

Open Safety Pin in Nose: A Tricky Foreign Body

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Abstract

Foreign bodies in nose is a very common presentation encountered by the ENT practitioners. A variety of nasal foreign bodies has been described in literature. We present our experience of managing an open safety pin lodged in the nose of a 2 years old child.

Keywords: Nasal foreign body, safety pin, endoscopic removal.

INTRODUCTION

Nasal foreign body is one of the most common ENT emergencies encountered by family physicians. Many cases of unusual foreign bodies in the nose have been reported in medical literature.¹⁻⁵ Safety pins account for less than 3% of foreign bodies found in tracheobronchial tree and 1.5% of those found in esophagus.² Though these might seem to be innocuous, but have been associated with intraoperative difficulties and complications. Safety pin in nose presents a tricky situation with very few case reports in the World literature.²⁻⁵

CASE REPORT

A 2-year-old female child presented to the emergency services of the department of otorhinolaryngology SMS medical college Jaipur with history of safety pin lodgment in nasal cavity while playing with her brother, about six hours ago. Removal was attempted by a private practitioner under local anesthesia, but the attempt had been futile and the child was having epistaxis since then. On examination, patient was uncooperative and blood was trickling from the right nostril. All attempts at examination revealed only blood in the vestibule. An emergency radiograph of the paranasal sinuses (Water's view) showed an open safety pin in right nasal cavity (Fig. 1). She was shifted to emergency operation theater and taken up under general anesthesia for endoscopic foreign body removal. After intubation, pharyngeal pack

was put. A 2.7 mm and 0 degree nasal endoscope revealed the keeper of the open safety pin at the floor of nasal cavity. The tip of the point could not be located. Decongestant nasal packs were put carefully. After decongestion, the point was seen to be embedded into the septum. A hemostat forceps was used to hold the keeper of the safety pin and then it was pushed posteriorly to dislodge the pin from septum. Another hemostat was used to hold the tip of the point and then the two instruments were manipulated so as to close the pin. However, this attempt failed and we were not able to close the pin. Using the converging principle, another attempt was made to pull the pin out without closing it completely. We were successful in doing this. Mild epistaxis was seen to be there from the lesion in septum and raw areas in lateral wall. A small pack was kept inside (Fig. 2). Endoscopy at 2 weeks revealed good healing of nasal mucosa.

DISCUSSION

Safety pin as a foreign body in nose is a rare event.²⁻⁵ An extensive search of medical literature revealed four such case reports.²⁻⁵ Of all these, only three cases were of open safety pins.²⁻⁴ Though most foreign bodies of nose are removed using a Eustachian tube catheter, but using this for a safety pin will lead to complications. Management of safety pins, particularly open ones, is still an enigma. Here, we discuss various management options which can be useful to a clinician in such cases.



Figure 1: X-ray PNS (Water's view) showing open safety pin in right nasal cavity



Figure 2: Safety pin after removal from nose with pack in right nasal cavity

One option can be dislodgement of point shaft by moving the safety pin posteriorly and then closing it with help of another hemostat.⁴ We tried this technique but were not able to close the pin. However, even if the 2 open ends can be converged we can remove the pin without closing it, as was done in our case. A safety pin closing forceps, if available, can be useful.

Other option is cutting the shaft of the pin near the spring and then removing the pin in two pieces. Utrata J³ described the removal of an open safety pin which had eroded through the soft palate, where the keeper shaft was first cut. Then the foreign body was removed in two pieces, one nasally and one orally.

Another way described in literature is by controlled pushing of the pin posteriorly towards the nasopharynx and then extracting it with help of curved Negus tonsillar artery forceps.²

Either of these approaches can be used as per the individual case and all these techniques should be tried before deciding to use an external approach. It is important to remember that removal of open safety pin from nose is difficult and requires careful handling.

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