

Letters to the Editor

Endoscopic ultrasound-guided choledochoduodenostomy: A propos of two cases

Key words: Biliary tract. EUS-guided drainage. Endoscopic ultrasound.

Dear Editor,

EUS-guided biliary drainage is a tool described by Giovannini 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 trans-

mural 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 duodenocholedochal 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.

Vicente Sanchiz, Oswaldo R. Moreno, Luis E. Barreda,
María Mora, Pablo R. Navarro, Andrés Peña and Francisco Mora

*Department of Digestive Medicine. Hospital Clínico
Universitario de Valencia. Universidad de Valencia.
Valencia, Spain*

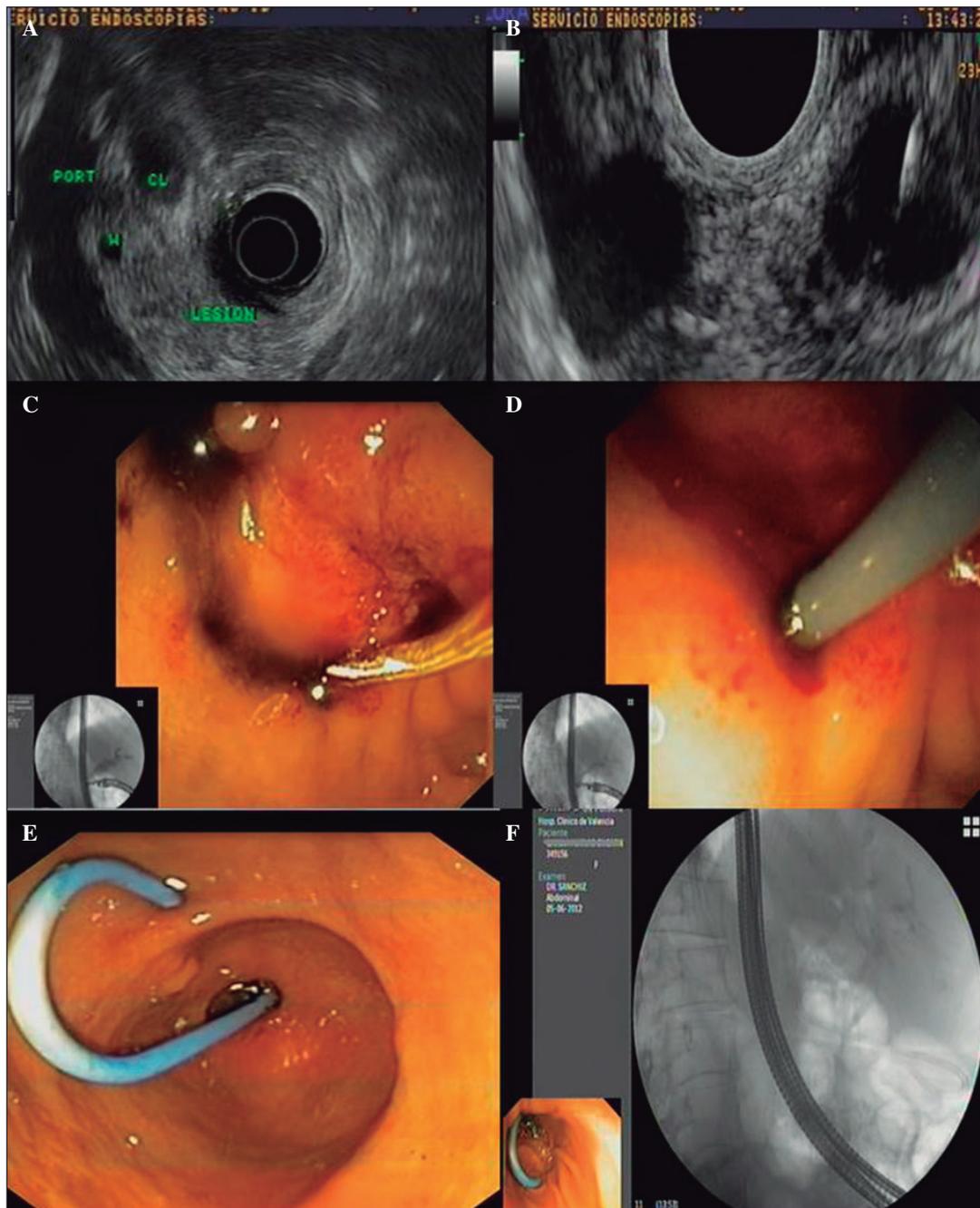


Fig. 1. Endoscopic ultrasound-guided choledochoduodenostomy.

References

1. Artifon ELA, Ferreira FC, Otoch JP. Coledocoduodenostomía guiada por ultrasonido endoscópico para la paliación de la obstrucción biliar distal maligna. *Revista de gastroenterología de México* 2012;77:31-7.
2. Giovannini M, Moutardier V, Pesenti C, Bories E, Lelong B, Delpero JR. Endoscopic ultrasound-guided bilioduodenal anastomosis: A new technique for biliary drainage. *Endoscopy* 2001;33:898-900.
3. Itoi T, Itokawa F, Tsuchiya T, Tsuji S, Tonzuka R. Endoscopic ultrasound-guided choledochostomy as an alternative extrahepatic bile duct drainage method in pancreatic cancer with duodenal invasion. *Dig Endosc* 2013;25(Supl. 2):142-5.
4. Kim TH, Kim SH, Oh HJ, Sohn YW, Lee SO. Endoscopic ultrasound-guided biliary drainage with placement of a fully covered metal stent for malignant biliary obstruction. *World J Gastroenterol* 2012;18:2526-32.