Foreign body in the nasopharynx- A rare entity: Case report
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Abstract
Nasopharynx is an exceptionally rare anatomical location for foreign body impactation*. As an otorhinolaryngologist, one may face challenges in diagnosis and removal of foreign body from airways. A metallic foreign body after being inhaled and ultimately being lodged in the nasopharynx is a rare entity. We report a case of nasopharyngeal foreign body (NFB) in a 1½ year old male child. The foreign body was diagnosed by diagnostic nasal endoscopy and documented by X-Ray of nasopharynx - lateral view [FIG.-2] and the same was removed under general anaesthesia. While keeping the child in Rose’s position.

Keywords - foreign body nasopharynx

Introduction
Foreign body (FB) have been a source of tremendous concern wayback in time and until now it produces great difficulties for both patients and medical practitioners in general and otorhinolaryngologists in particular[2-3]. It may turn uneventful or endanger the life of the patient depending on the type, size and location of the FB. Whenever a FB lodges in aerodigestive tract outcome may be dangerous more specifically when the victim is a child[4].

In one of the studies 2000 patients with laryngotracheal foreign bodies were documented out of which 534 patients were seen within a period of 15 years[2-3]. Only 2%-4% of the inhaled FB coughed out[2-7]. The majority of the inhaled FB either passed through the glottis in the trachea or esophagus[2,5-8]. This indicates the rarity of impaction of FB in the nasopharynx.

Case History
A 1½ year old male child was brought to the ENT OPD with complaints of bilateral nasal obstruction and purulent nasal discharge for 2 days. At that time the boy did not have any difficulty in breathing. He was taking liquid food but unable to take any solid food. His mother gives history of ingestion of FB 3 days back but was ignorant of the nature of FB. After ingestion the child became very irritable, cried intermittently and refused to take any solid food. However he took liquid food from time to time. They consulted a local doctor and he advised X-ray of neck, chest and abdomen. Since the patient is from a remote village he did not undergo any X-ray and when the discharge grew in excess, his mother finally brought him to the hospital.

The patient’s general and mental health was normal. Examination of ear, oral cavity and larynx yielded no significant clinical findings. His chest was normal. He was a mouth breather and had no respiratory difficulty. Nasal examination revealed bilateral purulent nasal discharge, hyperemic nasal mucosa and reduced bilateral nasal patency. Posterior rhinoscopy showed purulent discharge and obliteration of post nasal space. The exact cause of obliteration could not be identified because of the presence of excess purulent material. X-ray of soft tissue neck lateral view revealed a foreign body in the nasopharynx [FIG-2]. Nasal endoscopy with a 0° nasal endoscope confirmed a metallic FB in the nasopharynx. The child was admitted and was put on antibiotics and i.v. fluid. The operation was deferred to next day morning. He was put under anaesthesia by oral intubation in Rose’s position. Pharyngeal pack was given to prevent accidental dislodgement of FB in the lungs. Removal of FB was tried by nasal route with the help of a...
0° rigid fibreoptic endoscope but could not be extracted. Finally a rubber tube was passed through the nose and the FB was pushed into the oral cavity. It was finally removed by a Tilley’s forceps. No bleeding was seen. Pharyngeal pack was removed and the patient was finally recovered from anaesthesia.

Discussion

Chevalier Jackson had only 2 cases of FB nasopharynx inspite of dealing with 2000 cases of aerodigestive FB. The rarity is due to capacious space in the nasopharynx preventing FB impaction, and the FB may also get arrested in more narrow nasal space before entering the nasopharynx. The strong nasopharyngeal isthmus can prevent upward movement of FB during ingestion. However forceful emesis or coughing can eject a pharyngeal or oesophageal object into nasopharynx. The penetration of a substance during trauma or iatrogenic impaction of the FB during its removal is another rare cause of FB nasopharynx. The FB in the nasopharynx can remain silent for long or may present with symptoms simulating rhinosinusitis or adenoid hypertrophy; usual symptoms being bilateral nasal obstruction, purulent rhinorrhea epistaxis and halitosis. The further hypertrophy of lymphoid follicles due to infection may affect eustachian tube causing otalgia, otorrhoea and hearing impairment.

Conclusion

Investigation of choice to detect FB in nasopharynx is rigid endoscopy. Lateral view of skull is also necessary. This case is unique as inspite of being localised by nasal endoscopy and X-ray lateral view of skull with soft tissue neck, this foreign body could not be extracted by conventional methods. It had to be first moved to the oral cavity by rubber tube and extracted by Tilley’s forceps.

References