Case Report

Foreign Body Nose: An Unusual Presentation

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ABSTRACT

Introduction

This is a very interesting case of retained homicidal foreign body in the nose in contrast to most of the foreign bodies which are accidental.

Case Report

A 27 year old male presented to ENT emergency with alleged history of assault over face with sharp object following which patient developed nasal bleed. On examination vertical laceration of approximately 8 cm in length was present along left naso-orbital groove extending superiorly from medial canthus of left eye and inferiorly to nasal alar cartilage. On anterior rhinoscopy a metallic foreign body was seen in both nasal cavities, which appeared to be crossing from left to right side piercing the nasal septum. Foreign body was removed via open approach.

Discussion

Penetrating maxillofacial injury with foreign body impaction are less common. High index of suspicion is required in diagnosing these cases. Radiological intervention should be done to get idea of exact location and extent of foreign body. Lateral rhinotomy is a useful approach in removing these foreign bodies.

Keywords

Foreign Body; Nose; Homicidal; Lateral Rhinotomy

Nasal foreign bodies are most commonly seen in children and are unusual in adults. Whenever an adult patient presents with nasal foreign body, underlying accident, assault or psychiatric disorder should be ruled out. An eastern European retrospective study (over 10 years with 849 patients) identified the following relative proportions of foreign bodies: tracheobronchial 11%, pharyngo-oesophageal 17%, and ear, nose and post-nasal space 72%.[1] Our case is different as it is a case of homicidal foreign body in an adult which got impacted after an assault.

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Case Report

A 27 year old male presented to ENT emergency with alleged history of assault over face with sharp object following which patient developed nasal bleeding which was sudden in onset, gradually progressive, relieved on its own after sometime. There was no history of any retained foreign body, oral bleed, vomiting, seizures, diplopia, blurring of vision or any other ENT complaint. On examination a vertical incised like wound of approximately 8 cm in length was present along left naso orbital groove extending superiorly from medial canthus of left eye and inferiorly till nasal alar cartilage. The wound around the eye was primarily sutured with silk sutures by eye department. On anterior rhinoscopy metallic foreign body was seen in B/L nasal cavity appearing to be crossing from left side of the nasal cavity to the right side after piercing the nasal septum. On oral cavity examination, mouth opening was adequate and posterior pharyngeal wall was clear. Examination

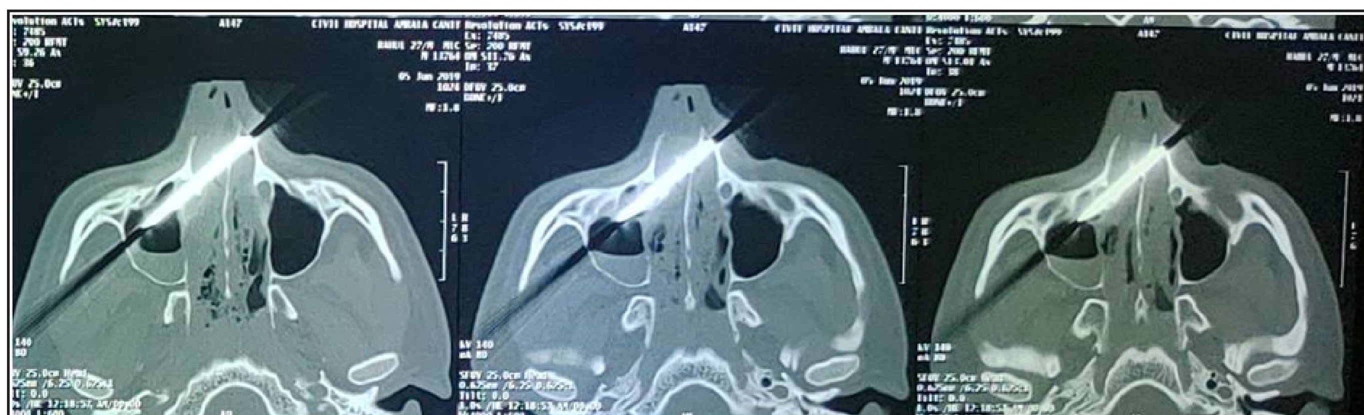

Fig. 1. Non contrast Computed tomogram depicting the radiopaque foreign body reaching up to posterior wall of right maxilary sinus.

of eye - B/L vision- normal, extraocular movements- normal in all directions, pupils- B/L normal reacting, no RAPD. Rest of the ENT examination was within normal limits. NCCT Nose and PNS was done for Medicolegal purpose and to see the exact location of foreign body. It showed metallic foreign body going from left naso-orbital groove entering left nasal cavity, going through nasal septum into right nasal cavity and entering till posterior wall of right maxillary sinus. No invasion into the orbit was seen. (Fig. 1) The patient was taken to ENT OT for foreign body removal under general anesthesia after taking written and informed consent for both endoscopic and external approach. Under GA, B/L nasal cavities were decongested and nasal endoscopy was done.

A metallic foreign body was seen in left nasal cavity going through the septum in right nasal cavity and into the maxillary sinus. Endoscopic manipulation was done to remove the foreign body but it was impacted and hence decision for external approach was made. Right lateral rhinotomy incision was made, soft tissue dissection done and part of anterior wall of right maxillary sinus removed. Foreign body visualized in maxillary sinus reaching upto posterior wall and roof, however, no breach was seen. Taking endoscopic control through right maxillary sinus, foreign body removed from left side entry wound. (Figs. 2 and 3) No immediate post op bleeding observed. Incisions closed in layers by inner Vicryl®, outer silk respectively and B/L anterior nasal packing was done with one full Merocel® in each nasal cavity. Pack removal was done on post-operative day 2 and patient was discharged on antibiotics and nasal decongestants. Patient underwent complete suture removal on post op day 7 and is continuously on regular follow up. Septal perforation was healed and no post-op. septal hematoma or abscess was seen. Patient is on regular follow up and a well healed scar is present.

Discussion

Foreign bodies in the nose can be situated in any portion of the nasal cavity. Foreign bodies in PNS are rare, if present they are usually traumatic or iatrogenic. Traumatic ones include pellets or bullets from gunshot injuries, wood, pieces of glass, and stones, while iatrogenic ones includes teeth, dental cement, and pieces of broken forceps.2-4 The approach in these patients include thorough clinical examination and radiological investigation to see exact location and extent of foreign body. The treatment protocol for a penetrating maxillofacial injury is to decompress, debride and avoid neurovascular injury and subsequent complications.

A multidisciplinary surgical intervention is always required in these cases. The surgical approach is chosen on basis of size, shape, material and location of foreign body. External approach could also be used if the foreign body is not retrievable by endoscopic approach. In a case in Turkey, septorhinoplasty was performed as a part of removal of asymptomatic foreign body in nose in a 17 year old patient.5 In our

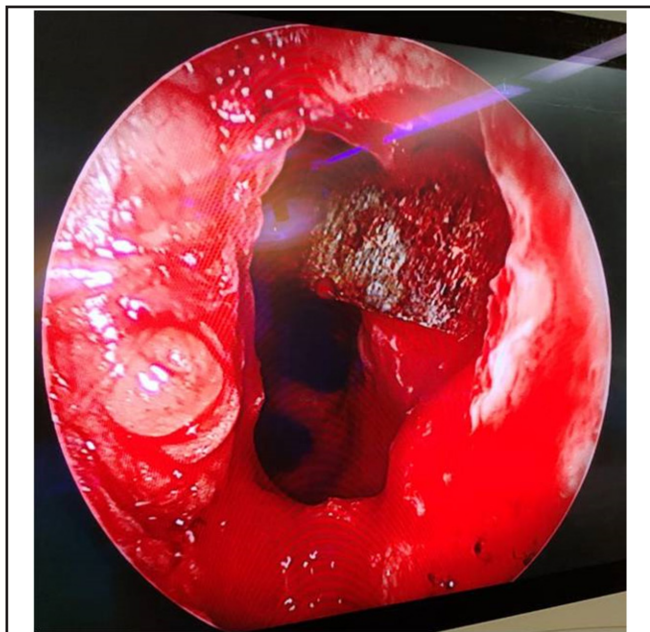

Fig. 2. Intra-operative picture showing foreign body in the right maxillary sinus after right maxillotomy.

Fig. 3. Metallic foreign body after removal

case we performed anterior maxillectomy as a part of removal of foreign body because it was entering into the maxillary sinus and to look for possible injury to internal maxillary artery as the foreign body was sharp and in close contact to posterior maxillary wall. Our case also emphasizes importance of thorough clinical examination in identifying such retained foreign bodies and further helping in the management of the patient. Penetrating maxillofacial injury with foreign body impaction are less common. High index of suspicion is required in diagnosing these cases. Clinical examination helps in identification of foreign body as it did in our case. Radiological intervention (CT) should be done to get idea of exact location and extent of foreign body. Lateral rhinotomy is a useful approach in removing these foreign bodies.

Abbreviations

ENT - Ear, Nose and Throat

RAPD- Relative Afferent Pupillary Defect

NCCT- Non Contrast Computed Tomography

OT- Operation Theatre

GA- General Anaesthesia

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