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Primary pediculosis ear- A case report

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Introduction

Foreign bodies (FB) in the ears, nose or throat are a common occurrence in otorhinolaryngology (ENT) emergency services. However live insects are comparatively rare. Foreign bodies have been estimated to account for approximately 11% of all the cases seen in ENT services.(1) A large variety of live foreign bodies in ear are reported in literature, however not the lice. Pediculosis is infestation of hairy parts of body or clothing with eggs, larvae or adults of lice. It is commonly encountered in paediatric population in the age group of 6-12 years.(2) In rural areas, prevalance rate of infestation was recorded to be 20.5%.(3) Girls are 2-4 times more frequently infested than boys, especially in countryside. Different species of lice prefer to feed on certain locations on the body of the host. They include Pediculosis capitis (head lice), Pediculosis corporis (body lice), and Phthirus pubis (pubic lice). Finding a lice primarily in the hairs of external auditory canal is unknown, hence putting forward this case.

Case Report

A 44 year old female presented to ENT OPD, PGIMS Rohtak (India) with itching both ears for 2 weeks and pain in left ear for 5 days. There was no history of decreased hearing, discharge ear, trauma, recent acute respiratory infection or of air travel. She belonged to a low socioeconomic status. Otoscopy of left ear revealed the external auditory canal to be normal and there was grade 3 retraction of pars tensa of the tympanic membrane. On examination of the right ear there were about 40 live lice in the external auditory canal. Otomicroscopy of right ear confirmed the same (Fig. 1). On high power microscopy it was confirmed to be lice (Fig. 2). Dry mopping was followed by repeated syringing of external auditory canal with normal saline until it was cleared of all the organisms. The patient was treated with oral Ivermectin 400 microgram per kilogram and cetirizine 5 miligram at night time. Dermatological consultation was taken to exclude involvement of scalp and other body parts. She was called for follow up after 10 days and there was no evidence of lice infestation. Patient was free of the symptoms.

Fig. 1: Otomicroscopy of ear canal

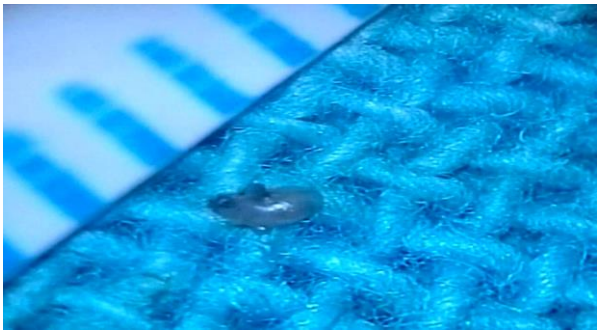

Fig. 2: High power microscopy of lice

Discussion

Every Otolaryngologist encounters a large variety of foreign bodies in the ears which accounts for emergency room visits, especially in children. Foreign bodies in the ear or nose can be classified in many ways like organic–inorganic, animate-inanimate, metallic–nonmetallic, hygroscopic–non hygroscopic, regular or irregular, soft or hard etc., according to their nature.(4) The majority of these foreign bodies are harmless. Some are extremely uncomfortable (insects or sharp objects) and some can rapidly produce an infection (food or organic matter). Live organisms like insects are not uncommon in the adult ears. Various live organisms that has been reported include tick, maggots, cricket, cockroach, spider and bed bug. An interesting unusual case of Rhabditis was reported by Teschner et al which present like CSOM i.e. Chronic ear discharge and hearing loss.(5)

For diagnosis in these cases no specific radiological studies are recommended. The physical examination is the diagnostic tool. Using the otoscope while retracting the pinna in the posterosuperior

direction helps in locating the foreign bodies. Other methods include use of a head mirror with a strong light source, operating otoscope or operating microscope.

After thorough search of the literature, no reported case of pediculosis in the ear was found. The diagnosis of pediculosis requires keen observation by the physician for viable eggs (nits), nymphs and live lice. Once diagnosed it should be treated effectively and completely. Treatment of pediculosis include 1% Permethrin rinse and Gamma Benzene Hexachloride lotion. Other effective treatments are Malathion, Crotamiton and Lindane. Orally effective drug is Ivermectin (400 microgram/kilogram). Newer agents include Spinosad 0.9% suspension, Isopropyl myristate 50% rinse, Dimeticone 4% and Benzyl alcohol 5% lotion.

Other rare case of live organism that had been reported in literature include outer ear canal infection with a free living nematode of the genus Rhabditis. Otomicroscopy revealed viable worms in the outer ear canal of patient suffering from chronic otorrhea and hearing loss. The nematode was identified by microscopy and Internal Transcribed Spacer (ITS)-PCR.[5]

Conclusion

The present case, to the best of our knowledge, represents the first report of a human ear canal infection with lice. Although the incidence of parasitic infections of the ear in humans is certainly low, our report indicates that careful inspection of the ear canal by otomicroscopy should be carried out routinely.

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