

Endoscopic removal of an embedded partially covered esophageal self-expandable metallic stent by overtube technique

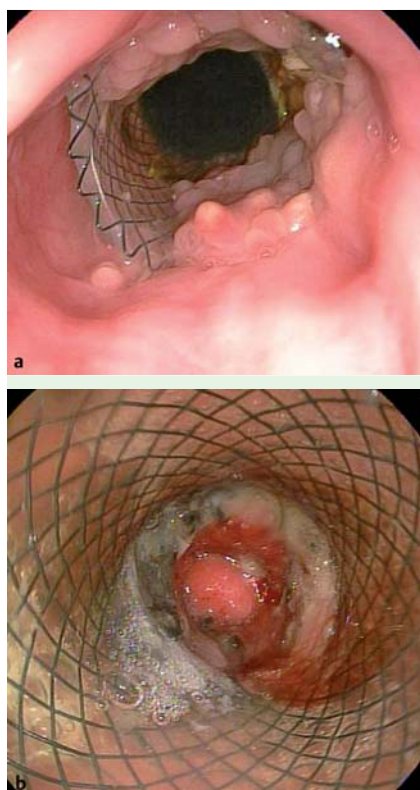


Fig. 1 Endoscopic view showing prominent tissue ingrowth at the proximal (a) and distal (b) uncovered ends of the self-expanding metallic stent (SEMS) in a 48-year-old woman.

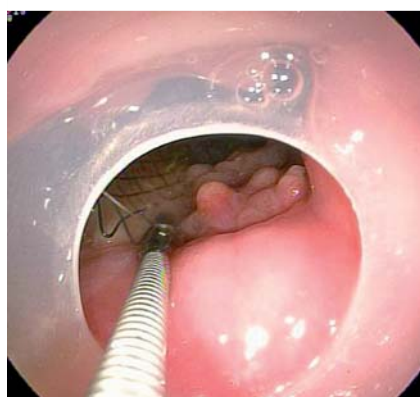


Fig. 3 The uncovered proximal flange of the self-expanding metallic stent (SEMS) was grasped and retracted with biopsy forceps, while pushing down on the overtube.



Fig. 2 A standard gastroscope and plastic overtube with ball-shaped distal end.

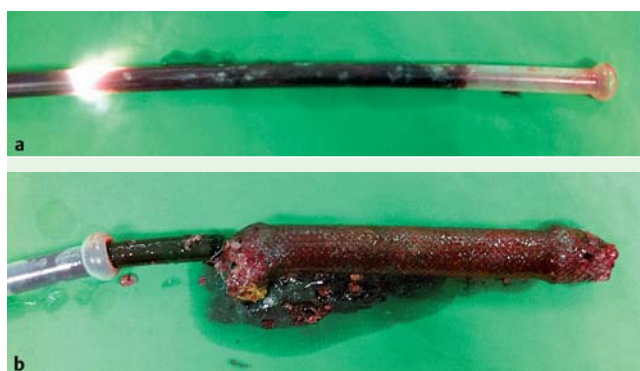


Fig. 4 a The self-expanding metallic stent (SEMS) was successfully retracted into the overtube. The bright area indicates the tip of gastroscope. b The retrieved self-expanding metallic stent (SEMS).

Self-expandable metallic stents (SEMSs) have been used to treat benign esophageal disorders such as leaks, perforations, and fistulas [1,2]. Fully covered SEMSs are often used to enable stent removal but have the disadvantage of easy dislocation or migration [2]. Stent embedding is a particular problem of partially covered SEMSs and may occur as early as 2–3 weeks after placement [1]. Removal of embedded stents is frequently associated with bleeding and mucosal tears [3,4]. We report here the successful retrieval of an embedded partially covered esophageal SEMS by a novel technique involving the use of a plastic overtube.

A 48-year-old woman was referred to our institution for bariatric surgery. Her past medical history was unremarkable and physical examination was normal except for an increased body mass index of 42 kg/m². She underwent laparoscopic sleeve gastrectomy, following which she experienced sudden onset of abdominal pain on postoperative day 7. Computed tomography of the abdomen revealed pneumoperitoneum. The patient under-

went emergent laparotomy, which revealed a staple line leak near the esophagogastric junction. After 3 weeks following the emergent operation, an esophagocutaneous fistula was seen on a barium esophagogram. A partially covered SEMS (Evolution, 12.5 cm, Cook Endoscopy, Winston-Salem, North Carolina, USA) was placed to compress the esophageal opening of the fistula. Esophagoscopy 5 weeks later showed prominent tissue ingrowth at both uncovered ends of the SEMS (Fig. 1). A standard gastroscope and a plastic overtube with ball-shaped distal end and an internal diameter of 9.6 mm (Fig. 2) were used to retract the SEMS. The uncovered proximal flange of the SEMS was grasped and retracted with biopsy forceps, while pushing down on the overtube at the same time (Fig. 3). The SEMS was successfully retracted into the overtube (Fig. 4), and no prominent bleeding or mucosal tear was noted after the procedure.

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Competing interests: None

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