

Transected nasogastric tube: a rare complication of nasogastric feeding

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Received: 2 August 2018 / Accepted: 10 August 2018 / Published online: 17 August 2018
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A 70-year-old woman was hospitalized with failure to thrive. Her recent history included bereavement and protein-calorie malnutrition. Her body mass index was 17 kg/m². She was oriented only to person. Laboratory tests showed hypernatremia and prerenal azotemia. A nasogastric (NG) feeding tube was placed successfully on hospital day 3 (Fig. 1), and enteral feeding was commenced. The patient's mental status improved to tolerate an oral diet with bedside removal of the tube on hospital day 11; however, a portion of the distal tubing was missing. An abdominal X-ray study showed 8 cm of retained tubing in the stomach (Fig. 2). An esophagogastroduodenoscopy (EGD) was performed with foreign body extraction using a rat-tooth forceps (Figs. 3 and 4). She was discharged the following day.

One prior case report describes a fractured orogastric tube after intraoperative placement [1], while another reports

nasojejunal tube fracture [2]. Our case describes spontaneous transection of NG tubing after successful placement and 8 days of enteral feeding, without resistance upon removal. The mechanism of transection is unclear. The American Society for Gastrointestinal Endoscopy recommends urgent endoscopy for objects > 6 cm above the proximal duodenum, which was performed in this case [3]. This recommendation

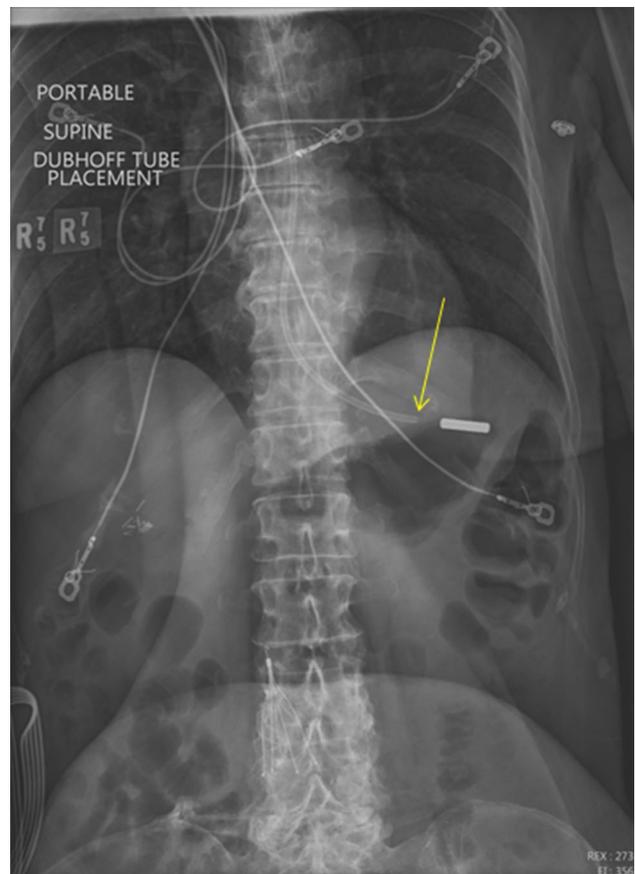


Fig. 1 Plain film of the abdomen confirming position of nasogastric feeding tube in the stomach

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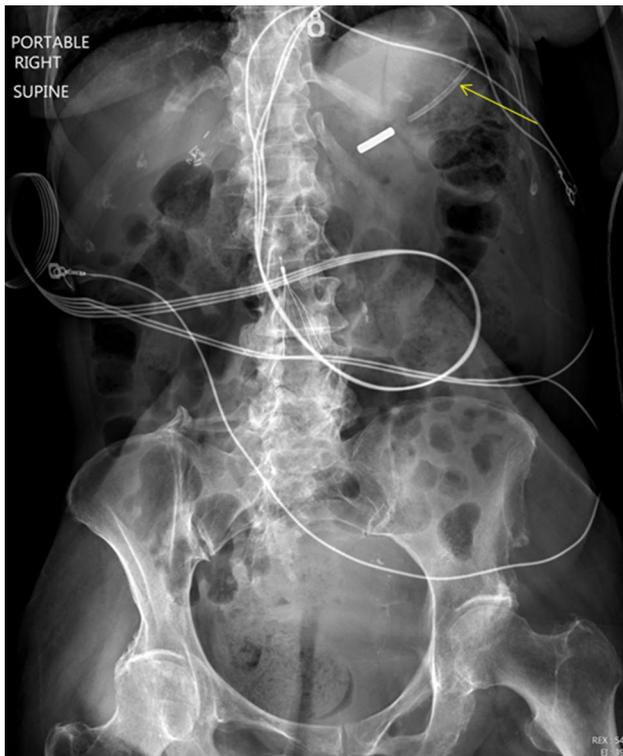


Fig. 2 Plain film of the abdomen revealing an 8 cm portion of remaining distal tubing of the nasogastric feeding tube in the stomach, after 8 days of initial placement and uneventful feeding



Fig. 3 Endoscopic view of the transected nasogastric feeding tube in the gastric body

is based on a study that reports that 112 of 139 objects longer than 6 cm remain proximal to the pylorus at endoscopy performed more than 48 h after presentation [4]. Given this recommendation, EGD was performed to ensure prompt

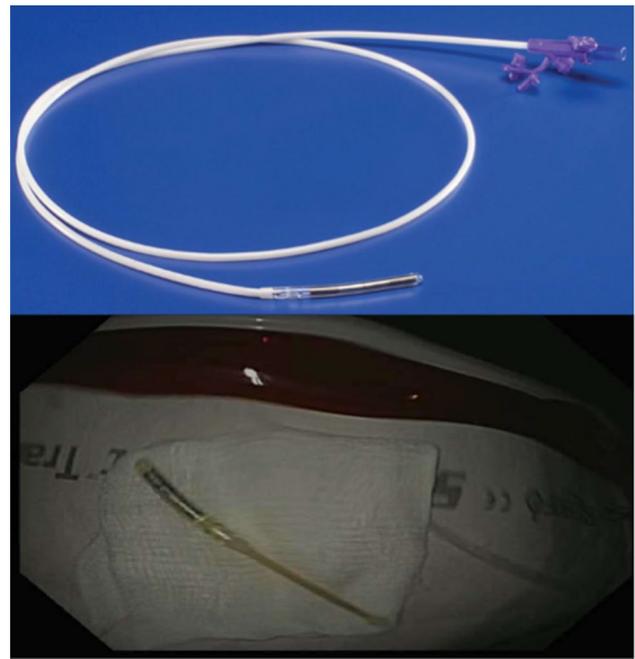


Fig. 4 Intact nasogastric feeding tube prior to insertion (top). Transected nasogastric feeding tube after endoscopic retrieval (bottom)

removal; although given the flexibility of the tubing, a period of observation would have also been reasonable to see if it would have spontaneously passed. This case highlights a rare adverse event of NG tubes.

Compliance with ethical statements

Conflict of interest The author(s) declare that they have no conflict of interest.

Statement of human and animal rights This case image involved the medical management of a patient as per society guidelines, and was not formal research involving Human Participants and/or Animals.

Informed consent This case image complies with the ethical standards outlined in the journal. Informed consent was obtained.

References

1. Ranier G, Costello K (2013) Fractured OG tip: a case report. *W V Med J* 109(5):38–39
2. Vardaan A, Ahmad A, Singh D, Misra R (2013) Endoscopic removal of a fractured nasojejunal tube in the duodenum. *Endoscopy* 45(Suppl 2 UCTN):347–348
3. ASGE Standards of Practice Committee (2011) Management of ingested foreign bodies and food impactions. *Gastrointest Endosc* 73(6):1085–1091
4. Palta R, Sahota A, Bemarki A et al (2009) Foreign-body ingestion: characteristics and outcomes in a lower socioeconomic population with predominantly intentional ingestion. *Gastrointest Endosc* 69:426–433