

## Case Report

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# An Unusual Foreign Body Nose

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### Abstract

*The presence of a foreign body in the nose is a relatively uncommon occurrence. Many unusual foreign bodies in the nose have been reported in the literature. Other than the common foreign bodies, some uncommon things have made interest like fish hook, anterior nasal pack, door handle, metal hooks and eyes, umbrella springs and coins also reported. A case of anterior nasal pack also reported and very interesting for several reasons. To the best of our knowledge, the nasal packing in this case is the largest foreign body left in situ. But here a case of 'lost' nasal splint which was kept after septoplasty operation for prolonged time has been discussed. A 32 years old man had this splint in his left nasal cavity for 9 years and had been suffering from persistent nasal discharge for this time. He was treated conservatively by many ENT specialists but had no improved. Afterwards he had undergone surgery and this plastic splint identified and removed.*

**Key word:** Foreign body nose, nasal splint

### Introduction

A nasal foreign body is a condition where something gets stuck in nose. This may include food, small toys, beads, disk batteries, insects, worms, or pieces of broken bones and cartilage. Maggots are also considered as foreign body! Nasal foreign bodies may get trapped in any part of the nasal cavity. The victim may have trouble in breathing if the object is very deep in the nasal cavity. Nasal foreign bodies may also cause itching, pain, headache, and frequent sneezing. Blood or a thick, yellowish fluid may drain from the affected nostril. If the foreign body is alive, such as insects or worms,

patient may feel movement in their nose. Rare symptoms have been reported, including bromidrosis (foul body odor) and infections, such as facial cellulites, epiglottitis and cephalic tetanus. Differential diagnosis of a unilateral nasal obstruction include nasal polyp, nasal tumor, septal hematoma, or unilateral choanal atresia<sup>1</sup>.

Out of these common foreign bodies, some uncommon things have made interest like fish hook, anterior nasal pack, door handle, metal hooks and eyes, umbrella springs and coins also reported. In a case, anterior nasal pack is very interesting for several reasons. To the best of our knowledge, the nasal packing in this case is the largest foreign body left *in situ* for over 10 years. He had epistaxis for this. The foreign body had essentially obliterated the whole right nasopharynx. A report of tooth brush head as nasal foreign body also reported in Scotland<sup>2</sup>.

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In the present case, a nasal plastic splint is the object entrapped in nasal cavity which was introduced during septoplasty and was not removed post operatively. It was lost during removal and could not found after search.

Sometimes diagnosis is very difficult. To the unsuspecting, a unilateral suppurative or mucopurulent fetid nasal discharge may suggest a number of possibilities other than a foreign body. On the other hand, the presence of a foreign body may be suspected but to prove its presence may be a trying task. A high index of suspicion is necessary so that further diagnostic maneuvers can be tried before a label of "no foreign body" is stamped on the case.

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. 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 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. Occasionally, the inflammatory reaction is sufficient to produce toxæmia<sup>4</sup>.

Button batteries may result in severe destruction of the nasal septum. These are composed of various types of heavy metals: mercury, zinc, silver, nickel, cadmium, and lithium. Liberation of these substances causes various types of lesions depending on the localisation, with an intense local

tissue reaction and liquefaction necrosis. As a result they can cause septal perforations, synechiae, constriction, and stenosis of the nasal cavity<sup>1,4</sup>.

Several important complications have been associated with the presence of an nasal foreign body. These include formation and development of rhinoliths, erosion into a contiguous structure, and producing infections in surrounding structures. Apart from acute sinusitis or otitis media, other infections reported include periorbital cellulitis, meningitis, acute epiglottitis, diphtheria, and tetanus<sup>1,3</sup>.

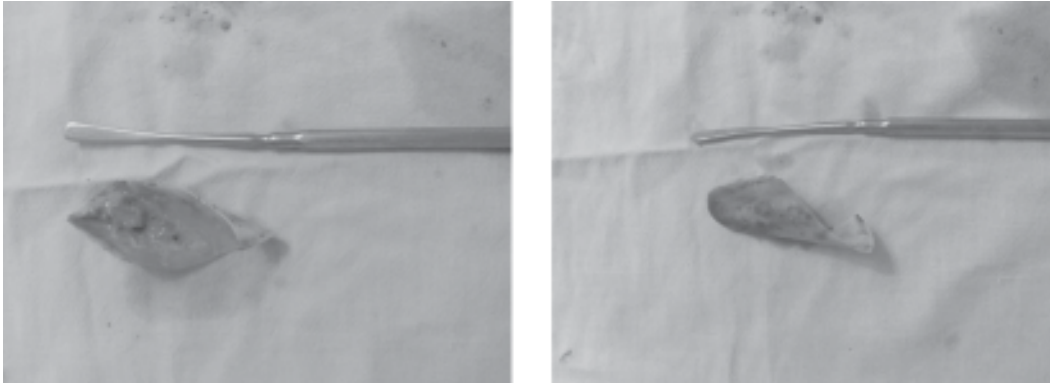
### Case Report

Asiful Islam, aged 32, came with foul smelling nasal discharge for 9 years with history of Septoplasty for Deviated Nasal Septum in a private hospital in Dhaka.

After operation the patient went to Saudi Arabia for job. After some day purulent nasal discharge started and no improvement observed after any sort of conservative treatment. He underwent Antral Wash Out 7 yrs back with no better outcome. Then he came back to Dhaka for further treatment.

This patient was examined again. There was foul smelling thick purulent nasal discharge from left nasal cavity. Suction and clearance was done. A hard sheet like structure surrounded by granulation tissue was found in the posterior part of left side of nasal septum. Then X-ray PNS was done and nasal cavity and sinuses was found clear. Provisional diagnosis was old foreign body left nasal cavity.

How much old it was? It was 9 years old, and that was plastic nasal splint! This foreign body was removed in August, 2014 under GA with difficulty.



**Fig.-1:** showing : Old plastic nasal splint in different views

### Discussion

A review of the literature shows that intra-nasal foreign bodies have been frequently reported especially among children. Among adults, however, they occur very rarely and are caused mostly by injury in an accident, trauma or coexisting mental disorders. In a large study of 420 cases of foreign bodies in the nasal cavity only one adult case, a homeless man with nasal myiasis was described. Unusual foreign bodies including buttons have been described very rarely in adults<sup>4</sup>

Other unusual foreign bodies like fish hook, anterior nasal pack also reported. In a case, anterior nasal pack is very interesting for several reasons. To the best of our knowledge, the nasal packing in this case is the largest foreign body left *in situ* for over 10 years. He had this for epistaxis. The foreign body had essentially obliterated the whole right nasopharynx. A tooth brush head as nasal foreign body also reported in Scotland<sup>5</sup>.

Many foreign bodies are inert and can remain in the nose for years without mucosal damage. However, most foreign objects initiate congestion, swelling of the mucosa, ulceration, mucosal destruction and epistaxis. This can result in a foul fetor and rhinolith formation. Certain foreign bodies,

such as vegetable, absorb water from the tissues and swell and can evoke an intense inflammatory reaction that can be sufficient to produce toxemia. Thus, several important complications may occur with the presence of a nasal foreign body, including formation and development of rhinoliths, erosion into a contiguous structure, toxic shock syndrome and development of infections in surrounding structures including acute sinusitis or otitis media, periorbital cellulitis, meningitis, acute epiglottitis, diphtheria, and tetanus<sup>6</sup>.

Long-standing objects left in body orifices tend to act as nuclei for concretion to form calculus deposits and become encrusted with calcified material and granulation tissue by receiving a coating of calcium, magnesium phosphate, and carbonate with time. Moreover, various iatrogenic foreign bodies on patients have been reported to cause nucleation and deposition of calculi. Similarly, the nasal packing in a case had become calcified. Interestingly, there are reports of intra-nasal foreign objects that were left calcified *in situ* from two to 50 years<sup>7,8</sup>. Most nasal foreign bodies can be easily removed in the office or emergency department. However, multiple attempts to remove the foreign object in our patient with different techniques by ear nose and throat (ENT) specialist were unsuccessful due to failure to identify the splint.

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