

Ingested Foreign Body in Nasopharynx: A Rare Presentation

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I. Introduction

A foreign body (FB) is any object in a region it is not meant to be, where it can cause harm by its mere presence if immediate medical attention is not sought [1]. It can be found in the ear, nose, and throat (ENT) region [1]. FB may be classified as animate (living) and inanimate (nonliving). The inanimate FBs can further be classified as organic or inorganic and hygroscopic (hydrophilic) or nonhygroscopic (hydrophobic) [2]. The presence of FBs in the ENT region is one of the most common causes of otolaryngologic emergencies. FBs can be introduced spontaneously or accidentally in both adults and children. Generally, FBs are more common in younger children; this may be due to various factors such as curiosity to explore orifices, imitation, boredom, playing, mental retardation, insanity, and attention deficit hyperactivity disorder, along with availability of objects and absence of watchful caregivers [3].

Foreign bodies in aerodigestive tract are common entity but in nasopharynx it's very rare to find an impacted foreign body (FB). The anatomical structure of nasopharynx prevents any lodgement of foreign body. It is capacious and having nasopharyngeal sphincter preventing regurgitation of FB from oropharynx. Through nasal cavity FB cannot travel to nasopharynx as the former is narrower. Most of the FB gets impacted as a result of forceful emesis, coughing, penetrating trauma or manoeuvre for removal of FB from oropharynx [4].

II. Case report

A 4-year-old male child was brought to the emergency department at Sharda hospital with complaint of ingestion of one rupee coin an hour before. The informant being the mother of the child reported that she had made efforts to remove the ingested coin, manipulating it towards the nasopharynx. The child did not have any history of breathing difficulties or vomiting. There was no significant history of excessive crying, cough reflex, nasal obstruction, nasal discharge, epistaxis, hematemesis, hemoptysis, or loss of consciousness.

On examination, the child was thin built, well hydrated, conscious and oriented in time place and person. All anthropometric measures were as per his age, general condition was fair and all his vitals were stable. On ENT (ear, nose, throat) examination, oral cavity was normal with mild restricted movements and mild bulge of soft palate. Examination of both the ears was normal with minimal wax present in left external auditory canal and bilateral intact tympanic membrane.

On anterior rhinoscopy, no foreign body was seen, septum was normal, lateral wall was found normal, no active bleeding was observed, there was serous discharge in both nasal cavities.

On Diagnostic nasal endoscopy during 1 st pass a glimpse of metallic foreign body seen lodged in Adenoids in nasopharynx , no further manipulation was done .

Immediate X-ray soft tissue neck (AP & lateral view) done which showed a radiopaque foreign body (coin) in nasopharynx. FIG 1

Intra-operative diagnostic nasal endoscopy done under general anaesthesia foreign body coin found lodged in adenoid tissue at roof of nasopharynx .

Trans palatal removal was done under general anaesthesia . FIG2

The postoperative period was uneventful

III. Discussion:

Foreign bodies in nasal cavity are very common by inhalation route but ingested foreign body in nasopharynx is extremely rare [5]. The presence of foreign bodies in the airway depends on its nature, size and locations. Every ENT department faces it every day, but nasopharyngeal foreign bodies are rare and it is difficult even to suspect in the absence of radiopaque foreign body. It is suggested that if swallowed foreign bodies could not be found anywhere, nasopharynx should be examined . [6] [7]

Foreign bodies in the nasal cavity and nasopharynx may cause purulent nasal discharge, nasal obstruction, chronic rhino sinusitis, persistent coughing or may remain asymptomatic. Most often nasopharyngeal foreign bodies are accidental findings on radiology, as with the present case. When inhaled, they may lodge in bronchi leading to pneumonia, atelectasis and bronchiectasis, the main complication in late diagnosis. The history of foreign body inhalation is positive in approximately 70% of cases and of these, only 60% seek medical help within the first 24 h [7]. It is difficult to diagnose a nasopharyngeal foreign body, more so in children. Technique of foreign body removal has improved enormously. They can be removed with the help of speculum and forceps. Endoscopic removal or removal through oral cavity can also be done.

Foreign body in nasopharynx should be kept in mind as a differential diagnosis in case of a lost FB which may cause fatal complications if not removed timely. It may dislodge from the site during coughing, sneezing or manual removal causing obstruction to larynx and respiratory arrest.

Complications may arise due to the foreign body or with the procedure. It can cause bleeding, pulmonary complications, retropharyngeal abscess and localized infection. Complication rates of 12.6% in adults and 4.6% in children has been reported by Singh B et al. [8] and in their study, pulmonary complications was most common in children and retropharyngeal abscess in adults, which was mostly due to sharp objects [8].

If a foreign body in the upper airway and digestive tract is suspected, endoscopic and radiological examination should be promptly performed. The objective of this case report is to suspect and identify the site of lodged foreign body presenting with no symptoms. A careful history of a sudden onset of nasal regurgitation and change in voice is very informative. Symptoms of change in voice, nasal regurgitation with difficulty in swallowing and clinical signs are very important. A supportive nasopharyngoscopy should be part of the investigation as the suspected nasopharyngeal foreign body may not be radiopaque. In addition to X-ray of the chest, neck with X-ray skull lateral view including nasopharynx is important radiological investigation as X-rays are usually diagnostic for radiopaque foreign bodies [9]

IV. Conclusion

Foreign body coin ingestion although common in oropharynx but it is rare to find a foreign body coin in nasopharynx high index of care is required to locate by X-RAY soft tissue neck , considering complications it can give rise .

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