

## CASE REPORT

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### A RARE PRESENTATION OF FOREIGN BODY IN THE EAR WITH TRAUMATIC DISLOCATION OF THE INCUS IN A FEMALE CHILD: A CASE REPORT

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#### HOW TO CITE THIS ARTICLE:

Santhana Krishnan K, Poornima S. Bhat. "A Rare Presentation of Foreign Body in the Ear with Traumatic Dislocation of the Incus in a Female Child: A Case Report". Journal of Evolution of Medical and Dental Sciences 2014; Vol. 3, Issue 06, February 10; Page: 1489-1491, DOI: 10.14260/jemds/2014/2012

**ABSTRACT:** Foreign bodies in the middle ear are a rare occurrence. This is a case report of a 5 year old female, with plastic button in the left ear, with history of attempted removal using a metal hook, leading to subtotal perforation of the tympanic membrane and traumatic dislocation of the incus. On surgery a yellow colored plastic button, measuring about 1x 1 cm size was removed from middle ear by retroauricular approach. Myringostapedioplasty using autologous incus and temporalis fascia under general anesthesia was done. Patient improved clinically post operatively. Foreign bodies in the ear should be removed with caution. Blind removal by instrumentation can lead to complications like tympanic membrane perforation and ossicular disruption. Early surgical intervention with tympanoplasty under anesthesia with tympanoplasty at the same sitting can prevent further complications and correct the hearing loss.

**KEYWORDS:** Foreign body, incus, myringostapedioplasty

**INTRODUCTION:** Foreign bodies in the ear are a common presentation in children. Most commonly foreign bodies are present in the external auditory canal, which can be removed on outpatient basis or sometimes under general anesthesia. A foreign body in the middle ear with ossicular disruption is a rare occurrence, which has to be treated by removal of foreign body and ossiculoplasty. Here is a rare case of plastic foreign body in the left ear of a 5 year old female, with tympanic membrane perforation and incus dislocation during attempted removal elsewhere, which was treated surgically.

**CASE REPORT:** A 5 year old female reported to our ENT outpatient department at tertiary care hospital, with history of insertion of plastic button into the left ear 10 days back, with attempted removal with a metal hook one day back, with no history of any ear complaints in the past. On otoscopy, a yellowish foreign body and blood clots were visualized obscuring the tympanic membrane (Fig. 1). Rest of the head and neck examination was unremarkable. Under general anesthesia, a yellow plastic button occupying left middle ear, extending partly into the external auditory canal was removed by retroauricular approach (Fig. 2). Subtotal perforation of the tympanic membrane (Fig. 3) and traumatic dislocation of the incus was noted (Fig. 4). At the same sitting, myringostapedioplasty was performed using autologous incus and temporalis fascia (Fig. 5). At 6 week follow up, patient improved clinically and graft was intact.

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**Fig. 1: Otomicroscopy demonstrating Yellowish foreign body in the middle ear.**



**Fig. 2: Yellowish plastic button, about 1x1cm size being removed from the middle ear.**



**Fig. 3: Subtotal perforation of the tympanic membrane.**



**Fig. 4: Extracting the dislocated incus from the left middle ear.**



**Fig. 5: Myringostapediopexy done using autologous incus.**

**DISCUSSION:** Foreign bodies in the middle ear are a rare occurrence. External auditory canal foreign bodies are most commonly removed by rinsing by a syringe and water.<sup>1,2</sup> Foreign bodies in the sulcus tympanicus are difficult to remove by syringing and they can be removed only by instrumentation.<sup>3</sup> Syms and Nelson<sup>4</sup> presented 4 cases of impression-material foreign bodies in middle ear induced chronic otitis media. A case of silicone foreign body in the middle ear caused by auditory canal impression in hearing aid fitting was reported by Shimanski.<sup>5</sup> Metal spark perforation of the tympanic membrane causing facial paralysis and hearing loss is presented by Stage and Vinding.<sup>6</sup> Hakuba et al studied 22 patients with traumatic ossicular disruption and found that most common cause was ear-pick injury and incudostapedial disarticulation was the most common finding<sup>7</sup>.

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In this case, there was traumatic dislocation of incus, secondary to attempted removal of a plastic foreign body, which was removed by retroauricular approach and hearing reconstruction was done at the same sitting.

**CONCLUSION:** Foreign bodies in the ear should be removed with caution. Blind removal by instrumentation can lead to complications like tympanic membrane perforation and ossicular disruption. Early surgical intervention under anesthesia with tympanoplasty at the same sitting can prevent further complications and correct the hearing loss.

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Date of Submission: 05/01/2014.

Date of Peer Review: 06/01/2014.

Date of Acceptance: 28/01/2014.

Date of Publishing: 07/02/2014.