Rendezvous ERCP via endoscopic ultrasound-guided gallbladder drainage to salvage a dislodged lumen-apposing metal stent during choledochoduodenostomy

A patient with metastatic pancreatic adenocarcinoma underwent combined endoscopic ultrasound-guided fine needle aspiration (EUS-FNA) and endoscopic biliary drainage. Tumor involvement of a resected papilla precluded endoscopic retrograde cholangiopancreatography (ERCP). EUS-cholangiography revealed a dilated common bile duct (CBD) and a patent cystic duct above a distal stricture (►Fig. 1).

EUS-choledochoduodenostomy was performed with an 8 × 8-mm lumen-apposing metal stent (LAMS). Bile and contrast outflow into the duodenum confirmed satisfactory placement of the LAMS (►Video 1). The LAMS was balloon dilated prior to the intended insertion of an axis-orienting double-pigtail stent. However, during dilation, the distal flange of the LAMS dislodged from the CBD and guidewire access was lost. Duct decompression and aerobilia prevented repeat EUS-guided CBD puncture being performed.

The gallbladder was imaged from the antrum and drained under EUS guidance with a cautery-enhanced 15 × 10-mm guidewire (►Fig. 2). Contrast injection into the proximal bile duct results in gross retroperitoneal extravasation (arrows) producing a double-contrast fluoroscopic image of the common bile duct (►Fig. 3). This confirms the presence of an active perforation, suggesting gallbladder drainage alone might be insufficient to control it.
LAMS. A gastroscope was passed through the cholecystogastric LAMS after successful balloon dilation. The cystic-duct orifice was identified using cholecystoscopy. A guidewire was advanced in an antegrade fashion through the cystic duct until it was coiled in the duodenum. The gastroscope was removed over the wire. A duodenoscope was advanced to the papilla alongside the wire. A parallel guidewire was placed into the CBD (▶Fig. 2) through a homemade monorail sphincterotome, as previously described [1]. A covered biliary metal stent was placed over the second guidewire across the malignant stricture and the choledochal perforation that had resulted from the dislodgement of the LAMS (▶Fig. 3). The dislodged LAMS was retrieved, with clip closure of the duodenal perforation being performed (▶Fig. 4). The patient was given intravenous antibiotics and analgesia, and recovered within 48 hours. Acute LAMS dislodgment from nonadherent organs results in a double perforation. LAMS are increasingly used for EUS-choledochoduodenostomy, with 10% unplanned procedural events reported [2]. Standard salvage strategies include a bridging stent if the guidewire is in place or repeat EUS-guided CBD puncture to create a new tract. Unfortunately, neither of these was possible in this case. In malignant biliary obstruction, EUS-guided gallbladder drainage allows symptomatic decompression when the cystic duct is involved [3] and rescue biliary drainage when it is patent [4]. Two-stage transluminal cholecystoscopy for biliary rendezvous was reported after failed cannulation in a poor operative candidate with acute cholecystitis and choledocholithiasis [5]. We similarly used transluminal-transcystic rendezvous to perform a single-session ERCP with biliary stenting to seal the CBD perforation that had resulted from the dislodgement of the LAMS.

References


Bibliography

Endoscopy
DOI 10.1055/a-1368-3985
ISSN 0013-726X
published online 2021
© 2021. Thieme. All rights reserved.
Georg Thieme Verlag KG, Rüdigerstraße 14, 70469 Stuttgart, Germany

ENDOSCOPY E-VIDEOS
https://eref.thieme.de/e-videos

Endoscopy E-Videos is a free access online section, reporting on interesting cases and new techniques in gastroenterological endoscopy. All papers include a high quality video and all contributions are freely accessible online.

This section has its own submission website at
https://mc.manuscriptcentral.com/e-videos