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 boudgienage 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. 1 e), 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.

The authors

Martin Goetz1, Jakob Fisch1, Jürgen Hetzel2, Gerd Grözinger3
1 Innere Medizin I, Universitätsklinikum Tübingen, Tübingen, Germany
2 Innere Medizin II, Universitätsklinikum Tübingen, Tübingen, Germany
3 Radiologische Universitätsklinik, Universitätsklinikum Tübingen, Tübingen, Germany

Corresponding author

Martin Goetz, MD
Innere Medizin I, Universitätsklinikum Tübingen, 72076 Tübingen, Germany
Fax: +49-7071-2925034
m_goetz@web.de