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Endoscopic ultrasound-guided transduodenal ERCP for hepatico-jejunostomy stricture

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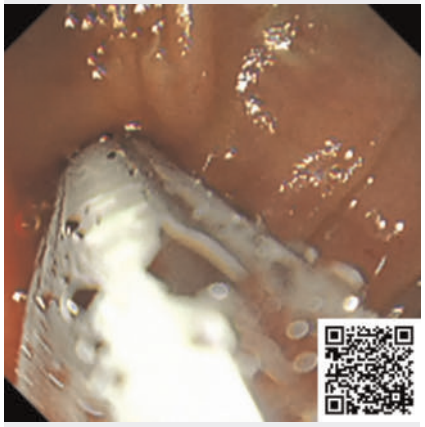

Video 1 Cannulation of the afferent limb via the lumen-apposing metal stent (white arrow) deployed between the duodenum and afferent limb bypass. Dilatation of the stenosed hepaticojejunostomy orifice was performed with a 6-mm biliary balloon.

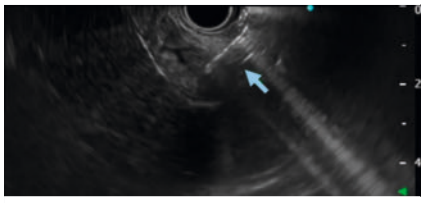

Fig. 1 Identification of the afferent limb and puncture of the afferent limb with a 19G FNA needle.

Fig. 2 Deployment of the distal flange of the lumen-apposing metal stent (LAMS). The LAMS was pulled back before deployment in the channel and full deployment under endoscopic guidance.

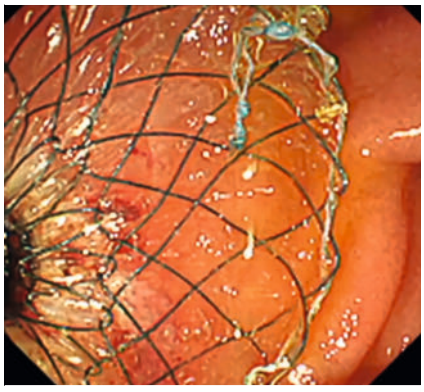

Fig. 3 Endoscopic view of the fully deployed LAMS between the duodenum and the afferent limb.

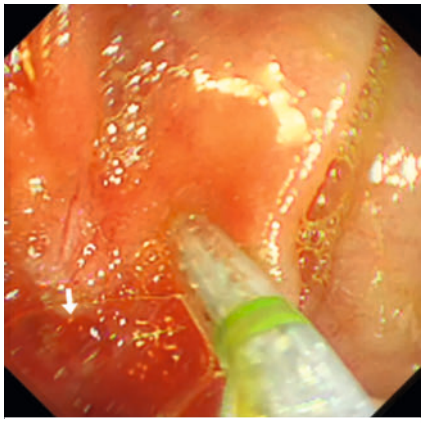

Fig. 4 Identification of the stenosed hepatico-jejunostomy orifice (white arrow) in the afferent limb.

A 75-year-old man was referred for management of a hepaticojejunostomy (HJS) stricture following HJS performed for a bile duct injury during cholecystectomy 3 months prior. A short-type double-balloon enteroscopy (DBE) was attempted but was unsuccessful due to inability to reach the HJS. Endoscopic ultrasound (EUS)-guided transduodenal endoscopic retrograde cholangiopancreatography (ERCP) for management of the HJS stricture was planned [1].

An EUS-guided duodenum–afferent limb bypass was first performed with a lumen-apposing metal stent (LAMS) between the duodenum and the afferent limb (**Video 1**). On EUS, the afferent limb was identified from the duodenum and punctured with a 19G needle (EZshot 3; Olympus Medical, Tokyo, Japan) (**Fig. 1**).The afferent limb was distended by infusion of 500 ml of normal saline mixed with indigo-carmine and contrast medium. Over a 0.025-inch guidewire, the delivery system of the cautery-enhanced LAMS delivery system (Hanarostent Z-EUS IT; M.I. Tech, Gyeonggi-do, South Korea) was inserted and a 16×20-mm stent was deployed into the afferent limb (**Fig. 2**, **Fig. 3**) [2]. ERCP was subsequently performed after 3 days with a dual-channel endoscope inserted into the afferent limb via the LAMS. The HJS (**Fig. 4**) was dilated with a 6-mm biliary balloon (Hurricane Biliary RX; Boston Scientific, Marlborough, Massachusetts, USA). Two plastic stents were inserted into bilateral intrahepatic ducts.

The patient was discharged on post-procedure day 2. No other complications or unplanned procedure occurred on follow-up. The patient underwent stent exchange at 6 months. No residual stricture was evident on cholangiogram at 9 months post-procedure. The HJS stricture occurs in up to 12.5 % of patients at 2 years post hepatico-jejunostomy [3]. In this patient with an HJS stricture after Roux-en-Y HJS, EUS-guided duodenum–afferent limb bypass was successful for access to the HJS for ERCP after failed DBE-assisted ERCP.

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Conflict of Interest

Prof. Anthony Y. B. Teoh is a consultant for Boston Scientific, Cook, Taewoong, Microtech and MI Tech Medical Corporations. Other authors do not have any conflicts of interest to disclose

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