



UNUSUAL PRESENTATION OF A FOREIGN BODY IN NASAL CAVITY IMPACTED THROUGH GINGIVO-LABIAL MUCOSA : A CASE REPORT

Medical Science

Dr Sachiv Garg* Senior Resident, Dept. of ENT, GMC Patiala, *Corresponding Author

Dr Sanjeev Bhagat Professor & Head, Dept. of ENT, GMC, Patiala

Dr. Dinesh Sharma Assistant Professor Department of ENT GMC Patiala

Dr Peeyush Verma Junior Resident Department of ENT GMC Patiala

KEYWORDS

Nasal Foreign bodies, Diagnostic Nasal Endoscopy, Type of foreign body

INTRODUCTION :

Nasal foreign bodies 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. Another common location is immediately anterior to the middle turbinate^[1].

Some foreign bodies are inert and may remain in the nose for years without mucosal changes.

However, most inanimate objects initiate congestion and swelling of the nasal mucosa, with the possibility of pressure necrosis producing ulceration, mucosal erosion, and epistaxis. These changes further impact the foreign body because of surrounding oedema, granulations, and discharge. This is particularly seen with vegetable foreign bodies which not only absorb water from the tissues and swell but also evoke a very brisk inflammatory reaction^[1]. Occasionally, the inflammatory reaction is sufficient to produce toxemia^[2].

A foreign body can act as a nucleus for concretion if it is firmly impacted or is buried in granulation tissue by receiving a coating of calcium, magnesium phosphate, and carbonate and thus becomes a rhinolith. Rhinoliths are initially symptomless and later cause nasal obstruction only if they become enlarged^[1].

Any patient who presents with a unilateral nasal discharge should raise the suspicion of a nasal foreign body and in children this must be regarded the case until proved otherwise^[1]. A unilateral mucopurulent nasal discharge, unilateral nasal obstruction with foul odour is the most consistent findings in patients with a nasal foreign body. Occasionally, discharge can be bloodstained. Rise in body temperature, headache, epistaxis usually occurs with long standing stay of foreign body in nasal cavity due to secondary infections and are not infrequent. Owing to the secondary infections and bone/cartilage destruction, complications can occur. Leucocytosis result from secondary infection^[1].

CASE REPORT :

5 year old male child presented to ENT emergency department, being referred from CHC with alleged history of foreign body insertion in right nasal cavity for 1 day prior to admission.

Informant were parents. History of oral bleed, right nasal bleed and fever was present. There was no active bleeding at the time of presentation. Child complained of right sided nasal blockade with excruciating pain and right nasal blood stained discharge.

On local examination: on anterior rhinoscopy, nasal septum was found pushed to left side due to mass effect of foreign body(wooden twig) in right nasal cavity. Foreign body was found obliterating the entire right anterior nasal cavity and causing a bulge on dorsum of nose and widening of right nasal ala. Clotted blood was seen at the anterior nares. Left nasal cavity clear.

Oral cavity and oropharynx examination – lacerated wound(0.5cm x 0.5cm)(fig-1) seen at right upper gingivo-labial mucosa communicating to floor of right nasal cavity. Mouth opening adequate. Dentition normal. Posterior pharyngeal wall was normal looking. Diagnosis of foreign body in right nasal cavity was made.



Fig-1

Child was kept nil per oral for 6 hours while intravenous drip was maintained. Routine blood investigations were done including complete blood count, liver function test, kidney function tests, viral markers and urine routine were done. Pre anaesthetic check up was done by anaesthesia team. Child was found to be anaemic with hemoglobin 8.2 grams per decilitre and leucocytosis with 18,700 per cubic mm. Rest investigations within normal limits. Patient was taken to operation theatre with pre-operative arrangement of one packed RBC unit.

Under IPPV via oral intubation, cleaning and draping done. Foreign body visualized and found to be impacted in right nostril via right upper gingivo-labial mucosa. Blunt dissection done and Foreign body(wooden twig) removed(fig-2) under vision using mosquito aretery forceps. Nasal endoscopy done and right nasal cavity found to be within normal limits except some mucosal injury on anterior part of septum. Right nasal cavity found to be patent. Hemostasis was achieved. Child was shifted to ward under satisfactory conditions after anaesthesia reversal and extubation. Patient responded well to medication and fever was relieved. Post operative period was uneventful.



DISCUSSION :

Although floor of nasal cavity below inferior turbinate is the most favoured site for lodgement of foreign body, but rare involvement of areas like posterior part of nasal septum, area between nasal septum and nasal bone at the level of nasal passage turbinate(stone), maxillary antrum(door handle), nasal septum(plastic nasal splint), area between nasal mucosa and nasal septal cartilage(toothbrush), nasal cavity and maxillary sinus(cleaning steaks) have also been reported in literature. Here in our case, the foreign body(wooden twig) got lodged in the right nasal cavity. However, its laceration through the upper right gingivo-labial sulcus and impaction into the floor of nasal cavity makes it an

uncommon presentation. The child impacted the foreign body accidentally during playing at home.

The size and shape of the foreign bodies can determine the difficulty in its removal, what can cause epistaxis, more rarely septal perforation, rhinosinusitis and bronchoaspiration^[3].

Any article small enough to be admitted into the anterior nasal orifice has, at one time or the other, been removed from the nose. Foreign bodies 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^[4].

Cases of nasal foreign bodies are frequently seen during childhood, and they are seen in adults because of traumas or mental disorders. In cases of a nasal foreign body accompanied with foul-smelling, purulent nasal flow, epistaxis is typically present, and removal of the foreign body is the remedy in such cases^[5].

CONCLUSION :

Several points need to be emphasised when dealing with nasal foreign bodies:

- Nasal foreign bodies are commonly encountered in emergency departments, particularly among children and mentally retarded patients.
- Successful diagnosis and treatment of nasal foreign bodies depends on careful examination of the nasal cavity and its adjacent structures.
- Medical personnel skilled in the technique of removal of nasal foreign bodies should be involved from the outset.

REFERENCES :

- 1) A Kalan, M Tariq. Foreign bodies in the nasal cavities: comprehensive review of the aetiology, diagnostic pointers, and therapeutic measures. *Postgrad Med J* 2000;76:484-487
- 2) Khabiruddin Ahmed, Ahmad Taous. An Unusual Foreign Body Nose. *Bangladesh J Otorhinolaryngol* 2014; 20(2): 102-105
- 3) Dr. Santanu Shit, Dr. Ashim Sarkar, Dr. Tshering Dorjee Sherpa, Dr. Ritam Ray, Dr. Manoj Mukherjee, Dr. Manotosh Dutta. Unusual Foreign Body in Nasal Cavity : A Case Report. *Bengal state journal of otolaryngology*, Dec 2013; 21(02)
- 4) Pavan M. Patil, Rajeev Anand. Nasal Foreign Bodies: A Review of Management Strategies and a Clinical Scenario Presentation. *Craniofacial Trauma Reconstruction* 2011; 4:53-58. Published online: February 18, 2011. DOI: <http://dx.doi.org/10.1055/s-0031-1272902>
- 5) Ince B, Dadaci M, Altuntas Z. Seventeen-year-old asymptomatic foreign body in the nose: Case report. *Int Med J Sifa Univ* 2014;1:15