Drainage of an inaccessible main pancreatic duct via EUS-guided transgastric stenting through the minor papilla

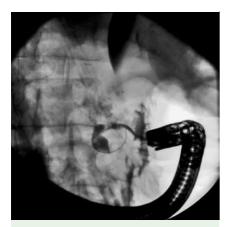


Fig. 1 Initial endoscopic retrograde cholangiopancreatography, attempted balloon pancreatogram, and attempted wire insertion failed to allow access, or even, visualization of the upstream main pancreatic duct (MPD).

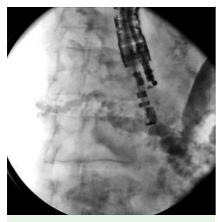


Fig. 2 Insertion of a 19 G needle transgastrically into the MPD, which measured 7 mm in diameter.

Endoscopic ultrasound (EUS)-assisted transgastric rendezvous procedures have been carried out in patients with obstructive chronic pancreatitis, occasionally inserting stents into the main pancreatic duct (MPD) to facilitate drainage [1–5]. This is the first known report of duodenal stent placement via transgastric access. A 62-year-old male with portal hypertension, presented with symptomatic alcohol-induced chronic calcific pancreatitis and MPD stones. Drainage could not be achieved during two prior endoscopic



Fig. 3 Advancement of a 0.21" guide wire into the duodenum via the minor papilla.

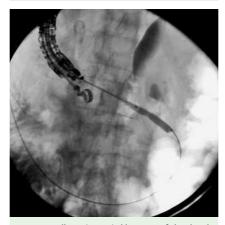


Fig. 4 Balloon (4 mm) dilatation of the distal pancreatic duct.

retrograde cholangiopancreatographies (ERCPs) due to severe MPD stricturing and occluding intraductal stones. Use of multiple guide wires and attempted forced balloon pancreatogram failed to allow access, or even, visualization of the upstream MPD (**°** Fig. 1).

Linear EUS was then carried out revealing changes compatible with severe calcific chronic pancreatitis. Initially, a 22 G needle was advanced transgastrically into the MPD, which measured 7 mm in diameter. A 0.18" guide wire could not be fed through into the duodenum. Therefore, a 19 G needle was transgastrically inserted and a 0.21" guide wire was advanced into the duodenum via the minor papilla



Fig. 5 A 7 Fr 7 cm straight stent was advanced through the echoendoscope and transgastrically into the pancreas, and eventually to the border of the minor papilla and duodenum.

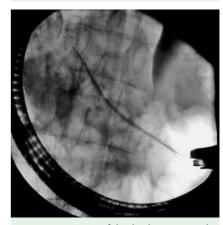


Fig. 6 Reinsertion of the duodenoscope and use of a snare to retract the stent further into the duodenum.

(Fig. 2 and 3). We performed catheter and balloon (4 mm and 6 mm) dilatation of the entire tract (Fig. 4). Then a 7 Fr 7 cm straight stent was advanced through the echoendoscope and transgastrically into the pancreas, and eventually to the border of the minor papilla and duodenum (Fig. 5). We failed to initially consider the need to remove the back flange, which we could not advance through the gastric wall. Therefore, the duodenoscope was reinserted and a snare was used to retract the stent further into the duodenum (> Fig. 6). A second 7 Fr 7 cm straight stent was inserted to further promote drainage. No complications developed and the patient is now asymptomatic 6 weeks following therapy. This report demonstrates the ability to achieve transpapillary stenting via EUS and a transgastric approach. It should also serve as a reminder to remove the back flange to facilitate stent insertion.

Endoscopy_UCTN_Code_TTT_1AR_2AI Endoscopy_UCTN_Code_TTT_1AS_2AD

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DOI 10.1055/s-2007-966794 Endoscopy 2007; 39: E313 – E314 © Georg Thieme Verlag KG Stuttgart · New York · ISSN 0013-726X

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