We present herein the case of a 70-year-old man with biliary tree dilation due to pancreatic head adenocarcinoma. As shown in Figure 1, given the failure of endoscopic drainage of the common bile duct (CBD), the patient underwent percutaneous internal-external biliary drainage (2 arrows) with restoration of normal bile passage from the liver into the duodenum (#). The final cholangiography demonstrated dilated biliary ducts and an anatomic variant, with an aberrant posterior branch of the right hepatic duct (PB-RHD) and the cystic duct (CD) draining into the common hepatic duct (CHD) together in a “Y” course. Steno-occlusion of the CBD was confirmed (*). The rest of the biliary tree appeared normal: the anterior branch of the right hepatic duct (AB-RHD), the left hepatic duct (LHD), and the gallbladder.

The patient underwent biliary stenting and subsequent oncologic therapy. The bile duct system arises from the hepatic diverticulum at the fourth embryonic week. Parts of those ducts later form the definitive hepatic duct pattern, but anatomic variants may occur during that process. If there is no knowledge of biliary tree anatomic variants, they can lead to bile duct injury during hepatic surgery. A clear characterization through imaging studies of the patient’s biliary anatomy provides important information for hepatic surgery planning and maneuvering.

Ethical disclosures

Protection of human and animal subjects. The authors declare that no experiments were performed on humans or animals for this study.

Confidentiality of data. The authors declare that they have treated all patient data with confidentiality and anonymity, following the protocols of their work center.
Aberrant right hepatic duct and cystic duct both draining into the common hepatic duct

Right to privacy and informed consent. The authors have followed the protocols of their work center in relation to the publication of patient data, preserving absolute patient confidentiality and anonymity.

Financial support

No financial support was received in relation to this article.

Conflict of interest

The authors declare that there is no conflict of interest.

Figure 1  Cholangiography with dilated bile ducts and an anatomic variant: anterior branch of the right hepatic duct (AB-RHD), posterior branch of the right hepatic duct (PB-RHD), cystic duct (CD), left hepatic duct (LHD), common hepatic duct (CHD), common bile duct (CBD).