

Case Report

An unusual long standing metallic foreign body in nasopharynx in an adult

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Received: 16 May 2021

Revised: 05 August 2021

Accepted: 07 August 2021

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ABSTRACT

This case report was to highlight the occurrence of a long standing unusual foreign body in the nasopharynx in an adult. Foreign bodies are common in ENT practice universally. At times they may present as emergency requiring urgent intervention and many a times they go unnoticed as these are not suspected. Nasopharyngeal foreign bodies are rare in any age group. A 70 year old man presented to neurology department with complaints of headache of 1 month duration. CT brain angiography showed atherosclerotic wall calcifications in bilateral cavernous segment of ICA and there was an incidental detection of a metallic foreign body in the posterior wall of oropharynx. History revealed accidental ingestion of a ring into mouth at 1 year of age. Diagnostic nasal endoscopy (DNE) was done, FB (foreign body) ring was seen at the level of left torus tubarius in nasopharynx and same removed in to intraorally. Care should be taken while removing these FBs. Digital manipulation for removal of such FBs are hazardous and should be avoided at all cost.

Keywords: Foreign body, Nasopharynx, Long standing foreign body, Unusual site

INTRODUCTION

Upper airways and upper digestive tract may harbor foreign bodies such as sponges, grains, toy parts, stones, paper, insects and cotton. These objects may go undetected for weeks or even years. Nasal FBs can be found in any portion of the nasal cavity, although they are typically discovered around the floor of the nose just below the inferior turbinate (Figure 1). Another common location is immediately anterior to the middle turbinate.¹ These objects are generally placed by children or mentally retarded patients whose curiosity leads them to explore body orifices. FBs that are impacted or those that have been present for some time and have become encrusted or those that have been impacted with force frequently challenge removal.

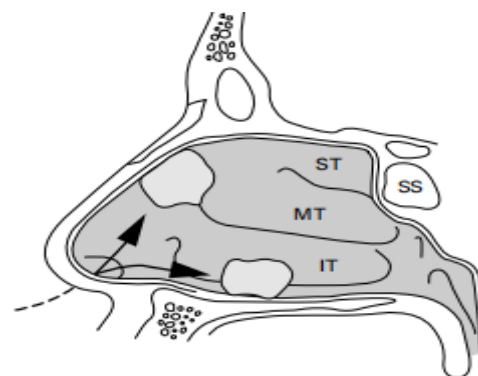


Figure 1: Commonest site of impact of FBs in the nasal cavity.

IT=inferior turbinate; MT=middle turbinate; SS=sphenoid sinus; ST= superior turbinate.

FBs in the nasopharynx are rare, with few citations in literature. They deserve to be highlighted owing to diagnostic difficulties and delays. Here we reported a rare case of metallic FB retained in the nasopharynx for an unusually long asymptomatic period of more than 60 years.

CASE REPORT

We described the case of a 70 year old male with type 2 diabetes of 15 years duration admitted with history of intermittent headache and difficulty in walking of one month duration. He also gave history of intermittent visual fortification and progressive numbness of both lower limbs and left upper limb for past 2 years. Clinical examination revealed decreased vision in left eye reduced to perception of hand movements only. Nerve conduction study showed distal sensory neuropathy of both lower limbs.



Figure 2: X-ray showing FB ring.

His routine blood investigations were normal except for poorly controlled blood sugar with HbA1c=10.9%. An MRI scan of brain showed Rathke's cleft cyst measuring 10×8 mm abutting the right ICA on right side and pituitary gland superiorly. CT brain angiography showed atherosclerotic wall calcifications in bilateral cavernous segment of ICA and there was an incidental detection of a metallic FB in the posterior wall of oropharynx. On further interrogation patient gave the history of insertion of a ring into his mouth at the age of 1 year, as told by his parents during childhood. Patient's father attempted FB removal by inserting finger into patient's mouth but failed. Later on he had nasal discharge and throat irritation which got settled down and no medical help was sought thereafter.



Figure 3: X-ray lateral view showing FB at the level of nasopharynx.

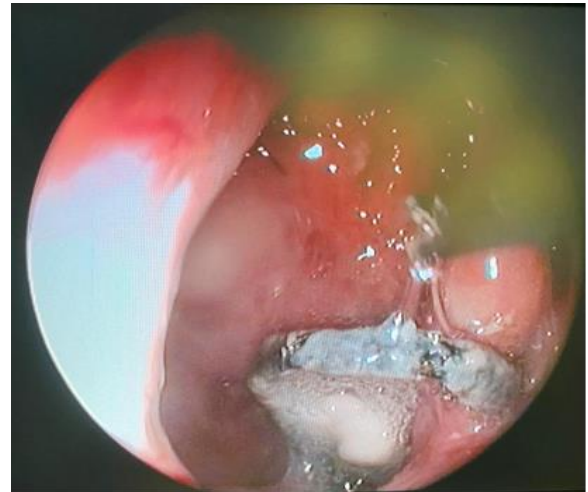


Figure 4: Endoscopic view.

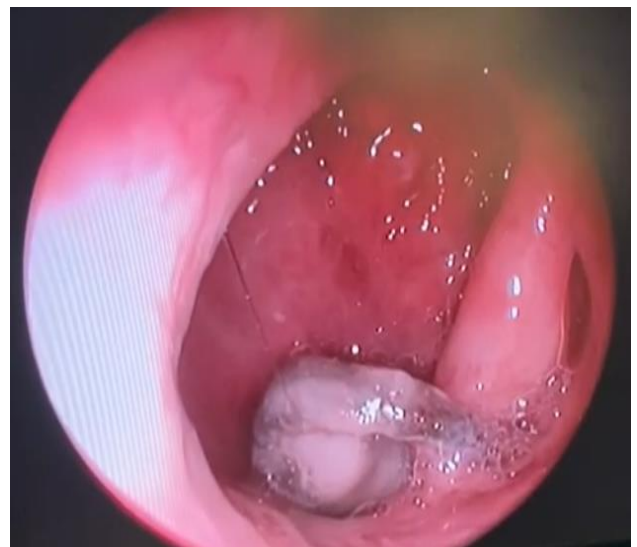


Figure 5: FB seen engulfing the left torus tubarius.



Figure 6: Removed FB.

ENT evaluation was done. With patient in supine position, DNE under LA showed a metallic foreign body/ring with crusts seen at the level of nasopharynx left side, engulfing the torus tubarius. A pediatric feeding catheter was negotiated through the right nasal cavity and delivered in to the oral cavity. The feeding catheter was pulled through the oral cavity to retract the soft palate thereby obtaining a better view of the foreign body. As FB removal through nose was difficult, FB removed in toto intraorally after cutting the ring with metal cutter and releasing it from the torus tubarius. Post-op period was uneventful. He was managed appropriately and was discharged in a stable state. Patient's headache was relieved following removal of FB.

DISCUSSION

FBs of the aerodigestive tract mostly involve nose, base of tongue, cricopharynx, larynx, trachea, bronchus and esophagus. FBs in nasal cavity are very common. However nasopharyngeal FBs are rare when compared to other sites and this was due to the wider postnasal space and it was difficult even to suspect in the absence of radiopaque foreign body. It was suggested that if swallowed FBs could not be found anywhere, nasopharynx should be examined. An ingested FB can rarely lodge into the nasopharynx in normal circumstances. However digital manipulation of the FB inside the oral cavity may cause it to slip into the nasopharynx as was seen in this case. The FB may also lodge in the nasopharynx in case of vomiting and regurgitation or if the FB was taken in the mouth in lying down position thereby making the nasopharynx dependent.²

FBs in the nasal fossae and nasopharynx may cause purulent rhinorrhea, nasal obstruction, chronic rhinosinusitis, persistent cough or may remain asymptomatic. Several important complications that have been associated with the presence of a nasal foreign body included formation and development of rhinoliths, erosion into a contiguous structure and producing infections in surrounding structures such as periorbital

cellulitis, meningitis, acute epiglottitis, diphtheria and tetanus.³

A loose FB in the postnasal space can accidentally be aspirated or pushed back in an attempt at removal and may result in acute respiratory obstruction. When inhaled, they may lodge in bronchi causing pneumonia, atelectasis and bronchiectasis, the main complication in late diagnosis. The history was positive in approximately 70% of cases and of these, only 60% seek medical help within the first 24 hours.⁴

Tay described a patient with an asymptomatic foreign body in the nasopharynx for 20 years.⁵ Frequently nasopharyngeal FBs were accidental findings on radiology, as with the present case. Long standing undetected nasopharyngeal FBs had been reported to have caused acquired cleft palate.⁷ If a foreign body in the upper airways or the upper digestive tract was suspected, endoscopic and radiologic examination should be promptly done as these FBs may be swallowed or aspirated resulting in complications which were associated with high morbidity rates.⁶

Proper instrumentation was required for removal of such FBs taking care that it was removed in a single piece. Removal of the FB from nasopharynx was always safe to be done under endoscopic guidance with head end low position so that the risk of the FB to enter the lower airway was avoided.⁸

CONCLUSION

Nasopharyngeal FBs are rare. Attempt to remove such FBs by digital manipulation can be hazardous. Care should be taken while removing these FBs so as not to cause any mucosal injury and airway compromise. Endoscopic examination of nasal cavity and nasopharynx is must in case of radiolucent FBs. If swallowed FBs could not be found anywhere, nasopharynx should be examined.

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: Not required

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Cite this article as: Freni JK, Jo JK, Sankar P. An unusual long standing metallic foreign body in nasopharynx in an adult. *Int J Otorhinolaryngol Head Neck Surg* 2021;7:1540-3.