Endoscopic ultrasound-guided jejunogastrostomy to perform endoscopic cholangiography in a patient with a modified Roux-en-Y hepaticojejunostomy

A 43-year-old woman had been diagnosed with intrahepatic duct stones and referred in 2007 for cholecystectomy and modified Roux-en-Y hepaticojejunostomy. A jejunal loop had been fixed to the anterior wall of the stomach for future endoscopic access, if necessary (Fig. 1). The patient had remained asymptomatic for 5 years, but then presented with multiple episodes of cholangitis. Magnetic resonance cholangiography in 2012 showed intrahepatic duct stones. Conventional endoscopic retrograde cholangiopancreatography (ERCP) failed. Thus a decision was taken to perform endoscopic extraction of the biliary stones by accessing the jejunal loop, guided by endoscopic ultrasound (EUS).

The procedure was performed using a linear echoendoscope (Pentax Corporation, Japan). The jejunal loop adjacent to the anterior stomach wall was identified (Fig. 2). A 19-G needle (EchoTipUltra; Wilson-Cook, Winston-Salem, North Carolina, USA) was inserted transgastrically into the loop under EUS guidance. Iodine contrast was injected confirming adequate positioning of the needle inside the loop (Fig. 3). A 0.035-inch guidewire (Jagwire; Boston Scientific, Massachusetts, USA) was advanced through the needle into the loop. A jejunogastrostomy was then created using a 10-Fr cystotome (Cystotome; Wilson-Cook, North Carolina, USA), and the tract was enlarged using a 10mm×4cm biliary balloon dilation catheter (Hurricane RX; Boston Scientific, Boston, USA). A 9.8-mm gastroscope was then introduced through the jejuno- gastrostomy and into the jejunal loop. It was possible to reach the hepaticojejunostomy (Fig. 4) and to perform direct cholangioscopy and endoscopic cholangiography. Using a 8.5/12/15-mm extraction balloon (Fusion; Wilson-Cook) it was possible to remove sludge and small stones from the bile ducts (Fig. 5). In order to maintain patency of the jejuno- gastrostomy for further endoscopic access into the biliary ducts, we opted to place three 10-Fr double-pigtail plastic stents (Biliary Stent Set; Wilson-Cook) (Fig. 6). The patient recovered well, and at 1-year follow-up she has remained asymptomatic without further episodes of cholangitis. Currently the plastic stents are still in place, and a further magnetic resonance cholangiography will be done.

Endoscopy_UCTN_Code_TTT_1AS_2AD

Competing interests: None
Rogério Colaiacovo, Augusto P. C. Carbonari, Lucio G. Rossini, Andre de Moricz, Erwin Santo, Marc Giovannini

1 Department of Endoscopy and French-Brazilian Centre of Endoscopic Ultrasound (CFBEUS), Santa Casa de São Paulo Hospital, São Paulo, Brazil
2 Department of Surgery, Santa Casa de São Paulo Hospital, São Paulo, Brazil
3 Department of Gastroenterology and Liver Diseases, Tel Aviv Sourasky Medical Center, Tel Aviv, Israel
4 Department of Gastroenterology and Endoscopy, Paoli Calmettes Institute, Marseille, France

Bibliography
DOI: http://dx.doi.org/10.1055/s-0034-1390923
© Georg Thieme Verlag KG
Stuttgart · New York
ISSN 0013-726X

Corresponding author
Augusto Carbonari, MD
Department of Endoscopy and French-Brazilian Centre of Endoscopic Ultrasound (CFBEUS)
Santa Casa de São Paulo Hospital
Rua Manuel Figueiredo Landim 600 ap. 52A
São Paulo 04693-130
Brazil
Fax: +55-19-996040645
augustocarbonari@gmail.com