



Exceptionally long duration an unusual nasal foreign body : 3 cases with review of literature

ENT

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ABSTRACT

Foreign bodies of the nose in adults are a rare entity and seldom encountered, although they are frequently encountered among children and mentally challenged patients. Here we present 3 unusual cases of foreign body nose, 1 adults and 2 childrens. They all predominantly presented with nasal symptoms and finally turned out to have foreign body lodged in their nasal cavity. Tooth in the nasal cavity of first adult case, polythene carry bag piece in nasal cavity of second children case. Company poythene sticker foreign body in the third children case.

KEYWORDS:

foreign bodies, nasal cavity, intranasal tooth.

INTRODUCTION

Nasal foreign bodies are commonly seen in the paediatric age group of 2-8 years and mentally retarded individuals because of curiosity and interest in exploring their bodies which make them more vulnerable to lodging foreign bodies in their nasal cavities 1. Nasal foreign bodies among adults in extremely rare and if present is without their knowledge. In adults, they are caused mostly by injury in an accident, trauma or coexisting mental disorders making in difficult to suspect foreign body in them 2. There have numerous literature on paediatric foreign bodies documented and most commonly encountered foreign bodies in nose include toys, sweets, jewels, rocks, batteries, magnets, etc. Both among the children and adults, inanimate foreign bodies constitute the majority when compared to live foreign bodies 2,3,4. The presence of a foreign body is not usually life threatening. However, it may result in long term complications, and could even be fatal, if the object gets dislodged into the airway. The foreign bodies in nose present with a wide spectrum of symptoms and signs. In adults a high index of suspicion is needed 2,5,6

Here we present 3 different cases of long duration unusual foreign bodies our first case is a 25 yrs young adult male having left nasal foreign body as tooth. Our second case is 8yrs old male children having left nasal foreign as polythene carry bag piece. Our third case is 4yrs old male children having left nasal company polythene sticker. The incidence of ectopic teeth is uncommon and its incidence is 0.1 to 1% which makes it a rare entity 7. but in our case patient gives history of fall from tree and displacement of tooth in nasal cavity, as tooth is absent in oral cavity that is interesting fact of this case that might be cause of nasal tooth foreign body

Case 1

A male patient of 25 year old present to our otorhinolaryngology dept opd with history of left nasal obstruction since 5 years with nasal bleeding intermitantly Patient also give history of fall from tree 5 year back since that time patient left incisor was also lost but patient couldnot make out at that time the relation between the of foreign body in left nostril and history of fall.

On anterior rhinoscopic examination patient have left nasal mass at floor of left nostril which was dull raddish with crusting and granulation over it, after suctioning of left nostril there was a small part of tooth Fig 1. A Xray of patient shows round opacity in left nostril.

On nasal endoscopic examination there is mass seen in floor of left nasal cavity present anteriorly, rest of the nasal cavity shows crusting

and congesation all routine blood investigation of patient were done We removed this foreign body in our department minor operation theater with the help of nasal packing forceps Fig 1b,c.

Case 2

A 8yr old male child presents to our otorhinolaryngology dept. opd with history of left nasal obstruction since 3 yesars, foul smelling nasal discharge since 2 years On anterior rhinoscopic examination there was foul smelling discharge and there were thick greeninsh secretions. Xray of paranasal sinuse shows no evidence of foreign body in left nasal cavity but it shows signs of b/l maxillary sinusitis On endoscopic examination there were piece of poythene seen in left nostril fig 2 a. Routine blood investigations of patient were done.

Foreign removed in operation theater under general anesthesia fig 2b.

Case 3

A 4 year male child present to our otorhinolaryngology dept.opd with history of foul smelling nasal discharge since 2 years as history given by parents with no history of fever cough, nasal bleeding.

On anterior rhinoscopic examination there was only foul smelling discharge. Xray paranasal sinuses were normal all blood investigation of patient done Patient foreign body removed in operation theater under general anesthesia. On endoscopic examination there were sticker present at floor of left nostril when tried to removed with nasal forceps on operation table it get pushed backward in to nasopharyng where it get stuck to post pharyngeal wall we were trying to find out in oral cavity but could not find out. but after extubation patients gets lot of cough for 10 minutes after that it expelled from oral cavity and its foud to be as small circular marketed company sticker fig 3 a&b.

DISCUSSION

Nasal foreign bodies produce local inflammation which may result in pressure necrosis and damage to the nasal cavity and surrounding structures. Symptoms are mainly caused by inflammation, mucosal damage and extension into adjacent structures and could include sneezing, epistaxis, nasal obstruction, nasal discharge, pain, and eventually rhino sinusitis 2,8. Some foreign bodies are inert and may remain in the nose for years without mucosal changes. However, most inanimate foreign bodies in nose initiate congestion and swelling of the nasal mucosa, with the possibility of pressure necrosis producing ulceration, mucosal erosion, and epistaxis. The retained secretion, the decomposed foreign body, and the accompanying ulceration can result in foul fetor. These changes further impact the foreign body because of

surrounding edema, granulations, and discharge 2,8. In literature various iatrogenic foreign bodies have been reported to cause nucleation and deposition of calculi, including intrauterine devices, catheters, suture materials, and surgical staples 2,9 .

Intranasal ectopic teeth are rare. Yeung and Lee reviewed the literature and found a total of 41 well documented cases 10. The age at discovery of the intranasal teeth ranged from 3 to 62 years. The etiology of intranasal teeth is controversial. Many theories have been proposed, including developmental disturbances, such as cleft palate, teeth displaced by trauma, cysts, infection, obstruction to eruption secondary to crowding of dentition, persistent deciduous teeth, or dense bone 11,12,13. Intranasal teeth presented a variety of symptoms and signs, including nasal pain, nasal obstruction, epistaxis, headache, nasal discharge, mild fever, crusting of the nasal mucosa, localized ulceration, external deviation of the nose, nasal septal abscess, and nasal-oral fistula. Intranasal teeth may also be asymptomatic and may be only incidentally recognized during routine clinical or radiographic examination. The diagnosis of an intranasal tooth can be made from either clinical examination or radiographic examination. Clinically an intranasal tooth presents as a white mass without covering of nasal mucosa or as protruding reddish mass, which is completely or incompletely embedded in the nasal mucosa. Intranasal tooth located in the floor or lateral wall of the nasal cavity can be surrounded by debris and granulation tissue. When intranasal masses are identified clinically, the differential diagnosis should include nasal foreign bodies, rhinoliths, bony sequestra, neoplasm, and exostoses 11-15. A unilateral mucopurulent nasal discharge with foul odour is the most consistent findings in patients with a nasal foreign body. Occasionally it can be bloodstained. Any patient who presents with a unilateral discharge should raise the suspicion of a nasal foreign body and in children this must be regarded the case until proved otherwise 2. The physical examination of the nose involving anterior rhinoscopy and use of either a fiberoptic nasopharyngoscope or a 0 degree rigid endoscope has made it easier for the otorhinolaryngologist and will often reveal the foreign object. However on occasions mucosal edema or granulations tend to hide it. In such cases the nose should be sprayed with a vasoconstrictor agent to shrink the mucosa before reexamination. Suction apparatus also plays an important role in making the foreign body visible by removing the secretions and debris accumulated around. Many times the foreign body becomes apparent with these maneuvers. In younger or very apprehensive children it may be necessary for the search to be carried out under a general anesthetic 2-5 . After successful removal of a nasal foreign body, careful examination of the involved nasal cavity as well as the other body orifices must be undertaken to exclude the presence of other unrecognized foreign bodies. Particular attention must be paid to the examination of the ear and sinuses on the involved side as acute otitis media or sinusitis are commonly seen if the foreign body has been present for any length of time. Additionally, epistaxis which frequently accompanies the removal of nasal foreign bodies must be appropriately dealt with. Foreign bodies left in the nose have been reported to cause infections, including sinusitis, otitis media, facial cellulitis, meningitis, epiglottitis, diphtheria, and tetanus. Certain foreign objects may cause erosion of adjacent structures. Any foreign body in the nose may be swallowed or aspirated and should be removed as soon as possible be it whether child or adult 16,17,18 .

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SUMMARY

Any foreign body in nose presents challenges to otorhinolaryngologist so careful inspection of the nasal cavity with endoscope is necessary. An intranasal ectopic tooth is an uncommon arising in the nasal cavity. It may be confused with other nasal cavity mass. Otorhinolaryngologist should be aware of this disease entity when encountering patients presenting with a nasal obstruction, foul smelling nasal discharge and nasal mass. Also give considerations to the history of parents in case of childrens properly evaluate The history of patients . In adults strong suspicion is needed to make a diagnosis of foreign body. So it becomes imperative that endoscopes

must be used based on availability before a plain diagnosis of sinusitis is made and patient under treated.

Fig 1 a,b&c



Fig .1 left nasal foreign body 1 tooth , removal, tooth [ab&c]

Fig 2

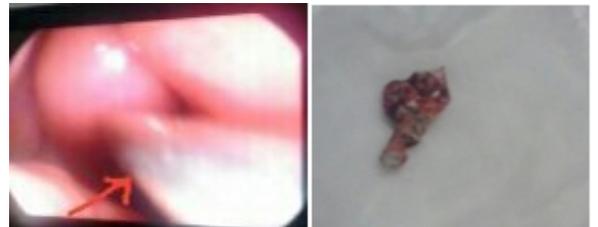


Fig 2 endoscopic view of left nasal foreign body , polythene piece sample [a&b]

Fig 3



Fig 3 endoscopic image of foreign body , foreign body polythene sticker [a&b]

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