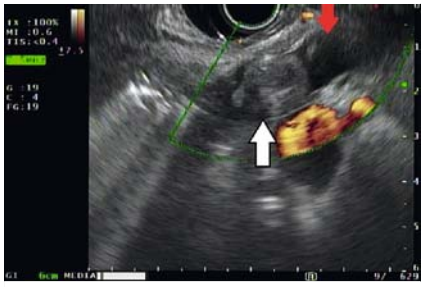
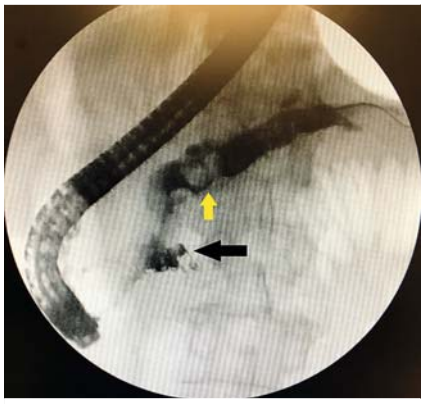
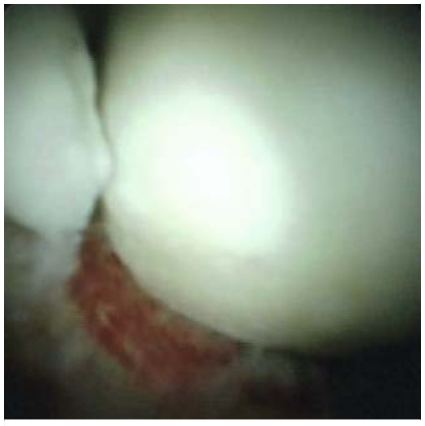
Endoscopic diagnosis and management of chronic relapsing pancreatitis due to eroded embolization coils



▶ **Fig. 1** Endoscopic ultrasound showed a dilated main pancreatic duct (red arrow) and intraductal filling (white arrow).



▶ **Fig. 2** Endoscopic retrograde cholangiopancreatography showed coils (black arrow) and intraductal filling (yellow arrow). There was also diffuse main pancreatic duct dilation.



▶ **Fig. 3** Pancreatic stones seen on SpyGlass examination (Boston Scientific, Marlborough, Massachusetts, USA).

A 59-year-old man with alcohol-induced pancreatitis was referred due to dilated pancreatic duct and pancreatic mass. He had presented 9 years earlier with gastrointestinal bleeding secondary to hemosuccus pancreaticus, which was treated by interventional radiology-guided coil and glue application to the superior pancreatico-duodenal artery pseudoaneurysm. He had complained of postprandial upper abdominal pain and a 10-lb weight loss, and had experienced recurrent acute pancreatitis in the preceding 4 months. Contrast-enhanced computed tomography showed dilated pancreatic duct and multiple coils around the head of the pancreas, and extensive shadowing artifact precluded further evaluation.

Endoscopic ultrasound revealed a dilated main pancreatic duct with intraductal filling and a 25 × 16 mm hypoechoic lesion in the head of the pancreas near the coils (▶ **Fig. 1**). Cytology showed epithelioid cells with abundant debris and no evidence of malignancy.

Endoscopic retrograde cholangiopancreatography was performed. After biliary sphincterotomy, the pancreatic orifice was cannulated with a 3.9-Fr sphincterotome and 0.025-inch angled tip guidewire. A diffuse dilated pancreatic duct and large filling defect was seen on pancreatogram (▶ **Fig. 2**). Spyglass DS (Boston Scientific, Marlborough, Massachusetts, USA) was passed over the guidewire and multiple large white stones were revealed (▶ **Fig. 3**). The stones were fragmented using electrohydraulic lithotripsy. Multiple eroded coils were also seen in the proximal duct, from prior embolization (▶ **Fig. 4**). The coils were removed with SpyBite (Boston Scientific) and rat-tooth forceps (▶ **Video 1**). Two 7 Fr × 12 cm single-pigtail plastic stents were deployed to maintain duct patency.

▶ **Fig. 4** SpyGlass examination (Boston Scientific, Marlborough, Massachusetts, USA) showed coils (red arrow) eroded into the pancreatic duct.

The patient tolerated the procedure well and was seen 1 month later, with marked improvement of symptoms and plan to follow up in 3 months.

Coils from prior embolization that have eroded into the gastrointestinal lumen and then either passed spontaneously or been removed endoscopically have been reported [1, 2]. To our knowledge, this is the first report of effective endoscopic management of recurrent pancreatitis caused by coils and glue expelled into the pancreatic duct.

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Competing interests

The authors declare that they have no conflict of interest.

Video 1 Diagnosis and management of chronic relapsing pancreatitis due to eroded embolization coils.

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