



Rescue of a delayed spontaneously migrated lumen-apposing metal stent placed to facilitate transluminal ERCP in a patient with acute recurrent pancreatitis and pancreas divisum with Roux-en-Y gastric bypass

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ERCP is challenging in patients with Roux-en-Y gastric bypass (RYGB). EUS-directed transgastric ERCP by use of the lumen-apposing metal stent (LAMS) (Axios; Xlumena, Inc, Mountain View, Calif, USA) has been performed in the RYGB population with a high success rate.

Although the stent has a large anchoring design in both ends, stent migration has been described in up to 5% of cases. Our video ([Video 1](#), available online at www.VideoGIE.org) describes a novel endoscopic approach for a delayed spontaneously migrated LAMS, 3 weeks after stent placement at the time when ERCP was planned. The patient's informed consent for the video was obtained.

The patient was a 46-year-old woman with RYGB anatomy who presented to the clinic because of recurrent acute pancreatitis due to complete pancreas divisum. MRI confirmed the pancreas divisum, and ERCP for sphincterotomy was planned. Because of her RYGB, an EUS-guided LAMS placement to gain access to the excluded stomach was successfully performed ([Fig. 1](#)).

Three weeks later, when ERCP was planned (as part of the EUS-directed transgastric ERCP procedure), we found that the LAMS had completely migrated to the excluded stomach and was now anchored only to the excluded stomach wall.

Evidence of a 1-mm fistula was found at the Roux limb access site into the gastric antrum, and fluoroscopy confirmed that the LAMS was completely migrated into the gastric remnant ([Fig. 2](#)). A wire was advanced through the fistula under fluoroscopic guidance into the gastric remnant, and an 8-mm balloon dilation of the fistulous tract was performed after contrast material injection verification. Next, an 18-mm × 6-cm fully covered through-the-scope (TTS) self-expandable metal stent (SEMS) (Taewoong Medical, Gyeonggi-do, South Korea) was placed through the Roux limb access site into the gastric remnant, re-establishing the jejunogastrostomy, and then the SEMS was dilated to 18 mm.

ERCP was subsequently easily performed through the jejunogastrostomy, and a cholangiogram confirmed dilated

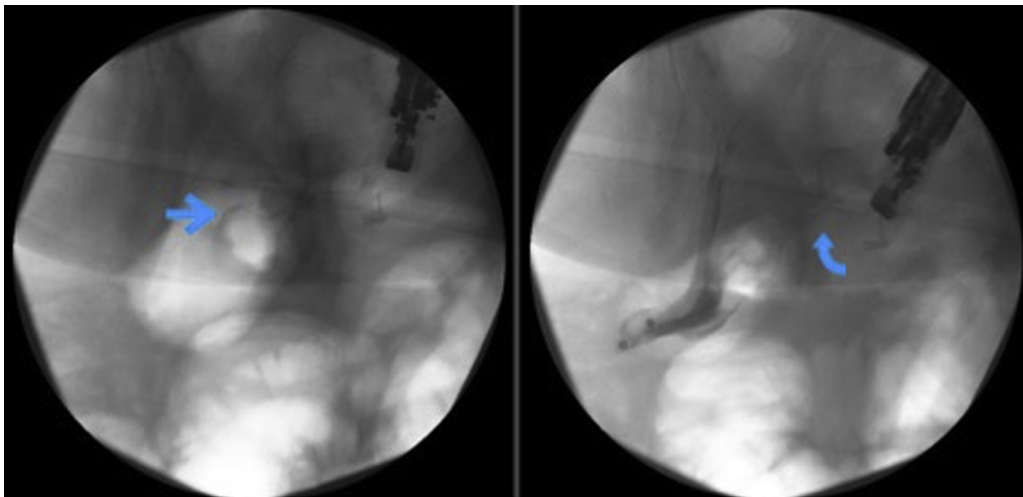


Figure 1. Fluoroscopic view confirming correct LAMS placement (*blue arrow*).

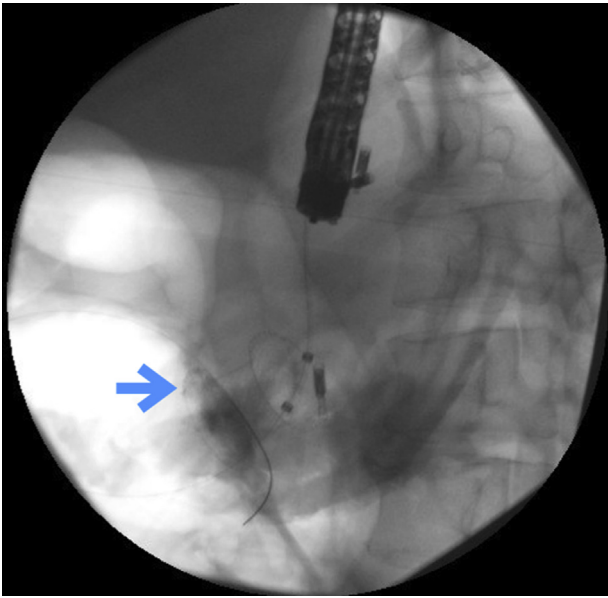


Figure 2. Spontaneously migrated LAMS (*blue arrow*) completely lodged in the gastric remnant.

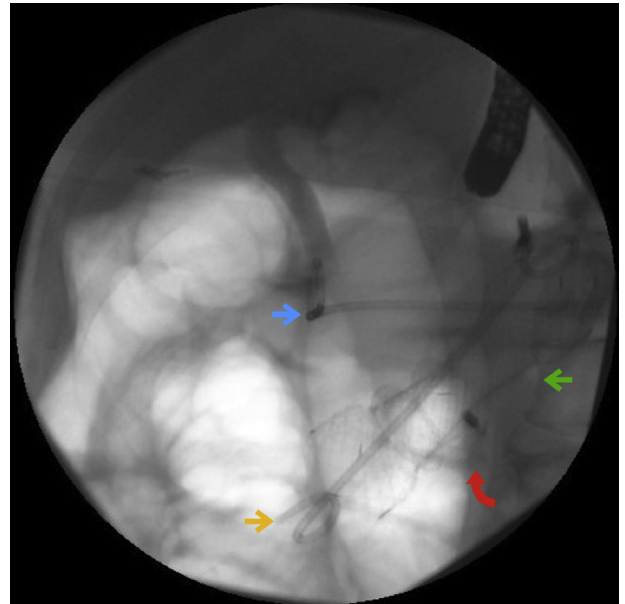


Figure 3. Pancreatic stent in the dorsal duct (*blue arrow*), SEMS traversing the enterogastrostomy (*green arrow*) and migrated LAMS (*red arrow*); double pigtail through the SEMS to prevent dislodgment (*yellow arrow*).

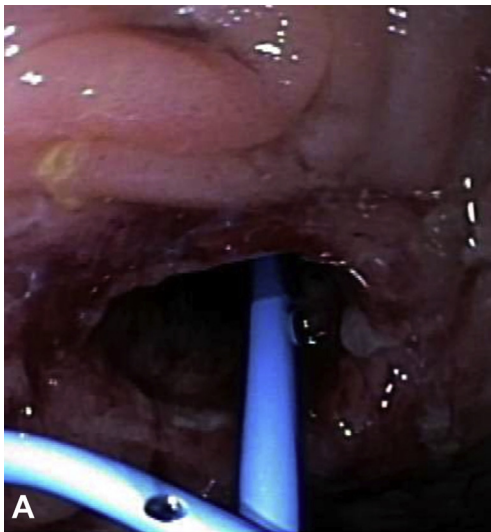


Figure 4. Fistula after LAMS (A) and SEMS (B) removal was cauterized with argon plasma coagulation. A 7F double-pigtail stent was left in situ through the fistula for future access.

bile duct and ampullary stenosis. Complete biliary sphincterotomy was performed, and a pancreatogram through the major papilla confirmed complete pancreas divisum. Complete minor papilla sphincterotomy was done, and a 7F × 12-cm single-pigtail pancreatic duct stent was placed (Fig. 3). During the exit from the excluded stomach, we noticed that the fully covered TTS SEMS had migrated into the gastric remnant. It was then grasped with a raptor tool and repositioned adequately across the Roux

limb access fistula and the gastric remnant. Finally, a 7F × 7-cm double-pigtail stent was deployed to anchor it, and the procedure was concluded.

At the 4-week follow-up visit, the dorsal pancreatic duct stent, the LAMS, and the SEMS were removed, and a 7F double-pigtail stent was left in situ through the fistula for future access (Fig. 4). A follow-up small-bowel follow-through study confirmed closure of the fistula around the 7F pigtail and no



Figure 5. Follow-up small-bowel follow-through study confirming extravasation of contrast material into the gastric remnant (*arrow*).

extravasation of contrast material into the gastric remnant (Fig. 5). At the 8-month follow-up visit, the patient had continued to do well with no episode of recurrent pancreatitis.

In conclusion, we present the first case demonstrating the rescue of a delayed spontaneous migration of an LAMS, using a fully covered TTS SEMS through the Roux limb access the site into the gastric remnant to reestablish jejunogastrostomy in a patient with RYGB and recurrent pancreatitis due to complete pancreas divisum.

DISCLOSURE

All authors disclosed no financial relationships relevant to this publication.

Abbreviations: LAMS, lumen-apposing metal stent; RYGB, Roux-en-Y gastric bypass; SEMS, self-expandable metal stent; TTS, through the scope.

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<https://doi.org/10.1016/j.vgie.2019.01.005>