Endoscopic removal of a fractured nasojejunal tube in the duodenum



Fig. 1 Antero-posterior X-ray of the abdomen in a 40-year-old man who underwent sutural closure of a duodenal perforation: there is a fractured nasojejunal tube lying inside the duodenum and the jejunum.





Fig. 2 a The fractured nasojejunal tube being removed endoscopically with a polypectomy snare. b The fractured nasojejunal tube after removal.

A 40-year-old man, with no significant history of past illness, presented to our emergency department with classic features of perforation peritonitis. Exploratory laparotomy showed duodenal perforation, which was closed with an omental patch. Before suturing the perforation, however, a nasojejunal tube was inserted for feeding. The postoperative period was uneventful and the patient was allowed oral feeding 1 week later. After 2 weeks, the nasojejunal tube was removed with some difficulty with its distal part missing. Abdominal radiography showed the distal end of the nasojejunal tube retained inside the intestine (Fig. 1). Upper gastrointestinal endoscopy showed narrowing of the D1-D2 junction with the proximal end of the fractured part of the nasojejunal tube lying just beyond the junction. We tried to grasp this end of the fractured tube with punch biopsy forceps but failed. We then decided to use a polypectomy snare to grasp the proximal end and the fractured tube was removed successfully (**Pig. 2** and **Video 1**).

The nasojejunal tube was probably sutured along with the duodenal wall during closure of the duodenal perforation, and thus it fractured during removal. There is little literature on endoscopic removal of such long foreign bodies. Only a few case reports had been published on endoscopic retrieval of sutured, knotted,

Video 1

Endoscopic removal of fractured nasojejunal tube using a polypectomy snare.

or fragmented nasogastric tubes from the stomach or the posterior pharynx in humans as well as in animals [1–4]. Thus, utmost care should be taken while suturing the bowel with any tube inside, however, endoscopic techniques can be used successfully to retrieve broken tubes.

Endoscopy_UCTN_Code_CPL_1AH_2AI

Competing interests: None

Ajay Vardaan¹, Arshad Ahmad², Devendra Singh², Ravi Misra¹

- ¹ Department of Internal Medicine, King George Medical University, Lucknow, India
- ² Department of Surgery, King George Medical University, Lucknow, India

References

- 1 Cappell MS, Scarpa PJ, Nadler S et al. Complications of nasoenteral tubes. Intragastric tube knotting and intragastric tube breakage. J Clin Gastroenterol 1992; 14: 144 147
- 2 *Cribb NC, Kenney DG, Reid-Burke R.* Removal of a nasogastric tube fragment from the stomach of a standing horse. Can Vet J 2012; 53: 83 85
- 3 *Dinsmore RC, Benson JF.* Endoscopic removal of a knotted nasogastric tube lodged in the posterior nasopharynx. South Med J 1999; 92: 1005–1007
- 4 Sucandy I, Antanavicius G. A novel use of endoscopic cutter: Endoscopic retrieval of a retained nasogastric tube following a robotically assisted laparoscopic biliopancreatic diversion with duodenal switch. N Am J Med Sci 2011; 3: 486–488

Bibliography

DOI http://dx.doi.org/ 10.1055/s-0033-1344834 Endoscopy 2013; 45: E347–E348 © Georg Thieme Verlag KG Stuttgart · New York ISSN 0013-726X

Corresponding author

Ajay Vardaan

Department of Internal Medicine King George Medical University Lucknow UP – 226003 India drajaymd12345@gmail.com