



Open Safety Pin in Nasal Cavity and Its Management

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ABSTRACT

Intranasal foreign bodies are a common problem for ear, nose, and throat surgeons. Varieties of nasal foreign bodies have been discussed in various published reports. A case report of a 2-year-old female child with open safety pin in nose, which was safely retrieved via endoscopy under general anesthesia, has been presented and its management discussed.

Keywords: Endoscopic removal, Foreign body in nose, Nasal cavity, Open safety pin.

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INTRODUCTION

Foreign bodies in the nose are otorhinolaryngologic emergencies. The cases commonly occur among children or mentally retarded persons.¹⁻⁵ Foreign body may produce ulceration in the nasal cavity. It may get dislodged and aspirated into the nasopharynx.⁶ Safety pins account for less than 3% of foreign bodies found in tracheobronchial tree and 1.5% of those found in the esophagus.³ They may seem to be innocuous, but are associated with intraoperative difficulties and complications. Open safety pin in the nasal cavity is very rare, with its only mention being the cases reported in Figures 2 and 3.

CASE REPORT

A two-year-old female child was brought by her parents to the casualty on May 8, 2016, at 8:45 p.m. at the Mahatma Gandhi Mission's Hospital Kamothe, Navi Mumbai, Maharashtra, India, with a history of safety pin accidentally lodged while playing in the right nasal

cavity 1 hour earlier. Removal was attempted at home by her mother. The attempt was futile. The child started to have mild bleeding and secretions. On examination, the child was uncooperative; only the head of the safety pin could be seen in the right nostril at the vestibule. A loop was attempted in the emergency to grasp the pin and avoid slippage, but the patient was very uncooperative and started crying. The safety pin slipped backward into the nasal cavity, which could not be seen by the naked eyes.

A diagnostic nasal endoscopy was done, which revealed an open safety pin with the head in the posterior 3rd of the right nasal cavity. Spear was not visualized. X-ray on examination revealed an open safety pin around 25 mm in length, with the head lodged in the posterior 3rd of the right nasal cavity and the open spear located below the soft tissue of the base of skull (Figs 1 and 2).

The patient was started on parenteral antibiotics and kept fasting for 6 hours and then shifted to the operation theater early next morning. After oral intubation, a pharyngeal pack was put *in situ*. Nasal decongestion was done. A zero-degree nasal endoscope was introduced in the right nasal cavity. The safety pin head was initially pushed backward to dislodge the spear from the soft tissue in the base of the skull (Fig. 3). After dislodging it from the soft tissue, it was attempted to close the spear end and remove it, but the efforts failed. A string was attached to the head of safety pin and fixed to avoid it from falling back again. With a Wire Vectis, the spear was pulled down. The patient started to have mild epistaxis mixed with secretions from the right nasal cavity. Suction was placed *in situ* followed by closing the pin with the help of the Wire Vectis. The pin was removed with the help of the string and a forceps (Fig. 4).

Anterior nasal pack was placed in the right nasal cavity. Parenteral antibiotics were continued. Next morning, the nasal pack was removed. The nasal cavity was examined. Mild scratches were seen along the nasal floor. This was managed with local application of Otrivin P nasal drops and oral antibiotics followed by discharge of the patient the day after. Follow-up of the patient was done after 3 days, which showed healthy nasal mucosa and floor.

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Fig. 1: X-ray film showing open safety pin stuck in the posterior 3rd of the nasal cavity and the open end/spear located below the soft tissue in the base of skull



Fig. 2: Before the procedure, the zoomed view of the X-ray showing the foreign body impacted and not dislodged



Fig. 3: Endoscopic removal of the foreign body with the string attached to the head to prevent falling back



Fig. 4: Foreign body after removal

DISCUSSION

Foreign bodies in the ENT are often deceptive, as they seem so accessible that one may get tempted to remove them immediately, but land up pushing them further deeper inside. The dictum while dealing with these foreign bodies is that one should not try to remove the foreign body unless proper illumination, instruments, and expertise are available. When the child is crying, attempt to remove the nasal foreign body usually results in it getting sucked into the tracheobronchial tree, and a simple nasal foreign

body may become a bronchial foreign body or, in case of pointed foreign body, it may become a nasopharyngeal foreign body, which requires a much larger setup to deal with. The correct management for an open safety pin still remains a challenge to the ENT surgeons.

CONCLUSION

A case report of a 2-year-old child with an open safety pin in the nasal cavity is presented and its management discussed.

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