

A Forgotten Nasogastric Tube

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ABSTRACT

Nasogastric tubes are commonly used in hospitals for both feeding and/or decompression of the upper gastrointestinal tract. We present a case of a forgotten nasogastric tube coincidentally found, four years after difficult removal, lodged in the nose and nasopharynx. We also describe the problems of knotted nasogastric tubes and different methods of removal.

Keywords: Nasogastric tube, Tiley's forceps.

INTRODUCTION

Nasogastric tubes (NGT) are routinely used for feeding and/or decompression of the upper gastrointestinal tract. There are a number of potential complications that can occur due to the presence of NGT and/or during their insertion and removal. Serious complications include respiratory distress, laryngeal trauma, pneumothorax and esophageal perforation.¹⁻³ There are many reported cases of unusual foreign bodies (FB) removed from the nose⁴ but no previous documentation of a NGT. In this report, we discuss a patient who presented to the emergency department due to a head injury and imaging revealed the coincidental finding of a NGT in the nose and nasopharynx. She was completely unaware of its presence but recollects a painful NGT removal four years ago.

CASE REPORT

A 88-year-old lady was referred to the ear, nose and throat department after an incidental finding on imaging. She had originally presented to the accident and emergency department with a head injury following a fall. She had bilateral periorbital ecchymosis and plain X-rays were requested to exclude facial fractures. A computed tomography (CT) scan was subsequently performed to exclude any intracranial damage from the head trauma. Neither facial bone fractures nor intracranial hemorrhage was noted on imaging. Anteroposterior facial and lateral neck X-rays revealed a coiled tubular FB in the right side of nasal cavity and nasopharynx (Figs 1 and 2). The CT scan confirmed this and provided more detailed views of the position of the tubular structure (Fig 3). When she was seen in the ear, nose and throat clinic, she denied any history

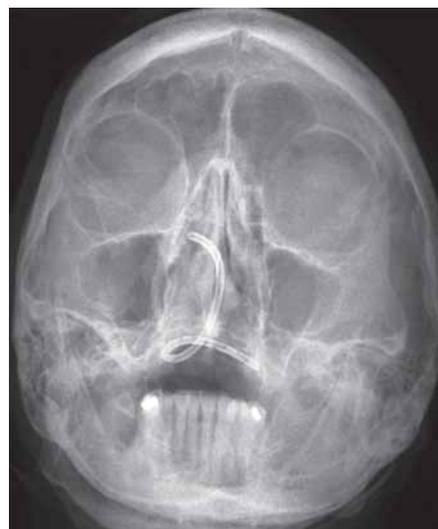


Fig. 1: Anteroposterior facial X-ray shows the coiled NGT



Fig. 2: Lateral X-ray neck further shows the position of NGT in nose and nasopharynx

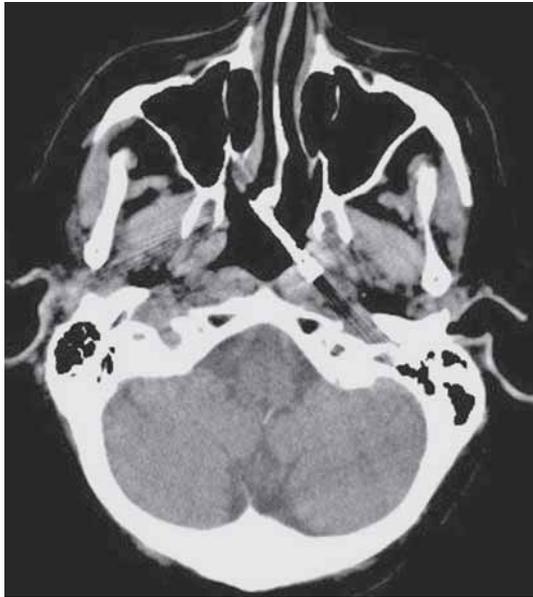


Fig. 3: CT scan axial section shows the NGT in nasopharynx

of FB insertion. However, she had a NGT tube inserted four years ago when she had surgery for treatment of a perforated duodenal ulcer. She recalled it being slightly painful at the time of its removal but denied presence of any nasal symptoms over the past four years. On nasal examination, a yellow tubular structure was visualized wedged under the inferior turbinate in the right nostril. This was removed using Tilley’s dressing forceps in the clinic. It was tightly in place and required some force to remove it. The FB was a length of NGT that was twisted (Fig. 4). There was no bleeding after its removal.

DISCUSSION

There have been many reported cases of FB within the nose. The vast majority of these cases are in children with a peak incidence between 0 and 4 years of age.^{4,5} In this case, an iatrogenic FB was removed from the nose. Although, it had



Fig. 4: Shows knotted NGT after removal

not caused any adverse effects in this patient, FB in the nose may cause nasal obstruction, rhinosinusitis, tissue necrosis and epistaxis.⁴⁻⁶ These complications may occur when the FB causes swelling of the nasal mucosa.

There are many documented risks of using NGT. The most common and life-threatening is due to malpositioned tubes causing potential aspiration.¹ However, the NGT may cause respiratory distress, laryngeal trauma, pneumothorax and esophageal perforation.¹⁻³ It is known that NGT may snap and break off as occurred in this case when it was originally removed.⁷ The NGT may also become self-knotted and twisted causing problems with both insertion and removal.^{8,9} The NGT which becomes knotted or twisted is more likely to become blocked and would require replacement. The knot is thought to be created in the stomach when the NGT tip passes through a coil of excess length. On removal, the knot is tightened causing potential problems. The possibility of a knotted tube is often not realized until the NGT is removed. At this time, it may be painful and excess force is required. The knotted NGT may even cause respiratory distress.¹⁰ Methods of removal of knotted or twisted NGT’s include: Through the mouth, using an endoscope or even a nasopharyngeal airway.^{7,11,12} The use of nasopharyngeal airway prevents the knot becoming stuck within the nasal cavity or in the nasopharynx. The nasopharyngeal airway is passed into the nose with the NGT running through the center of the nasopharyngeal airway. While keeping the nasopharyngeal airway in place, the NGT is removed through the middle of nasopharyngeal airway, and thus not causing any discomfort during removal.¹²

CONCLUSION

Nasal FB in adults is unusual. NGT may become self-knotted or twisted and cause problems by becoming blocked or during its removal. This case report reiterates the fact that care should be taken on removal of the NGT and the tube should be examined to confirm that whole of the NGT tube has been removed. This is particularly relevant when the tube is difficult to remove requiring excessive force or causing pain due to having become twisted or knotted.

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