

Case Report

An unusual foreign body nose: a case report

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ABSTRACT

Nasal foreign bodies constitute an emergency and are more common in children with insertion generally via anterior nares. Case presentation: We present a case of 57-year-old-man with unusual entry site foreign body nose after external trauma to face, confirmed by 3D computed tomography and extracted through nasal route without any complication. Thus, nasal foreign bodies, a frequent accident in medical practice, usually harmless, but if neglected may cause complications hence prompt extraction is important.

Keywords: Foreign body, Nose, Unusual

INTRODUCTION

The type of nasal foreign body varies and extraction may seem difficult, with risk of complications.¹ Some typical anatomical sites include nasal entrance anterior to the middle turbinate and floor of the nasal cavity just below the inferior turbinate.^{2,3} However, one must visualize every anatomical location in the nasal cavity to avoid overlooking FBs.² Changes in appearance and function can be prevented by prompt and appropriate management. We present an interesting case of an adult male, in which foreign body entered the nasal cavity after external trauma.

CASE REPORT

A 57-year-old male patient complaining of pain and foreign body in right side of nose was admitted to our emergency department. He had a trauma history in which he fell from a tree in his farm two days ago, and as the patient described, a foreign body was lodged in his nose on right side which was very painful. The foreign body was impacted in the place and could not be pulled out.

The physical examination revealed a 1 cm entry wound on the right nasolabial sulcus and also, a moderate soft tissue swelling in left nasolabial, superior oral and premaxillary region. External examination showed a bulge on left side of face and FB could be palpated in the premaxillary region. There was no associated bleeding from nasal or oral cavity. Anterior rhinoscopy and diagnostic sinus endoscopy was done- right nostril ala of nose was compressed by the FB. The rest of the ear, nose and throat examination showed no abnormality. Patient had no history of major illness, surgery or allergy. His routine blood examination findings were within normal limits. A 3D computerized tomography face showed a FB in the right nasal cavity, a linear tubular hypodense structure in deep subcutaneous and muscular plane extending to midline to upper lip for approximate length 8cm and maximum thickness 8 mm (Figure 1). He was taken to the operating room after written informed consent. Under general anaesthesia after oro-tracheal intubation with all the necessary precautions the foreign body was removed en-masse with the help of artery forceps under endoscopic guidance. To our surprise indeed it was an eight cm long and one cm wide strong twig of a tree which had penetrated from the right

nasolabial sulcus through the sublabial space to premaxillary region deep enough to cause the swelling on the left side too (Figure 2).



Figure 1: Foreign body in situ in the right nasal cavity.



Figure 2: Extracted foreign body measuring approximately 8 cm x 1 cm.

There was no associated bleeding after removal. Nasal irrigation and antibiotics were given. Anterior nasal packing was performed and the pack was removed after 24 h. The patient was discharged on second post-op day. No infection or purulent discharge was seen in the follow-up.

DISCUSSION

Nasal foreign bodies are a frequent accident in medical practice, especially in young children out of curiosity, nasal itching by rhinitis or otalgia and attraction to small, round objects.^{1,4,5} Thus, the most common entry site FB is via anterior nares. But in our case, FB entered the nasal

cavity transcutaneously, which is very unusual. Although there have been cases with unusual sites of penetration, such as craniofacial trauma from orbital FB, the entrance of the nasal FB described above remains unique.⁶ Most common clinical symptoms are nasal obstruction, unilateral purulent nasal discharge, epistaxis and foul odour. FBs are generally harmless, but may incur complications such as sinusitis, otitis media, rhinolith formation, periorbital cellulitis, meningitis, hence timely extraction is of importance.⁴ Nasal foreign bodies may also be life-threatening in case of aspiration.¹ If nasal injury is suspected as in this case, search for presence of nasal fracture, other facial injuries and head injury should be done. The nasal bones are the most commonly fractured bones of the face, as they occupy a prominent, exposed position and have little structural support. After assessment a careful intranasal examination with particular attention to significant rhinorrhoea (CSF leak), epistaxis, septal haematoma, septal deviation, lacerations, swelling and bruising, crepitus and instability, facial/mandibular fracture, ophthalmoplegia, facial anaesthesia should be carried out. The diagnosis of foreign body is generally made on clinical grounds and imaging is usually done for complete maxillofacial assessment.⁵ In our case neither the physical examination nor the CT face revealed any other deformity apart from the FB.

Once diagnosed two categories of technique for extraction may be distinguished: non-instrumental and instrumental manoeuvres.⁴ Here we advocated instrumental manoeuvre as the FB was impacted. The most common complication after foreign body extraction is epistaxis especially in patients with hard and irregularly shaped foreign bodies.¹ However, our patient did not have any bleeding after removal of FB. After successful removal of a nasal FB, careful endoscopic examination of the involved nasal cavity must be done to ensure no other pieces are left in the cavity. In a patient with a penetrating injury to the face, one should suspect and investigate any hidden FB embedded in deep tissues and in case of the penetrating object, it should be examined to ascertain if any part is missing. Also, examination of the ear and sinuses must be undertaken to exclude the presence of other unrecognised foreign bodies as acute otitis media or sinusitis are commonly seen if the FB has been present for any length of time.^{1,2}

CONCLUSION

To conclude, successful removal of a nasal foreign body depends on the location, its shape, patient cooperation and the experience of the physician. Nasal FBs should not be neglected and must be removed as soon as possible, preferably by an otorhinolaryngologist. Each patient should be treated individually by selecting an appropriate intervention method in consideration to the properties of the foreign body and the resulting symptoms. The best treatment, however, remains prevention.

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