

## Penetrating Foreign Body through Palate

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**Abstract:** Foreign bodies are common in otorhinolaryngologic practice, usually in children. An impacted penetrating foreign body can be one of the most challenging emergencies. Penetrating oropharyngeal foreign bodies are rare mainly seen in children falling with objects in their mouth. Here we share our experience with one such unusual case report of a foreign body penetrating the palate. Management should be done quickly & carefully as it can also lead to neurovascular complications, airway compromise.

**Keywords:** foreign body, penetrating the palate.

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### I. Introduction

Foreign bodies are common in otorhinolaryngological practice, most commonly seen in children. An impacted penetrating foreign body can be one of the most challenging emergencies. Penetrating oropharyngeal foreign bodies are rare mainly seen in children falling with objects in their mouth. Here we report an unusual case of a foreign body penetrating the palate.

### II. Case Presentation

A 6 years old boy was brought to emergency with a nail in the oral cavity for the past 2 hours. The child was playing with a nail and accidentally fell while playing with the nail, then accidentally sharp end of the nail penetrated the oral cavity. On examination, the child was irritable, crying. He was conscious with an open mouth and there was drooling of saliva. There were no signs of respiratory distress. Vitals were normal.

On examination of the oral cavity and oropharynx revealed a sharp metallic nail penetrating the posterior end of the right side of the hard palate. The blunt end of the nail was visible. No active bleed was seen from the site of penetration as the nail was sealed at the entrance point. Pillars were normal. Tonsillar fossa was normal. There was no evidence of a cerebrospinal fluid leak.

Diagnostic nasal endoscopy was done and there was no evidence of the passage of the foreign body. No bleeding point was noted. Nasal cavities were normal. Otoendoscopy was normal.



Fig.1 showing the child with foreign body nail



Fig.2 showing endoscopic view of the foreign body penetrating the palate

An urgent x-ray nasopharynx showed a straight radiopaque object penetrating the hard palate passing through the floor of the sphenoid sinus touching the clivus.



Fig.3 showing an x-ray nasopharynx with a radiopaque foreign body

Other blood investigations like complete blood picture, serology, liver function and renal function tests were done and planned for foreign body removal under general anaesthesia.

He was started on IV fluids, antibiotics, injection of tetanus toxoid was given. Care was taken during intubation cuffed endotracheal tube of size 5.5 was used and intubated without touching the nail.

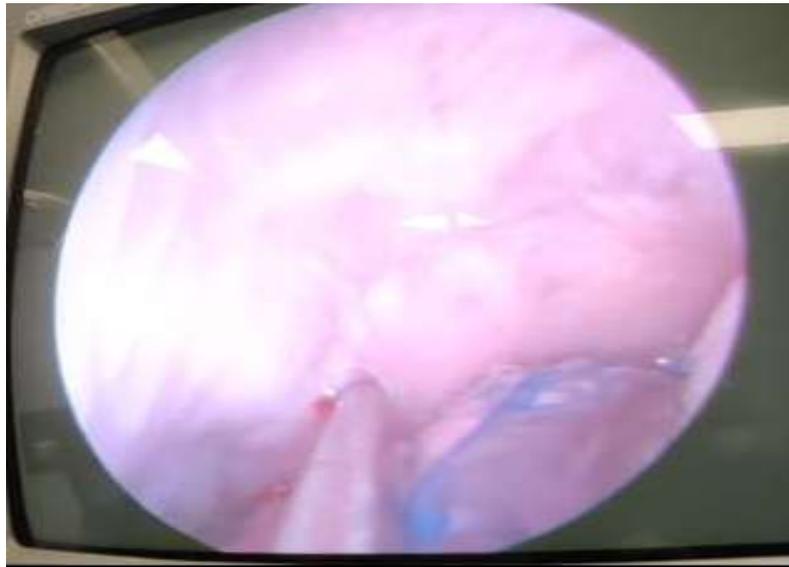


Fig.4 showing endoscopic view of foreign body along with the endotracheal tube

Boyle Davis mouth gag applied. The nail was held with a bone nibbler and pulled out gently under direct visualization. while removing the foreign body diagnostic nasal endoscopy was performed simultaneously and there was a movement at the lateral wall of the nasopharynx over the right side while removing the foreign body.

Postoperatively it was uneventful. There was no cerebrospinal fluid leak nor active bleed.

The nail was around 12 cm in length. The child was on nilper oral for 8 hours and was on IV antibiotics and discharged on the 2<sup>nd</sup> postoperative day.



Fig.6 showing the oral cavity after foreign body removal

### **III. Discussion**

Penetrating oropharyngeal foreign bodies are rare mainly seen in children falling with objects in their mouth. Urgent intervention is needed with careful history & examination. A significant injury should be suspected even with minor evidence of injury at presentation as potential vascular & fatal complications can happen.

As it was an emergency CT scan was not available at that time in our hospital. So, under emergency, an x-ray was taken. Despite this, in a low set up he did well. No neurological nor major vascular injury has happened. Although the Foreign body removal in our case was uneventful, this is not always the case. Early presentation & definitive management are desirable for a good outcome.

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