

Rare complication of upper gastrointestinal endoscopy: doubled-back endoscope in the esophagus

The best-known complications of upper gastrointestinal endoscopy are perforation and hemorrhage. Our case report describes a rare complication that occurred during diagnostic endoscopy.

A 53-year-old man with diabetes was admitted to our department because of disturbed carbohydrate balance. Because he was suffering from epigastric pain and recurrent coffee-ground vomiting (he was on continuous antiplatelet agent therapy), upper gastrointestinal endoscopy was performed. During the procedure some coffee-ground fluid was observed in the stomach; nevertheless, the inspected mucosa appeared to be intact. During retroflexion the fiberscope slipped back into the esophagus and resisted manual extraction. Chest and abdominal X-ray confirmed that the endoscope had reached up high into the esophagus, almost to the hypopharynx, while being doubled back in a U-shape in the stomach (● Fig. 1, 2).

Since manual extraction of the endoscope was unsuccessful, laparotomy was performed. The twisted U-shape of the endoscope was then directly palpable in the stomach. Pulling the endoscope gently from the upper end, both portions of the instrument in the stomach were identified. The endoscope was straightened

and pulled out of the esophagus successfully without a gastrotomy.

Despite the increasing number of upper gastrointestinal endoscopies being performed worldwide, the complication rate remains low (0.018–0.7%) [1]. In cases of urgent endoscopy because of acute gastrointestinal bleeding, the complication rate is higher (2.82%) [2].

Retroflexion is part of a routine procedure: the subcardial region can be examined substantially only in this way. Impaction of the fiberscope is not unknown, but it is a very rare complication [3]. In the case report of Döbrönte the endoscope was successfully pulled out with the aid of a second endoscope [4]. In our case, however, this procedure could not be performed because of the high impaction and risk of esophageal perforation; instead, the fiberscope was removed intact using laparotomy but not gastrotomy.

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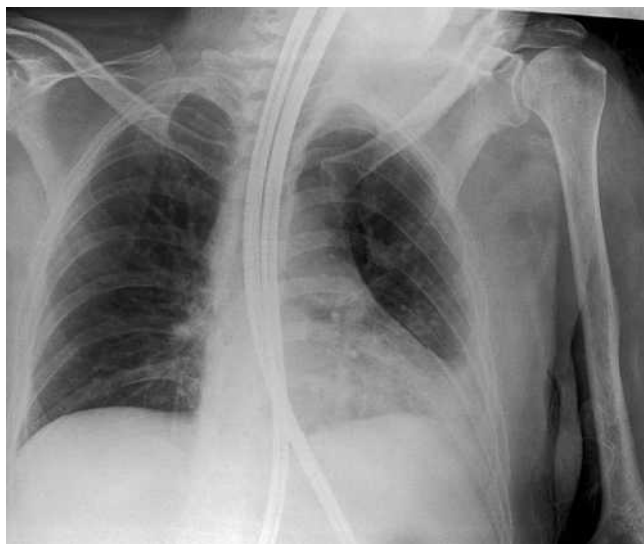


Fig. 1 Chest X-ray. The endoscope turned back and reached up to the hypopharynx.



Fig. 2 Abdominal X-ray. The U-shaped endoscope in the body of the stomach.

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References

- 1 Wolfsen HC, Hemminger LL, Achem SR et al. Complications of endoscopy of the upper gastrointestinal tract: a single center experience. *Mayo Clin Proc* 2004; 79: 1264–1267
- 2 Adler DG, Adler AL, Nolte T et al. Complications of urgent and emergency endoscopy in patients with upper and lower GI bleeding as a function of time: a review of 10 197 cases [abstract]. *Gastrointest Endosc* 2001; 53: AB80
- 3 Barrett B. New instruments, new horizons, new hazards. The impaction injury. *Gastrointest Endosc* 1970; 16: 142–143
- 4 Döbrönte Z, Barta M. Impacted duodenoscopy removed with the aid of a second endoscope. *Endoscopy* 1989; 21: 195

Bibliography

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