Endoscopic ultrasound-guided biliary drainage (EUS-BD) is a treatment option for patients with biliary obstruction in whom traditional endoscopic retrograde cholangiopancreatography (ERCP) is not possible due to altered upper gastrointestinal anatomy. In such cases, EUS-BD is a good alternative to surgery or percutaneous transhepatic biliary drainage (PTBD), with comparable clinical and technical success rates [1]. Two approaches have been described for EUS-guided transluminal biliary drainage. EUS-guided hepaticogastrostomy uses the transgastric approach and EUS-guided choledochoduodenostomy uses the transduodenal approach [2].

Here, we present the case of a 78-year-old woman with a history of gallbladder cancer and cholangiocarcinoma, for which she underwent Whipple surgery 8 months earlier, followed by adjuvant chemotherapy. She was admitted to the hospital after the 11th cycle of chemotherapy due to severe weakness and jaundice. Her blood tests were remarkable for high liver function tests of cholestatic pattern. Computed tomography of the abdomen showed an ill-defined lesion at the porta hepatis with intrahepatic biliary dilation. It was decided that EUS-guided hepaticogastrostomy should be performed.

A 19-gauge needle was used to access the dilated left intrahepatic duct. Then, cholangiography revealed biliary obstruction extending to the bifurcation, with upstream biliary dilation. A guidewire was passed into the left intrahepatic duct and a hepaticogastrostomy tract was created using needle-knife electrocautery (Boston Scientific, Marlborough, Massachusetts, USA). Next, the tract was serially dilated, and a 10 mm × 10 cm fully covered metallic stent (Viabil; Conmed, Utica, New York, USA) was placed and subsequently dilated. An Autotome sphincterotome (Boston Scientific) was used to cross the obstruction; then, a 12 cm...
double-pigtail stent (DPS) (Wilson Cook, Winston-Salem, North Carolina, USA) was placed through the stent bypassing the biliary obstruction and reaching the small bowel. Another DPS was placed across the left intrahepatic duct. A forward-viewing endoscope confirmed the placement of the DPS deep into the jejunum (▶ Fig. 1, ▶ Video 1). The patient’s clinical status improved with a trend toward lower liver function tests. After 6 months, the patient was clinically stable after a cycle of chemoradiation.

EUS-BD via hepaticogastrostomy is a safe and effective procedure when performed by an endoscopist well trained in both EUS and ERCP.

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Competing interests

M. Kahaleh has received grants from BSC, Cook, Apollo, Gore, and Fuji, and is a consultant for BSC, Medtronic, Microtech, Creo, Apollo, and AbbVie. A. Tyberg is a consultant for BSC, Endogastric Solution, and Ambu. S. M. Shah-Khan, K. Elfert, A. Sarkar, and H. Shahid declare that they have no conflict of interest.

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