Clip-assisted minor pancreatic duct cannulation to manage pancreatic duct leak

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We report the case of a 64-year-old man with high-output fistula after laparoscopic pancreatic tail resection for neuroendocrine tumor who was referred to our endoscopic unit 1 day after a failed ERCP. During previous ERCP, biliary sphincterotomy and Wirsung duct cannulation were performed (Fig. 1). However, dorsal duct cannulation failed. A small bleed from the previous sphincterotomy was managed, and cannulation of the Wirsung duct was obtained with a 0.025-inch guidewire (Visaglide; Olympus, Tokyo, Japan). Its opacification showed multiple side branches but no communication with the dorsal duct, leading to a diagnosis of complete pancreas divisum (Fig. 2; Video 1, available online at www.VideoGIE.org). Therefore, accessory (minor) papilla cannulation was decided upon for the management of the leak.

A small pseudopolipoid minor papilla was recognized on top of a fold (Fig. 2). Because it was floppy, its cannulation failed; nonetheless, several approaches with different devices were attempted. A hemostatic clip (RevolutionClip; Boston Scientific, Marlborough, Mass, USA) was used to anchor the fold to the duodenal wall, thus exposing the papilla and reducing its movements (Fig. 3). Easy cannulation with a 0.025-inch guidewire was achieved, and dorsal duct pancreatography confirmed a leak at the level of the pancreatic tail. Finally, a 7F 13-cm-long pancreatic plastic stent was successfully inserted. Surgical drainage was removed after 1 week. The pancreatic stent was removed 3 months later at the referring endoscopy unit. At the 6-month follow-up visit, the patient was asymptomatic.

Pancreas divisum is present in 10% of patients.[1] Diagnosis during ERCP occurs in 0.47% to 2.3% of cases.[2]

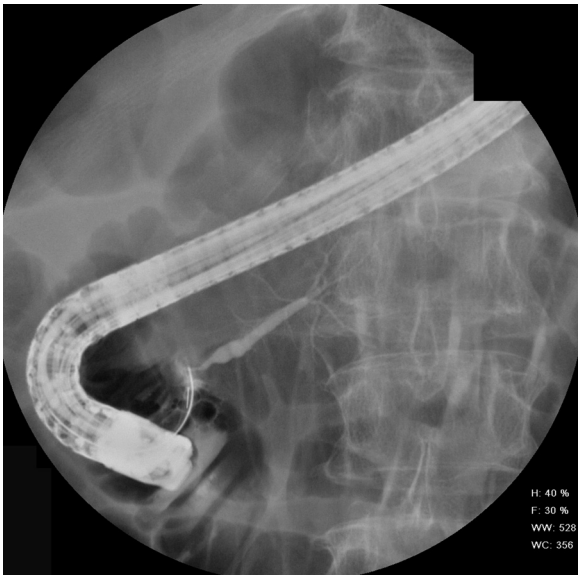

Figure 1. Ventral duct opacification showing no communication with dorsal duct.

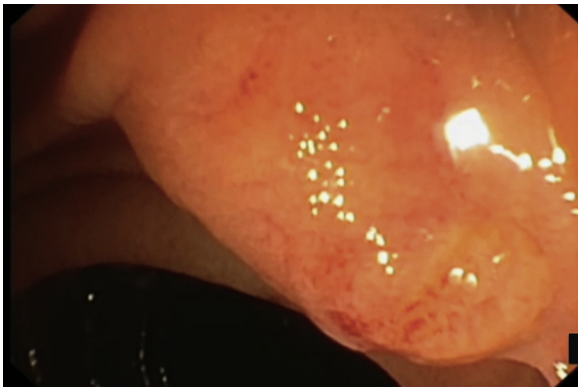

Figure 2. Small floppy minor papilla.

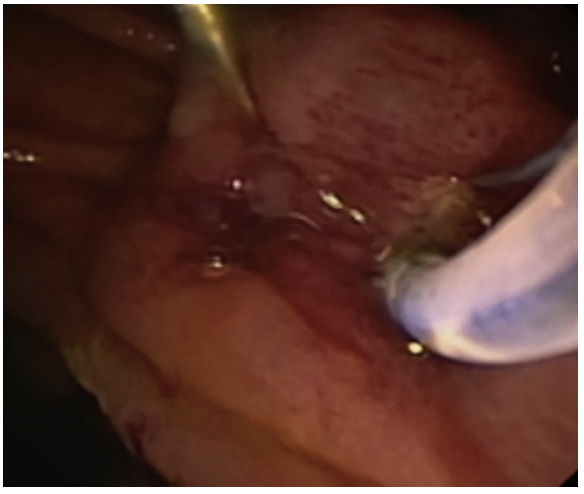

Figure 3. Clip-assisted minor papilla cannulation.

Early recognition of pancreas divisum is very important to avoid adverse events, namely, acute pancreatitis or duct trauma and rupture.

Cannulation of a minor papilla is challenging even in expert hands. Several techniques have been described: chromoendoscopy to recognize the orifice, needle-knife–guided cannulation, rendezvous technique, or dual-device–assisted access.[3,4] Unfortunately, deep cannulation fails in up to 23% of cases.

Clip-assisted cannulation has been reported for major papilla cannulation in cases of periampullary lipoma or diverticula.[5] Here we report the first case of clip-assisted cannulation of a minor papilla. This is a feasible and inexpensive technique in cases of difficult cannulation of major or minor papilla, allowing us to expose and fix them to the duodenal wall.

DISCLOSURE

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