

# Foreign body in hard palate: A case Report with review of literature

Manal Shafiq; Montasir Junaid\*; Sadaf Qadeer

\*Montasir Junaid

Department of Otorhinolaryngology, Jinnah Medical and Dental College, Karachi, Pakistan

## Abstract

Foreign bodies embedded in the hard palate are a rare presentation in a clinical setup. Foreign bodies found in the ear, nose, eyes or airways are immediately reported due to obstruction or unbearable irritation. Foreign bodies in the hard palate do not present with these symptoms, hence they are usually ignored for quite a long time. Here we would like to present a case of 6 years old, school going girl with a piece of steel embedded in her hard palate, partially covered by oral mucosa, for past 8 months. The metal was successfully removed with no post-operative complication or fistula formation. Follow up after a week showed good signs of wound healing.

## Keywords

foreign body; hard palate; oral mucosa

## Introduction

Foreign body in the Ear, Nose and Throat region is a frequent cause of E.R referral in pediatric population [1]. They are more common in younger children; which may be largely attributed to their curious nature and in part secondary to mental retardation, attention deficit hyperactivity disorder and absence of watchful caregivers [2] Most common site of foreign bodies is ear followed by nose, pharynx, esophagus and then laryngo – tracheobronchial tree [3]. Main symptoms are of obstruction or severe irritation and the patient usually presents to a medical setup within the time frame of a few hours to a few days. Foreign bodies implanted in the hard palate are rarely seen. We would like to present a case of a 6 years old school going girl with a foreign body embedded in her hard palate for the duration of 8 months.

## Case Presentation

A 6-years-old, school going girl presented in the outpatient department with the presenting complaint of discomfort over her hard palate for last 2 months. According to the patient she was in usual state of health 2 months back when she started experiencing discomfort over her hard palate. She was given “paracetamol” by her parents, which relieved her symptoms temporarily. Detailed, demanding history revealed that the patient placed a metallic cap of some kind on her hard palate 8 months back which got stuck. She did not inform anyone about it in fear of being scolded. She tried to remove it by finger and tongue but that resulted in further embedding of the cap. The patient denied any other Ear, Nose or Throat complaints.

On examination, a 1.5cm disc like shiny metal cap was found to be stuck just posterior to the incisive palatal area over the palatine rugae (Fig 1). On opening the mouth the rest of hard palate and soft palate looked normal and the foreign body was obscured from the vision due to incisors. Examination of palatal rugae revealed shiny disc like foreign body; while surrounding area was tender on palpation. The hidden nature of foreign body behind the incisors was probably the reason that parents were not able to notice it earlier. Rest of the ENT examination was normal. All pre-operative labs were within normal limits. The metal cap was removed under general anesthesia, after dissecting the adjacent mucosa which has grown over it. This was followed by gentle elevation of mucosa with periosteal elevators from one side. No fistula was identified and the wound was left to heal by secondary intention (Fig 2). Prophylactic broad range antibiotics were given. She was advised to maintain proper oral hygiene and was discharged the same day.

The foreign body found, was the metallic cap of "AA battery" (Fig 3). The child took it out and planted it over her hard palate. Fortunately the cap was not impregnated with any active ingredient or battery salts and the child did not develop severe inflammation or fistula. Follow up examination after one week showed healing with healthy granulation tissue.

## Discussion

Foreign bodies embedded in the palate are exceedingly rare, may imitate and should be differentiated from oral lesions [4,5]. Only hand full of cases have been reported in literature regarding Foreign bodies being impacted in hard palate [Table 1]. Most of these cases are observed in pediatric age group [4,6] for reasons described earlier [2]. In our case also the child was curious enough to keep the battery cover in mouth and finally impacted the sharp edge over hard palate. The type of foreign bodies reported in literature ranged from coin [7], wood [8], artificial nails [9], pistachio nut shell [10] and cloth decorative items [11]. No case of metal as a foreign body of hard palate has been reported yet.

Patients with retained hard palate; foreign bodies, may not present immediately in an emergency setting or an ENT clinic. The longest duration found from time of impaction to time of presentation of a foreign body in hard palate in any hospital setup was 18 months reported in Turkey [12]; the smallest duration was that of a few hours [7]. Our patient presented with a long standing history of 8 months before she was seen in our clinic.

The presenting complaints and the long term result can be variable. Similar to our case, the literature review failed to show any fistula formation [12].

Foreign bodies can be removed via topical application of anesthetic agent in a clinic set up or general anesthesia, for foreign bodies being deeply impacted. [2] The choice of anesthesia for the removal surgery was found to be variable. From Lidocaine nebulization [7] to inhalation and general anesthesia [2]. No intubation was undertaken and only Inhalational anesthesia was used in our case which provided adequate time and ease to remove the impacted foreign body.

## Conclusion

Foreign bodies in hard palate though clinically rare, should be differentiated from palatine lesions. The objects can be quite versatile. The patient, usually a child, may tolerate some discomfort for quite a long time before being brought to a clinical setup. No fistula formation was seen even in long standing

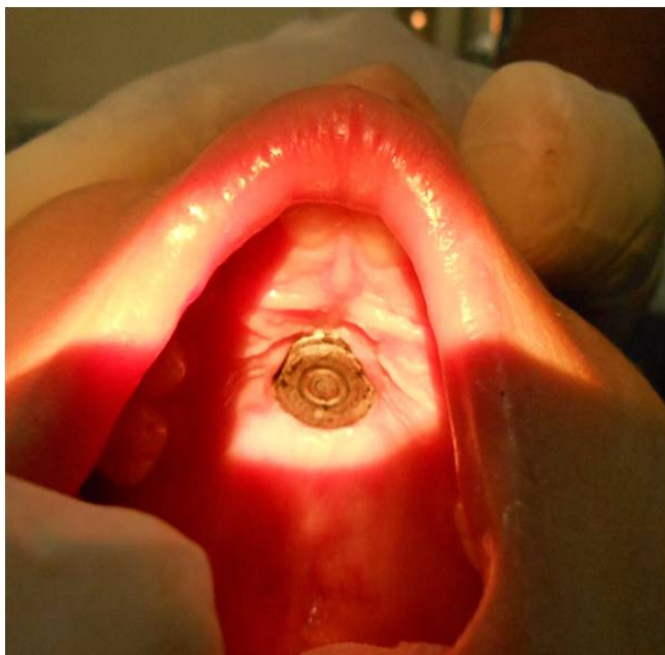
cases. Surgical procedures for removal of foreign body may differ on the basis of anesthesia. Prophylactic antibiotics are usually considered to prevent post-operative infection.

## Table

**Table 1:** Foreign bodies and time span

| Type of foreign bodies      | Time span |
|-----------------------------|-----------|
| Coin [6]                    | Few hours |
| Wood [7]                    | Unknown   |
| Artificial Nails [8]        | Unknown   |
| Pistachio nut shell [9]     | Unknown   |
| Cloth decorative items [10] | 10 months |
| Unknown [11]                | 18 months |

## Figures



**Figure 1:** Examination of the oral cavity reveals disc to be stuck just posterior to the incisive palatal arch over the rugae.



**Figure 2:** Hard palate after removal of the metal. No fistula is seen.



**Figure 3:** Metal cap of AA battery removed from the hard palate.