Endoscopic ultrasound-guided choledochoduodenostomy: A propos of two cases

Dear Editor,

EUS-guided biliary drainage is a tool described by Giovanini in 2001 for the treatment of obstructive lesions in the biliary tract. Choledochoduodenostomy under EUS is a feasible approach with low morbidity and mortality for the management of jaundice secondary to distal obstruction (distal biliary, head of the pancreas, or major papilla tumors). Two cases are reported of patients with bile duct obstruction of malignant etiology who underwent EUS-guided drainage following a failed ERCP.

Case reports

Two cases are reported of two patients—70 and 71 years of age—with biliary obstruction secondary to adenocarcinoma of the papilla and adenocarcinoma of the head of the pancreas, respectively, in both cases following a failed ERCP procedure because of tumor infiltration. We proceeded to perform a transmural biliary drainage procedure under EUS guidance (Fig. 1A). The duodenal bulb was entered, where a distally dilated choledochus was identified proximal to the tumor; it was punctured with a 19A gauge needle (Fig. 1B), which confirmed ductal access with bile release; then a contrast medium was injected and a guidewire was passed (Fig. 1C); a 4-mm Hurricane on the wire was used to dilate the duodencholedochal tract (Fig. 1D), and a 10-Fr biliary pig-tail stent was placed (Fig. 1E), in both cases witnessing contrast voiding (Fig. 1F) and the pouring out of abundant biliary fluid. Biliary tract drainage was satisfactorily successful in both patients using the EUS-guided choledochoduodenostomy technique. Prior to the procedure, patient 1 had a total bilirubin of 16.52 mg/dl, and at day 22 following drainage total bilirubin was 6.41 mg/dl. Patient 2 had a total bilirubin of 19.95 mg/dl and then of 4.19 mg/dl at day 15 after drainage. No immediate complications were reported and a definitive surgical therapy could be performed.

Discussion

Although current data are limited, transmural biliary drainage under the guidance of endoscopic ultrasounds represents a huge potential as an alternative for biliary drainage following a failed ERCP. It is a complex, invasive procedure that requires appropriate patient selection and shows favorable outcomes with a low morbidity and mortality.

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Fig. 1. Endoscopic ultrasound-guided choledochoduodenostomy.

References