

Endoscopic removal of a lumen-apposing metal stent that migrated into the walled-off necrosis during the first drainage procedure

A 43-year-old man with severe alcoholic acute pancreatitis complicated by infected walled-off necrosis (WON) (▶ **Fig. 1**) was referred to our hospital. An endoscopic ultrasound (EUS)-guided transluminal drainage was performed using a GF-UCT260 echoendoscope (Olympus Medical Systems, Tokyo, Japan) and a 15-mm lumen-apposing metal stent (LAMS; Hot AXIOS; Boston Scientific, Marlborough, Massachusetts, USA) was



▶ **Fig. 1** Abdominal computed tomography scan showing an encapsulated fluid collection adjacent to the stomach, indicating an infected walled-off necrosis.

inserted. Although we used the intrascopy channel release technique, the LAMS migrated into the WON (▶ **Fig. 2 a**). After insertion of a 0.025-inch guidewire (VisiGlide 2; Olympus Medical Systems), the migrated LAMS was moved further into the WON using a balloon catheter (▶ **Fig. 2 b**) to provide interspace for insertion of an additional 20-mm LAMS (Hot AXIOS; Boston Scientific), which was inserted along the guidewire and carefully deployed under endoscopic and fluoroscopic guidance (▶ **Fig. 2 c**).

Endoscopic removal of the migrated LAMS was attempted 5 days after the first session. Removal of the LAMS by simple grasping of the flange with forceps or snaring was difficult owing to a narrow working space. Therefore, we used a 2-channel endoscope (GIF-2TQ260M; Olympus Medical Systems), through which we could grasp the LAMS tightly using a snare from the left-sided working channel after pulling the flange with the forceps from the right-sided working channel. We successfully removed the 15-mm LAMS through the

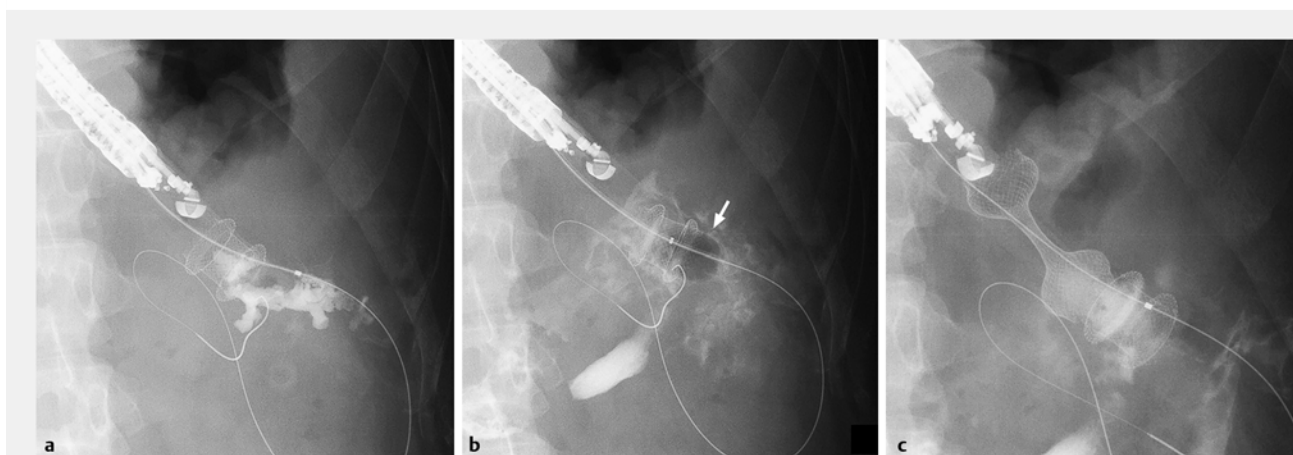
additional 20-mm LAMS using this method (▶ **Fig. 3**). The 20-mm LAMS was not dislodged, and four sessions of endoscopic necrosectomy were subsequently performed without any adverse events, resulting in an improvement in the WON.

Although previous reports have described endoscopic replacement of a LAMS that had migrated into the stomach during endoscopic necrosectomy [1, 2], the rescue technique for a LAMS that had migrated into the cavity of the WON during the first drainage session has not been established. Insertion of an additional LAMS, followed by retrieval of the migrated stent in the following session is one possible strategy for management of such stent migration.

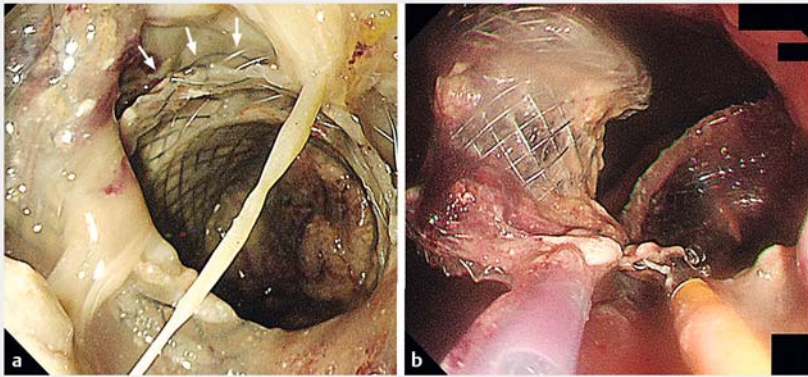
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Competing interests

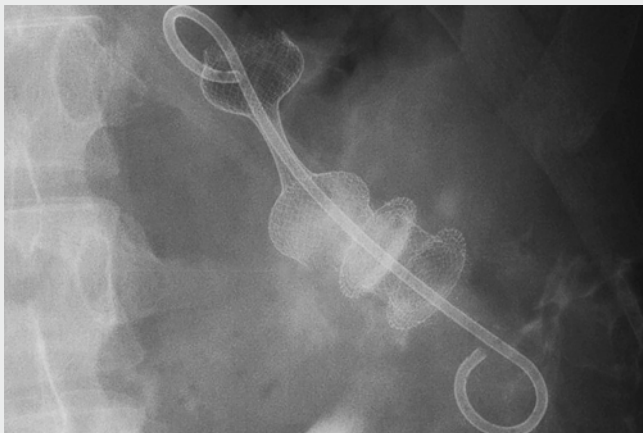
None



▶ **Fig. 2** Fluoroscopic images showing: **a** a 15-mm lumen-apposing metal stent (LAMS) that had migrated into the walled-off necrosis (WON) during the first drainage session; **b** the migrated LAMS being moved deeper into the WON using a balloon catheter (white arrow); **c** an additional 20-mm LAMS being inserted along the same guidewire under fluoroscopic guidance.



► **Fig. 3** Endoscopic images during removal of the migrated lumen-apposing metal stent (LAMS) 5 days after the first session showing: **a** the migrated and additional LAMS, with the proximal flange (white arrows) of the migrated LAMS clearly visualized; **b** the migrated LAMS being successfully removed by snaring the proximal end and grasping the flange using a 2-channel endoscope.



► **Video 1** A 15-mm lumen-apposing metal stent (LAMS) migrates into the walled-off necrosis (WON) during the first drainage session, following which an additional 20-mm LAMS is inserted. Endoscopic removal of the migrated LAMS is successfully performed in the next session.

References

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- [2] Kumta NA, Doshi R, Reinoso PJ et al. Retrieval and reuse of a dislodged lumen-apposing metal stent during endoscopic necrosectomy for pancreatic necrosis. *Gastrointest Endosc* 2016; 84: 364

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