgE levels were normal, Skin prick test for common aeroallergens and common food allergens and hair dye didn't reveal any sensitisation.

Medications:

Steroid based ear drops, oil based ear drops didn't alleviate the symptoms. Anti-allergics like levocetirizine, cetirizine, fexofenidine, hydroxyzine were tried by different doctor but failed to improve the condition. Beclomethasone containing ointment provides some relief but as soon as it was stopped patient had recurrence in symptoms.

Patient had 2 episodes of otitis externa before reaching us.

General physical examination and local ENT examination was unremarkable. Otoscopic examination revealed an intact right tympanic membrane with no evidence of ear wax or any ontological infection. There were no signs of inflammatory changes in the ear canal.

Further, an otoendoscopy was done which revealed a small hair sticking to the ear drum. (Figure 1)

This hair follicle was removed successfully with the traditional ear syringing.(Figure 2) It is interesting to note that our patient belonged to the Sikh community and was forbidden to cut his hair due to religious beliefs. The patient was followed up after a week and was fully relieved of his complaints.

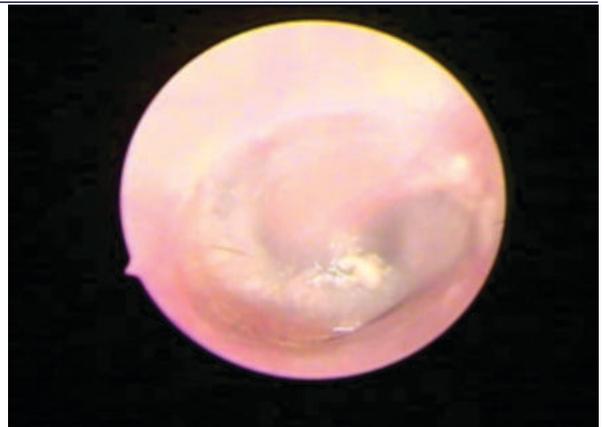


Figure 1: Otoendoscopic Image Showing A Small Hair Sticking To The Ear Drum.

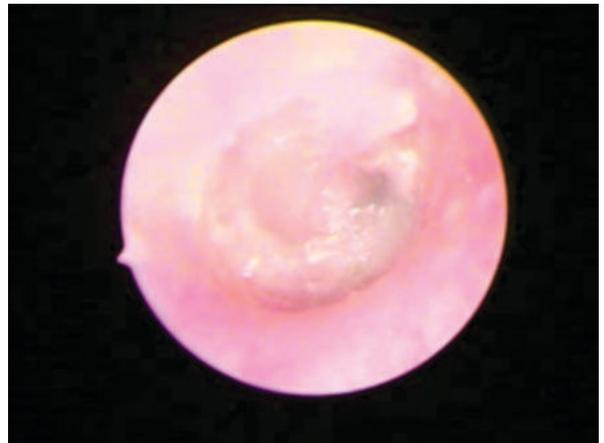


Figure 2: Otoendoscopic Image Showing A Normal Tympanic Membrane After Ear Syringing.

DISCUSSION

Itching or pruritus in ears can be very distressing for the patient and requires prompt treatment. Ear itching most commonly results from a chronic inflammatory process of the ear canal which is usually allergic in nature. Allergic inflammatory changes in the ear are mainly associated with delayed-type hypersensitivity reactions to preservatives in shampoos or conditioners which usually occur several days after exposure to the initial insult or after repeated contact.[1] Infectious causes of chronically pruritic ears include acute or chronic fungal infections of the ear canal. Rarely, systemic skin conditions, such as psoriasis can involve the external canal skin leading to itching. Patients with diabetes are generally more likely to develop fungal or bacterial otitis externa due to a loss of acidity in the cerumen which

reduces protection against fungal elements in the ear canal and probably changes the bacterial flora that normally lives on the skin surface.[5]

Sometimes people get very nervous and start to their ears. This is likely an amplification of normal sensation that the person would otherwise ignore. Yilmaz et al (2015) reported that 43% of patients with itching ears had a "Type D" personality, as compared to 15% of controls. Type D personality is a psychological term describing the "distressed" type of person who tends to have negative feelings and avoids social contact.[6]

The various documented causes of ear itching are: Fungal infection, otitis externa, otitis media with effusion (OME), laryngopharyngeal reflux (LPR) or gastroesophageal reflux disease (GERD), skin allergies, temporomandibular joint dysfunction and less wax production, globus pharyngis, dental caries, elongated styloid process, allergic rhinitis and very rarely pyriform fossa cancer.[7]

Detailed history-taking and examination may provide clues that will help establish the cause of ear itching. Along with examination of the pinna, post-auricular region, scalp, the skin of the rest of the body should be inspected. One should look for excoriations, lichenifications and for oozing and crusting, fissures, hyperemia or erythema. Otoendoscopy is the endoscopy of the ear which involves placing a rigid endoscope into the ear to examine both the exterior and middle portions of the ear. An Otoendoscope is a short rigid telescope usually of 10cm length and varying diameters namely 1.7mm, 2.7mm, 3.4mm etc. It is available in 0, 30, 45, 70 degree angles. It has to be connected to a fiberoptic light source for illumination. The findings can be recorded through a camera.[8]

The intact eardrum can be examined closely and the movement of the ear drum can be evaluated using a 0 degree otoendoscope. It can be used to visualize the ear drum, hidden areas of the middle ear, remove foreign bodies and during ear surgeries like endoscopic transcanal myringoplasty, endoscopic mastoidectomy etc. Otoendoscopy has become established in our practice as a determining and systematic method of exploration to complement otomicroscopy.[3]

Advantages of otoendoscopic myringoplasty are as follows:

1) It is less traumatic, requires less operating time, less expensive, less morbid, results in less postoperative pain. 2) Visualizes the whole tympanic membrane and the ear canal without having to manipulate the patient's head or the microscope. 3) Extends the operative field in the transcanal procedures of the structures usually hidden under the microscope. 4) Visualizes structures from multiple angles as opposed to the microscope's single axis along the ear canal. Provides extremely sharp image with high resolution.[9]

Irrigation involves inserting liquid into the ears to flush the earwax or any foreign body out. It is often necessary to perform ear irrigation in cases of impacted ear wax, foreign body in the ear or for caloric stimulation.[4] One can either use a thirty milliliter to a 60-mm syringe with a 16 or 18 gauge intravenous (IV) catheter attached (with the needle removed) or a pulsating water device (such as a WaterPik) to irrigate the ear. Water is directed superiorly and posteriorly in the ear canal. Irrigation of the ear can lead to otitis externa, vertigo, perforation of the tympanic membrane, and middle ear damage if the tympanic membrane is perforated. These complications are less common with the syringe and IV catheter technique than when compared to the pulsating water device technique.[10]

It would not have been possible to treat our case without the use of an otoendoscope and ear syringing. Also, otoendoscopes are not easily available in developing countries like ours but they are gaining popularity tremendously due to its various advantages as mentioned before. Hence, we must lay emphasis on these modalities in diagnosis and treatment of a case of ear itching.

CONCLUSION

The atypical clinical presentation of our case prompted us to share our experience on the cited subject. Our case also highlights the importance of otoendoscopy and ear syringing which would help in the early diagnosis and treatment of this condition.

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