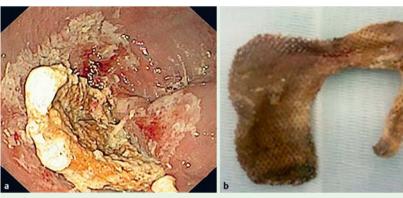
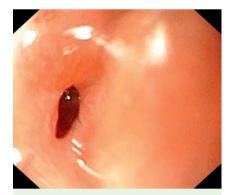
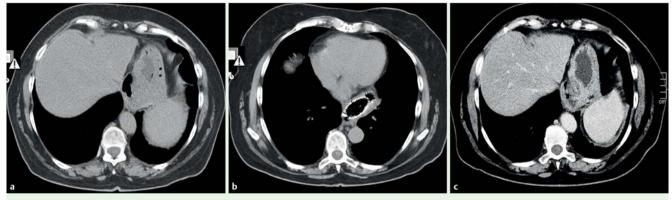
# Late transmural mesh migration into the esophagus after Nissen fundoplication



**Fig. 1** The foreign body that was obstructing the esophageal lumen: **a** seen endoscopically; **b** following its extraction, when it was revealed to be a surgical mesh.



**Fig. 2** Upper gastrointestinal endoscopy image after endoscopic extraction of the surgical material showing the opening of a fistula 1 cm above the cardia.



**Fig. 3** Computed tomography (CT) images showing: **a** an intra-abdominal air collection at the level of the fundoplication and an esophagogastric fistula; **b** a covered self-expanding metal stent in position to treat both the esophageal stricture and the fistula; **c** a reduction in the size of the intra-abdominal air collection after removal of the stent and healing of the fistula 6 weeks later.

A 71-year-old woman was referred to the gastroenterology department with progressive dysphagia and weight loss over 4 weeks. She had undergone a laparoscopic fundoplication with closure of the hiatal crura with mesh 5 years previously for heartburn due to gastroesophageal reflux disease and a large hiatal hernia.

Upper gastrointestinal endoscopy showed an irregularly shaped foreign body obstructing the lumen immediately proximal to the cardia (**Fig.1a**). This was assumed to be a food bolus, so the object was extracted using a Roth net standard retriever. Surprisingly, the foreign body proved to be a surgical mesh (**Fig.1b**). The esophageal wall was again inspected after this endoscopic extraction. There was evidence of severe lumen tortuosity and ulcerated stenosis at the gastroesoph-

ageal junction, and the opening of a fistula was found 1 cm above the cardia on the anterior wall of the esophagus ( Fig. 2). Thoracoabdominal computed tomography (CT) scanning confirmed an intraabdominal air collection at the level of the fundoplication and a line of air to the esophagogastric fistula ( Fig. 3 a). A covered self-expanding metal stent (Hanarostent; 80×14mm) was inserted to treat both the esophageal stricture and the fistula ( Fig. 3 b). There were no complications during the procedure, following which the patient reported no dysphagia (grade 0).

The stent was removed 6 weeks later without complications and complete healing of the fistula was confirmed. A further CT scan showed reduction of the intra-abdominal air collection ( Fig. 3 c)

with the patient reporting weight gain and no symptoms of dysphagia.

Closure of the hiatal crura has proven to be a fundamental issue in laparoscopic antireflux surgery [1]. Mesh reinforcement is not without complications and the incidence of these complications may be greater than previously reported [2,3]. We describe a rare case of dysphagia caused by an esophagogastric fistula that was secondary to complete transmural esophageal migration of the surgical mesh 5 years after Nissen fundoplication and was resolved by endoscopic management.

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Competing interests: None

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#### References

- 1 Soricelli E, Basso N, Genco A et al. Long-term results of hiatal hernia mesh repair and antireflux laparoscopic surgery. Surg Endosc 2009; 23: 2499–2504
- 2 Stadhuber RJ, Sherit AE, Mittal SK et al. Mesh complications after prosthetic reinforcement of hiatal closure: a 28 cases series. Surg Endosc 2009; 23: 1912–1226
- 3 Frantzides CT, Madan AK, Carlson MA et al. A prospective, randomized trial of laparoscopic polytetrafluoroethyleno patch repair vs. simple cruroplasty for large hiatal closure. Arch Surg 2002; 137: 649–652

### **Bibliography**

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