

WOODEN FOREIGN BODY IN NASAL CAVITY: AN UNUSUAL CASE REPORT

*Subrat K. Behera, **Girija S. Mohanta, ***Pitabas Nayak

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ABSTRACT:

Introduction: Nasal foreign bodies are more commonly encountered in pediatric age group. If an adult comes with excoriation of nasal dorsum skin or non healing ulcer and have history of fall or road traffic accident, a thorough clinical examination and diagnostic procedure is required to establish the diagnosis, skilled technique may be required for removal.

Conclusion: Here we present a case of wooden object in the nose which is a rare of its kind in adult.

Keywords: Wooden foreign body, Nasal cavity.

INTRODUCTION:

Nasal foreign bodies are commonly encountered in emergency departments, particularly among children and mentally retarded patients¹ Nasal FB in adults are uncommon. Wooden foreign bodies within nasal cavity may remain asymptomatic for long duration and may be missed in plain radiograph and CT scan.

Patients are presented with unusual symptoms related to complication of FB. Successful diagnosis and treatment of nasal foreign bodies depend on careful nasal endoscopy and skilled technique of removal. We are presenting a case of a lady, who implanted a wooden bamboo stick accidentally due to fall from a tree and presented to us after 1 month of incident with unusual complain of excoriation of nasal dorsum skin.

CASE REPORT:

A 32 year old woman was presented to Outpatient department with chief complain of excoriation of nasal dorsum skin since 15 days. She had history of fall from a tree and a stick was pierced in to the dorsum which was removed in local hospital 1 month back. She had pain and bleeding from nose, which did subside on medication. The symptoms were not associated with nasal obstruction, decrease smell perception and nasal discharge. There was no history of loss of consciousness, vomiting and bleeding from ears. On examination the patient was conscious, cooperative and well oriented

without any neurological deficit. There was small unhealing ulcer on dorsum of nose, just left lateral to midline with excoriation of skin (Fig. 1) up to nasofacial crease. There was no other wound or nasal deformity externally. Local tenderness was present. Eyeball movements were normal with normal vision. On cold spatula test fogging on both side were normal.

Anterior rhinoscopy showed a yellow-pinkish, firm foreign body on left nasal cavity. That was insensitive to touch and did not bleed on probing. Posterior rhinoscopic examination was normal. Diagnostic nasal endoscopy was revealed, a yellowish firm wooden stick foreign body in left nasal cavity medial to middle turbinate, extending from roof to the level of inferior turbinate (Fig. 2). The examination of throat showed no abnormality. X ray of nose and paranasal sinuses was inconclusive. CT scan was done, which showed left maxillary mucosal thickening; but

Affiliations:

* Prof and HOD, ** & *** Post Graduate, Deptt. Of ENT and Head and neck Surgery, S.C.B. Medical. College, Cuttack, Odisha.

Address of Corresponding Author:-

Dr. Girija Shankar Mohanta

Post Graduate, Deptt. Of ENT and Head and neck Surgery, S.C.B. Medical. College, Cuttack, Odisha.
Contact-9937644983
Email- girija.mohanta@yahoo.com

inconclusive. The detail hematological and routine works up were done and were within normal limits. The patient was planned for exploration of wound under general anesthesia. We removed a 3cm × 1 cm of wooden bamboo stick from left nasal cavity found attached to roof and hanging up to the level of inferior turbinate through external approach. After removal whole nasal cavity was washed with normal saline, homeostasis was maintained and antibiotic soaked anterior nasal pack was given. The pack was removed on 2nd post operative day and patient was discharged. Patient was follow up on 7th post operative day and found to have normal nasal cavity and wound healed.

DISCUSSION:

Nasal foreign bodies are most common between age 2-4 group². They are more common in children than adults because children are more likely to put anything in to their nose or in to other children's nose³. Foreign bodies in adults are mainly seen in psychiatric disorder patients, self inflicted harm as seen in suicidal attempts person^{5,4} or prisoners who sometime attempts to temporarily escape justice⁶. In normal adult, foreign bodies may be implanted in to nose and Para nasal sinuses accidentally like road traffic accident, fall from height or drowning. These cases are often associated with maxillo-facial injury. Foreign bodies are either animates or inanimates¹. Inanimates nasal foreign bodies are classified as organic and inorganic. The plastics and metal s are common as inorganic foreign bodies⁷. Organic foreign bodies are seeds, food, wood etc.

Nasal foreign bodies are generally painless. Any patient who presents with a unilateral nasal discharge should raise suspicion of a nasal foreign body and in children this must be regard as the case until proved otherwise¹. Accidentally implanted nasal foreign bodies without much external and maxilla-facial injury are difficult to diagnosis. Entry wound are contaminated and presence of foreign body pieces makes the wound unhealing. Irritation of wound and surround skin due to presence of FB may lead to excoriation of skin (as in our case).

The physical examination of nose involving anterior rhinoscopy and use of 0 degree rigid endoscope will often reveal foreign body. However on occasions mucosal edema or granulation tends to hide it, vasoconstrictors should be used to decongest the mucosa prior to examination⁸.

Although standard plain radiographs clearly show the presence of FB, for their precise and accurate localization within the sinuses, orbits& soft tissues CT scan may be required in high density foreign body⁹.

Dry wood has air content^{10, 11}. On CT scan, in the early stage, it presents as low attenuation linear or cylindrical focus surrounded by hypo dense inflammatory soft tissue. In late stage due to mineral deposition, it becomes hyper dense. Intra nasal wooden foreign body may be missed in early stage on CT because of apparent air attenuation of FB and lack of contrast with the surrounding intranasal air¹² (as in our case).

The size and shape of the foreign bodies are determining the method of removal and make difficulty in removal. If foreign bodies are left inside may result in chronic sinusitis, FB granulation formation, secondary infection, osteomyelitis and sinus formation¹³.

Transnasal endoscopic technique^{9,13, 14} offers excellent visualization and easy removal of FB. Other external approaches like lateral rhinotomy may be required in complicated and selected cases like in our case we removed through external approach.

Complication during the removal may cause epistaxis, injury to neighboring structure, aspiration, orbital hematoma, rhinosinusitis etc.

If the CT is negative but a wooden foreign body is suspected, MRI may be performed. MRI shows the retained wooden foreign body to be hypo intense to skeletal muscle on both T1 and T2 weighted sequence. However CT should be performed initially in a patient suspected a harboring a FB, Since metallic FB may be present and result in a severe or fatal injury if the metal reacts to the magnet of the MRI³.

CONCLUSION:

Foreign body in nose with unusual presentation need nasal endoscopy for diagnosis. Complicated cases may require latal rhinotomy for removal for the same.



Fig.1: Small unhealing ulcer on dorsum of nose, just left lateral to midline with excoriation of skin.

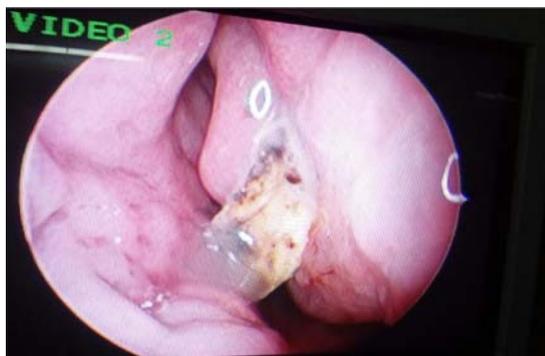


Fig. 2: A yellowish firm wooden stick foreign body in left nasal cavity medial to middle turbinate, extending from roof to the level of inferior turbinate.



Fig.3: Pre operative photograph.



Fig.4: Post operative photograph.

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2. Conflict of interest: The authors declare that they have no conflict of interest.
3. Informed consent: Informed consent was taken from every patient.
4. Ethical approval: All procedures performed in studies involving human participants were in accordance with the ethical standard of institution.

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