



Open Safety Pin in the Nasal Cavity of an Adult: Case Report

Dr. Srinivasa V^[1], Dr. B. Asma Tarannum^[2], Dr. Sheik Alaudeen Aashi^[3]

^[1]Professor and Head of Department of Otorhinolaryngology, Vinayaka Mission's Medical College & Hospital, Karaikal, Puducherry 609609

^[2]Post graduate, Department of Otorhinolaryngology, Vinayaka Mission's Medical College & Hospital, Karaikal, Puducherry 609609

^[3] Post graduate, Department of Otorhinolaryngology, Vinayaka Mission's Medical College & Hospital, Karaikal, Puducherry 609609

*Corresponding Author: Dr. B. Asma Tarannum^[2]

Submitted: 10-12-2021

Revised: 22-12-2021

Accepted: 25-12-2021

ABSTRACT

Safety pin as a foreign body is more common in the Gastro-intestinal tract than the airway tract. Moreover, closed safety pins are more commonly seen than open safety pins. Here, we came across an adult female with an open safety pin in the right nasal cavity. Diagnostic nasal endoscopy was done and the pointed end was found to be stuck in the right middle turbinate. So it was removed under general anesthesia using a clamp and skin hook. Bleeding was controlled by placing a nasal pack.

Key words: Foreign body, Nose, Nasal cavity, Safety pin

I. INTRODUCTION

Foreign bodies in the nose are commonly seen in children especially toddlers. In adults, foreign body of the nose can be seen more commonly among the mentally disabled. Frequently encountered foreign bodies of the nose are: tamarind seeds, beads, nuts, paper wads, button batteries, etc. Generally, safety pin as a foreign body is swallowed by children. Safety pin as a foreign body in nose of an adult is not usually seen.

After the extensive research of medical literature, only 16 cases were found to be documented in literature, with open safety pin involving airway tract. Among them, 5 were in nasal cavity⁴, 4 in larynx², 3 each in bronchus³ and trachea⁵ and 1 in nasopharynx⁴.

CASE REPORT

A 45 year old female, came to the Otorhinolaryngology OPD at Vinayaka Mission's Medical College and Hospital, with an open safety pin in the right nasal cavity. The patient was trying to scratch an itch in the nose with a safety pin, it accidentally opened and got stuck. On attempting to remove it, she had pain and bleeding from the right nasal cavity.

On examination, head of the safety pin seen anteriorly and the point end seen stuck at the right middle turbinate. Diagnostic nasal endoscopy was done. On attempting to remove it, patient was uncooperative. X ray skull lateral view was taken. It showed the open safety pin in the right nasal cavity.

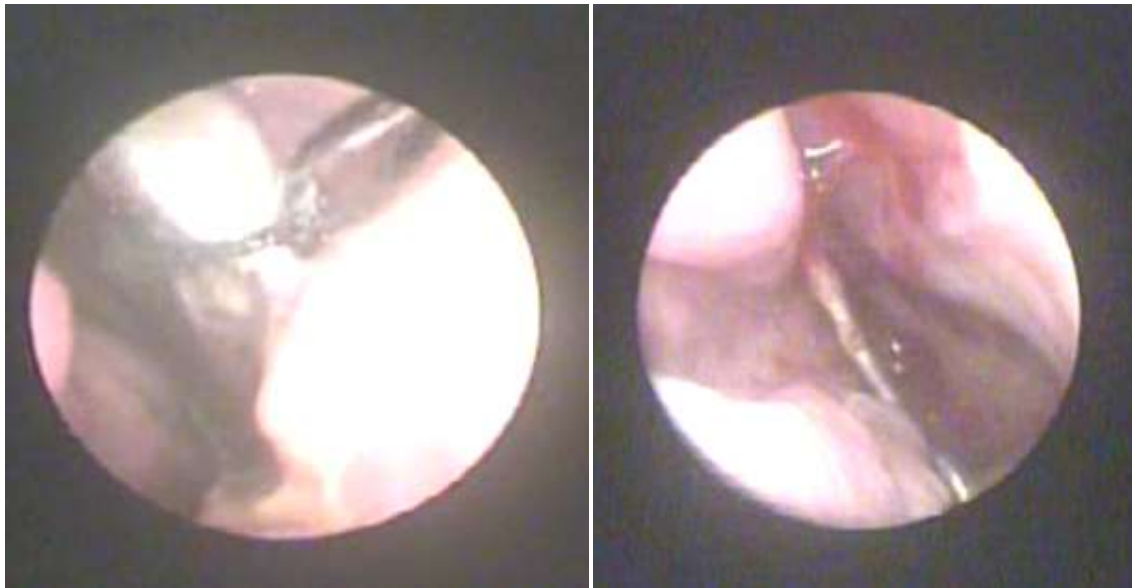


Fig 1: Head of the safety pin at the anterior part of Right nasal cavity. Pointed end stuck in the right middle turbinate

Patient was shifted to Operation theatre to remove the safety pin under General anaesthesia. The safety pin was held in position with a thread tied to its head to avoid displacement during the attempts to close and remove the safety pin. After intubation, pharyngeal pack kept. 0 degree endoscope revealed the pointed end stuck at the

right middle turbinate. The pointed end was removed from the right middle turbinate and closed using a clamp and a skin hook. And the safety pin pulled out gently by the thread tied to the head. Mild epistaxis was seen after the removal. A small pack placed in the right nasal cavity. Endoscopy at 2 weeks revealed good healing of nasal mucosa.

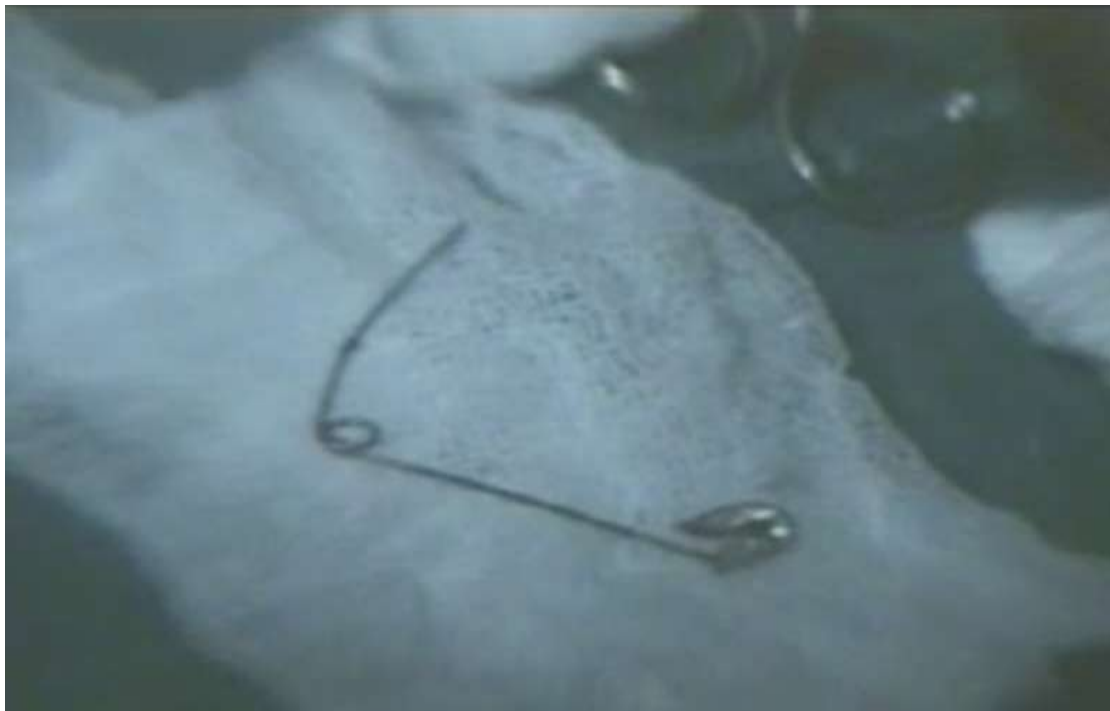


Fig 2: Open safety pin after its removal



II. DISCUSSION

Generally, safety pin as a foreign body is swallowed by children⁸. It can get stuck in the oesophagus. Closed safety pins can be seen in the nasopharynx⁹. Closed Safety pin as a foreign body in nasal cavity can be managed better than an Open safety pin.

Removing an open safety pin is a tough procedure. It needs careful handling and removal. There is no particular method for its removal. It has to be managed according to the site and position of the safety pin. There is no particular instrument which is readily available to remove an open safety pin. In most of the cases, it is managed by trying to close and remove with the instruments that were readily available like Tilley's nasal forceps, artery forceps, clamp, skin hook, etc.

There are few case reports with the open safety pin in the nasal cavity. Most of them are in children¹. Only one such case is seen in an adult where the safety pin was stuck in the left nasal cavity. It was dislodged posteriorly and closed using a hemostat and removed through the nostril using another haemostat without causing any damage to the nasal mucosa⁷.

It is mostly done under General anaesthesia, especially in children as they are uncooperative and sometimes due to the risk of bleeding and complications that can arise. It can be removed by dislodging the pin and then closing and removing. Otherwise, it can be cut into two parts near the spring and removed. Another way can be by closing and removing through nasopharynx via oral cavity. All the procedures must be tried before going for an external approach^{7,10,11}.

In our case, we first tried to dislodge the stuck pointed end of the safety pin and then closed it with the help of a skin hook. And then it was removed gradually using a clamp. Bleeding was managed by placing a nasal pack.

III. CONCLUSION

An open safety pin as a foreign body should always be handled very carefully and removed. All the tertiary centres with ENT care should be well equipped to manage any rare foreign body like this. Experts and appropriate instruments should be readily available to manage and avoid any further complications.

REFERENCES:

- [1]. Dasgupta KS, Lanjewar KY, Joshi SV. Safety pin—The UNSAFE foreign body of air passage. *Indian Journal of Otolaryngology and Head and Neck Surgery*. 2006 Oct 1;58(4):387-8.
- [2]. Hussain SS, Raine CH, Caldicott LD, Wade MJ. An open safety pin in the larynx: a case report. *The Journal of Laryngology & Otology*. 1994 Mar;108(3):254-5.
- [3]. Ali M, Aslam S, Majeed FA, Ashfaq M. An unusual foreign body bronchus (open safety pin). *Pakistan Armed Forces Medical Journal*. 2008 Sep 30;58(3):348-9.
- [4]. Sen I, Sikder B, Sinha R, Paul R. Open safety pin in the nasal cavity. *Indian Journal of Otolaryngology and Head and Neck Surgery*. 2004 Apr 1;56(2):129.
- [5]. Veena A, Bist SS, Bharti B, Mehrotra S. Removal of an aspirated open safety pin from trachea. *Anaesthesia, Pain & Intensive Care*. 2019 Jan 27:416-8.
- [6]. Bora H, Bandyopadhyay SN, Basu SK, Sinha R. Play safe with safety pins. *Indian Journal of Otolaryngology and Head and Neck Surgery*. 1999 Aug 1;51(1):39-42.
- [7]. Salley Jr LH, Wohl DL. Nasal foreign body: removal of an open safety pin from the left nostril. *Ear, nose & throat journal*. 2000 Feb;79(2):118-20.
- [8]. Benizri EI, Cohen C, Bereder JM, Rahili A, Benchimol D. Swallowing a safety pin: Report of a case. *World Journal of Gastrointestinal Surgery*. 2012 Jan 27;4(1):20.
- [9]. Wadhwa R, Gulati SP, Garg A, Ghai A. Two rare case reports of nasopharyngeal foreign bodies—Bobbin and safety pin. *International Journal of Pediatric Otorhinolaryngology Extra*. 2008 Jan 1;3(1):14-6.
- [10]. Stool SE, Manning SC. Foreign bodies of the pharynx and esophagus. *Pediatric otolaryngology*. 1996;2:1169-80.
- [11]. Marsh BR. The problem of the open safety pin. *Annals of Otolaryngology & Laryngology*. 1975 Sep;84(5):624-6.