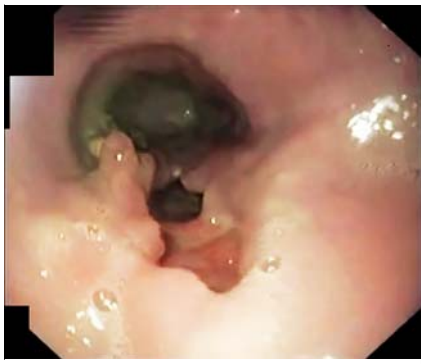
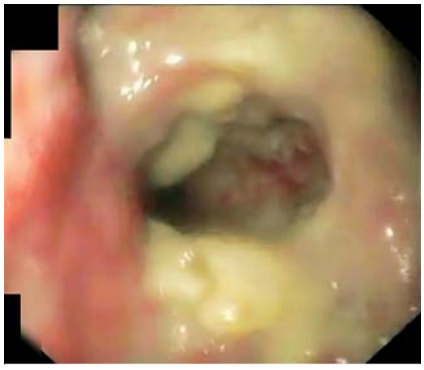
Post-peroral endoscopic myotomy dehiscence treated with an esophageal fully covered self-expandable metal stent

Peroral endoscopic myotomy (POEM) is an effective and safe technique for treating esophageal achalasia [1 – 2]. Adverse events related to POEM, although uncommon, may present a diagnostic and therapeutic challenge [2 – 3]. Fully covered self-expandable metal stents (FCSEMSs) have been successfully used in several complications of esophageal procedures, such as perforation, fistula, and leakage [4 – 5].

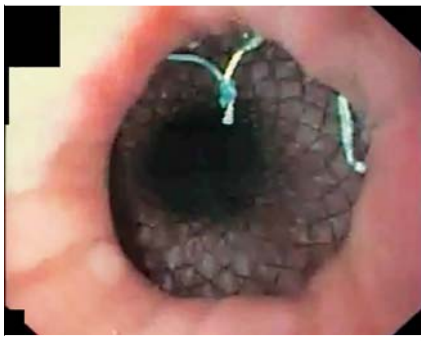
A 59-year-old man presented with intermittent dysphagia to solids and fever. He had undergone POEM 6 days before for symptomatic type III achalasia (Eckardt's score of 8) with a posterior incision. Intravenous prophylactic antibiotics were administered before and after the procedure. Upper endoscopy (GIF-Q165; Olympus, Tokyo, Japan) revealed dehiscence of the previously closed mucosal incision, with purulent material located inside the tunnel (▶ **Fig. 1**, ▶ **Fig. 2**). Gentamicin was flushed through the tunnel and intravenous antibiotics were started (piperacillin/tazobactam and metronidazole). A 23 × 105-mm FCSEMS (Wallflex Esophageal Stent; Boston Scientific, Marlborough, Massachusetts, USA) was placed under direct endoscopic visualization (▶ **Fig. 3**) and radioscopic control (▶ **Video 1**). The stent was repositioned using a rat tooth grasping forceps (FG-48L-1; Olympus, Tokyo, Japan) and then fixed with a through-the-scope clip (Resolution 360 Clip; Boston Scientific) and an over-the-scope clip (OTSC System Set, 11/6 mm, type t; Ovesco Endoscopy AG, Tuebingen, Germany). A thoracic computed tomography excluded mediastinitis, periesophageal fluid collections, or fistula. Antibiotics were continued for 14 days in association with fluconazole for 7 days. Afterwards, the patient showed clinical improvement. An upper endoscopy was performed 3 weeks weeks after stent deployment. The esophageal stent was removed using a rat tooth grasping forceps (FG-48L-1, Olympus), and complete closure of the former dehiscence was observed (▶ **Fig.4**). There was no difficulty passing the endoscope through the esophagogastric junction.



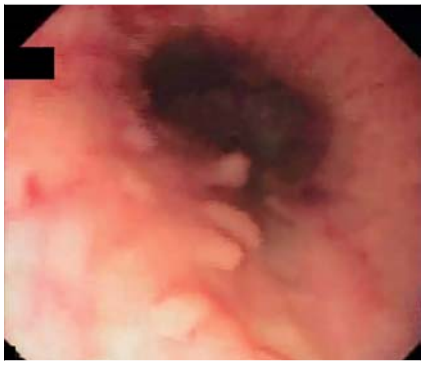
▶ **Fig. 1** Upper endoscopy after peroral endoscopic myotomy showed dehiscence of the previously closed mucosal incision.



▶ **Fig. 2** Endoscopic view of the inside of the tunnel containing purulent material.



▶ **Fig. 3** Endoscopic view after placement of fully covered self-expandable esophageal metal stent.



▶ **Fig. 4** Endoscopic evaluation after stent removal showing closure of the dehiscence.

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Competing interests

The authors declare that they have no conflict of interest.

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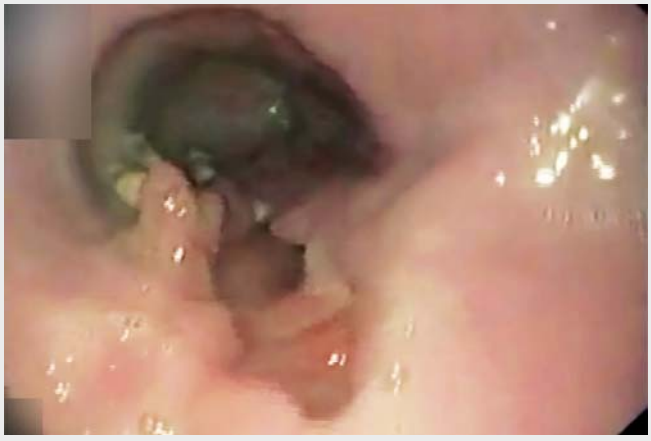

Video 1 An infected dehiscence of the mucosal incision after peroral endoscopic myotomy was closed using a fully covered self-expandable esophageal metal stent placed for 3 weeks.

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