

An Unusual Foreign Body in a 3 Months Old Infant – A Case Report

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Abstract: Foreign body in the aerodigestive tract is common, but ingested foreign body lodging in the nasopharynx is rare and likely to be missed. We present an unusual case of a 3 month old infant who presented with a history of gagging, excessive crying and irritability, drooling of saliva and refusal to suck. A foreign body (mirror) was found lodged in his nasopharynx. The FB was removed under general anaesthesia with no complication.

Keywords: Nasopharynx, foreign body, mirror, ingestion

I. Introduction

Although unusual aerodigestive tract foreign bodies (FB) are common among children, its lodgment in the nasopharynx is not a usual finding. The nose is the usual conduit for FB found in the nasopharynx, an unskilled attempt at removal of a nasal foreign body can push it backwards and occasionally may be lodged in the nasopharynx. Most of the foreign bodies entering the oral cavity pass into the esophagus and some are inhaled into the trachea. Report of FB introduced through the oral cavity getting lodged into the nasopharynx is unusual and very rare. **Error! Bookmark not defined.**, this is due to the fact that the nasopharynx is capacious and the presence of nasopharyngeal sphincter prevents regurgitation of FB into the nasopharynx. Patient with FB in the ingestion that got impacted in the nasopharynx may present with initial choking, coughing, bluish colouration and breathlessness, and later with nasal obstruction, nasal discharge and snoring. Sharp foreign bodies can pierce soft tissue and get impacted and removal of such foreign bodies may result in damage to surrounding structure if not carefully done. Perforation of the pharyngeal wall may lead to retropharyngeal abscess formation with all its attendant complication if not adequately and promptly treated. We present a case of an unusual FB (mirror) in an unusual age group -three months old child.

II. Case Report

A 3 month old male child was rushed into the emergency room of our hospital with five (5) hours history of gagging, excessive crying and irritability with associated drooling of saliva and refusal to suck. He was playing with his 3year old sister outdoors when he suddenly developed above symptoms. Upon opening the mouth the mother noticed a brownish FB getting in the oropharynx. Examination revealed an irritable child not in respiratory distress. There was pooling of saliva and a tip of a brown coloured FB projecting downward behind the soft palate with no evidence of bruising or bleeding.

X-ray of the post nasal space revealed a radio-opaque FB in the nasopharynx extending into the oropharynx (fig.1). The FB was removed in the theatre under general anaesthesia, it was a piece of a mirror triangular shaped measuring 3.8cm×3.7cm×3.6cm (fig.2).

Following orotracheal intubation and pharyngeal packing, careful examination under anaesthesia was carried out and the foreign body was gently manipulated and removed per oral without trauma to surrounding tissues. Child was discharged the following day and has remained well.



Figure 1. Lateral X-ray showing the nasopharyngeal FB



Figure 2. The piece of mirror removed

III. Discussion

There is paucity of reports of nasopharyngeal FBs especially those lodged via oral route in English literature. Although it has been reported that relatively large FBs constitute a risk of lodgment in the nasopharynx because of its difficulty in getting down the aerodigestive tract, the size of the FB in this index case is many fold larger than the larynx or oesophagus of the 3 months old child. It is also not certain how this FB got into the nasopharynx of this patient. Reported reasons for possible explanations of nasopharyngeal foreign bodies in children include forceful emesis, coughing, penetrating trauma or maneuver for removal of FB from oropharynx. This child did not present with any of these possibilities. Some authorities also theorized that ingestion of the FB while lying down with the nasopharynx in a dependent position may predispose to lodgment in the nasopharynx, this may be the only likely possibility in this child since there was no adult eye witness to give an account. The only history from the parents was that the child was with a 3 year old sister.

Although there was no evidence of tissue injury to suggest force in manipulating this FB body which is a glass, it is possible that the 3 year old sister put it in the patient's mouth and attempted retrieval without success. At 3 months anything that touches the lips will be sucked thinking that it is breast.

Aerodigestive FBs especially in children has been reported as potentially dangerous, occasionally with associated morbid outcome. **Error! Bookmark not defined..** In this child, inspite of the nature of the foreign body it was removed successfully with excellent outcome. We choose to use general anaesthesia because no reliable history was obtained, the nature of the FB was also not known and the need to remove the FB without worsening morbidity.

A high index of suspicion is required for the diagnosis of nasopharyngeal foreign bodies. No definite criteria for diagnosis was developed but we wish to advice that when children even not expected to ingest certain things because of age, history of sudden gagging, drooling of saliva, refusal to suck and the presence of other children who cannot effectively explain events shall raise a suspicion. Thorough physical examination and relatively cheap and available investigations like plain X-rays may be necessary for quick assessment in a resource constrained environment like ours. Where nasopharynx is not the first suspected area, if FB is not found in the other part of the aerodigestive tract then nasopharynx must be fully examined **Error! Bookmark not defined..** Several X-ray views of the nasopharynx have been described in the literature but a lateral will reveal most of the foreign bodies in the nasopharynx **Error! Bookmark not defined..**, as seen in our case.

The nasopharynx is an unlikely site for lodgment of ingested FBs, however it must be borne in mind that it is a likely possibility when evaluating a child for an aerodigestive FB. We report a case of a 3 year old male child with a relatively large piece of mirror in the nasopharynx which has not been reported before in English literature. Its removal though not very different from general principles, we advise removal of such FBs under general anaesthesia via orotracheal intubation and pharyngeal pack to protect the remaining part of the aerodigestive tract.

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