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DEN Video Article

Hepaticojejunostomy for the right hepatic bile duct using a forward-viewing echoendoscope in a patient after pancreatoduodenectomy

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BRIEF EXPLANATION

A 58-YEAR-OLD MAN with a history of pancreatoduodenectomy with modified Child's reconstruction for pancreatic cancer carried out 2 years prior presented with afferent loop syndrome and obstructive jaundice owing to a recurrent tumor. Contrast computed tomography showed that the tumor was in the hepatic hilum, obstructed the afferent limb and intrahepatic duct, and disconnected the right and left biliary systems. A colonoscope was inserted, and an uncovered self-expandable metallic stent (SEMS) (10-mm diameter, 80-mm length; Niti-S large cell D-type; Taewoong Corporation, Seoul, Korea) was deployed for isolated afferent loop drainage. Four days later, biliary drainage of the right intrahepatic duct (RHD) from the afferent limb and that of the left intrahepatic duct (LHD) from the stomach were planned. A forward-viewing endoscopic ultrasound (FV-EUS) device was inserted into the afferent limb using an over-the-wire technique after inserting a guidewire (GW) using colonoscopy. The dilated RHD was punctured using a 19-gauge EUS needle (Fig. 1). The GW was advanced into the RHD, and the fistula was dilated using a balloon catheter. We placed a covered SEMS (10-mm diameter, 60-mm length, 10-mm uncovered portion at the distal end; Niti-S biliary S-type, Taewoong Corporation) (Fig. 2). Because LHD was successfully drained through a slight connection between RHD and LHD using SEMS, drainage of the LHD from the stomach was not performed (Video S1). Jaundice resolved and no adverse events were reported after 12 weeks. EUS-guided biliary drainage (EUS-BD) for RHD obstruction has been reported; however, use of the procedure, which includes a curved linear array, is stressful for EUS patients with surgically altered anatomy because of the inability to intubate the afferent limb.[1–3] For

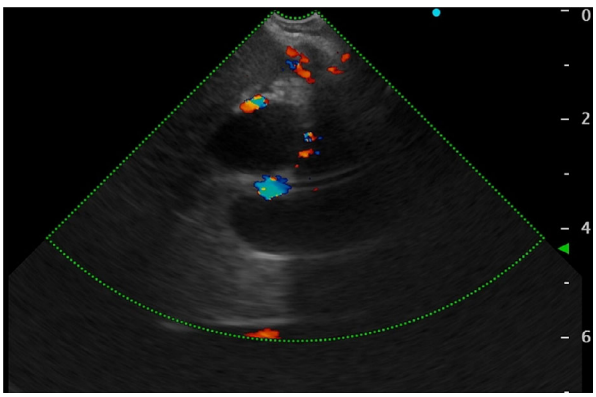

Figure 1 Dilation of the right hepatic duct is observed using a forward-viewing echoendoscope.

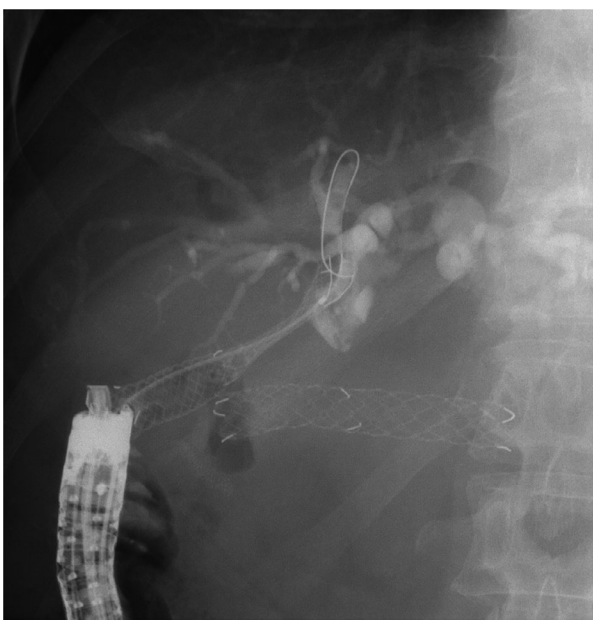

Figure 2 A covered self-expandable metallic stent (bare-end type, Niti-S biliary S-type; Taewoong Corporation, Seoul, Korea) is inserted in the right hepatic duct from the afferent limb.

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patients with surgically altered anatomy, the use of FV-EUS should be considered as a rescue technique in EUS-BD for RHD obstruction.[4]

Authors declare no conflicts of interest for this article.

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SUPPORTING INFORMATION

ADDITIONAL SUPPORTING INFORMATION may be found in the online version of this article at the publisher's web site.

Video S1 Endoscopic ultrasound-guided biliary drainage for the right hepatic duct is successfully carried out using a forward-viewing endoscopic ultrasound device from the afferent limb in a patient with a history of pancreatoduodenectomy with Child's reconstruction.