Reverse rendezvous with endoscopic retrograde cholangiography and percutaneous transhepatic cholangio drainage: who meets whom?

A 47-year-old severely ill Caucasian man presented with cholestasis (bilirubin 17.8 mg/dL) due to primary sclerosing cholangitis. Endoscopic retrograde cholangiography (ERC) showed high grade strictures of the common bile duct (CBD), dilation of the common hepatic duct (CHD), and left hilar obstruction (▶ Fig. 1a). Attempts to maneuver 5–7-Fr bougies across the distal CBD stenosis were not successful.

Via left-sided percutaneous transhepatic cholangio drainage (PTCD), retrograde access to the CBD was not possible even after simultaneous transpapillary wire guidance (▶ Fig. 1b). Therefore, a 1.2-mm biopsy forceps (SpyBite; Boston Scientific, Ratingen, Germany) was introduced percutaneously through an 8-Fr bougie into the dilated CHD to grab the transpapillary 0.025-inch wire. The wire was carefully exteriorized in a reverse rendezvous maneuver (▶ Fig. 1c, d, Video 1). Given the lack of bougienage options, a 5.2-Fr angiography catheter (Super Torque Plus; Cordis, Baar, Switzerland) was inserted as a temporary spacer across the papilla under duodenoscopic view. Upon PTCD exchange, spurting bleeding from the access site was stopped by upgrade to an 8.5-Fr Yamakawa drain (Peter Pflugbeil GmbH, Zorneding, Germany). Parenchymal damage from initial wire manipulation was suspected, so the percutaneous tract was subsequently

▶ Fig. 1 Cholangiographic images. a High grade common bile duct (CBD) stenoses, common hepatic duct (CHD) dilation to 15 mm, and left hilar obstruction not amenable to endoscopic retrograde cholangiography-guided therapy. Right-sided loss of intrahepatic ducts was suspected previously. b Rendezvous of wires in the dilated CHD, but access across the significant stenoses was not possible. c, d The transpapillary wire was grabbed with a forceps over an 8-Fr bougie and exteriorized percutaneously. e Resolution of stenoses in the CBD and CHD 14 months after initial rendezvous.

▶ Video 1 Reverse rendezvous with endoscopic retrograde cholangiography and percutaneous transhepatic biliary drainage.
occluded with hemostyptic gelatine (Gelita; B. Braun, Melsungen, Germany), and a transpapillary 8.5-Fr pigtail stent was inserted.

The patient gained 10 kg in weight and the bilirubin level persistently dropped to 0.8 mg/dL. After repeated stent upgrades and dilations (▶ Fig. 1e), dysplasia was ruled out by cholangioscopic biopsies. After 20 months, the patient was well and continued to have regular follow-up with no evidence of recurrence of cholestasis.

To our knowledge, reverse rendezvous, with percutaneous uptake of a transpapillary wire, has not been reported previously. The “lucky punch” of being able to grab the transpapillary wire with a port-guided forceps can be facilitated by C-arm rotation. Unsheathed transparenchymal wire extraction is not recommended as the wire may cut the liver parenchyma, necessitating hemostyptic occlusion of the percutaneous tract, as in our patient. Reverse ERC-PTCD rendezvous is a nonstandard rescue maneuver that can offer significant benefit in technically demanding situations.

Competing interests

Martin Goetz is in the advisory board for Boston Scientific.

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