"Double trouble": embedded lumen-apposing metal stent and embolization coils

A 56-year-old man with history of alcoholic pancreatitis complicated by chronic pseudocyst in the pancreatic head presented with abdominal pain and enlarging pseudocyst. He underwent endoscopic ultrasound-guided cystogastrostomy and placement of an AXIOS 15 × 10 mm lumen-apposing metal stent (LAMS; Boston Scientific, Marlborough, Massachusetts, USA). He presented at the emergency department 2 weeks later with melena and a 4-g drop in hemoglobin. Computed tomography angiogram followed by visceral angiogram confirmed inferior pancreaticoduodenal artery (PDA) pseudoaneurysm, which was treated with coil embolization (Fig. 1, Fig. 2). No further episodes of melena occurred and the patient was discharged in a stable condition.

Six weeks after cystogastrostomy, attempted LAMS removal during esophagogastroduodenoscopy (EGD) was unsuccessful as the stent had migrated inside the collapsed cavity and become embedded in the gastric wall. Repeat EGD at a tertiary center showed that the embolization coils had migrated into the decompressed cavity in the middle of the distal embedded flange of the stent (Fig. 3, Fig. 4). The LAMS was extracted using rat-tooth forceps and gentle evulsion of the embedded proximal flange; the coils were left in place (Video 1).

Endoscopic placement of fully covered self-expandable metal stents/LAMS is the mainstay of therapy for pancreatic fluid collections (PFCs) [1, 2]. LAMS migration occurs in up to 6.5%, usually when stents are left in situ for >6 weeks [3]. Pancreatitis-associated PDA pseudoaneurysms are extremely rare, but could lead to hemorrhage, with a mortality rate >25% [4]. Therefore, regardless of size, active treatment of PDA pseudoaneurysms is recommended [5]. Concomitant coil and stent migration and embedding is an extremely rare complication. Efforts should be made for early (<4 weeks) LAMS removal to prevent embedding. Endoscopists should be mindful of these rare events in patients with complicated pancreatitis with PFCs and treated pseudoaneurysms to prevent blind stent extraction and complications.
Competing interests
The authors declare that they have no conflict of interest.

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References

Bibliography
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