Postsurgical bile duct disruption: Digital single-operator cholangioscopy-assisted recanalization

Treatment of postsurgical biliary leaks is complex and depends on their severity. Endoscopic treatment is usually preferred, but it can be difficult in cases of complete duct transection. However, most patients with a biliary leak are septic and are therefore not eligible for a surgical approach [1, 2, 3].

We present the case of a 59-year-old patient who developed jaundice and fever 10 days after a hepatic metastasectomy (segments II and IVa). A computed tomography (CT) scan showed a 14-cm perihilar collection, compatible with an infected biloma (Fig. 1).

Endoscopic retrograde cholangiopancreatography (ERCP) demonstrated a stenosis of the proximal common bile duct (CBD), a biliary leak, and no opacification of the intrahepatic bile duct (Fig. 2). A sphincterotomy was performed and two transpapillary nasobiliary drainage catheters (7 F and 8.5 F) were placed. The biloma was percutaneously drained. Cannulation of the CBD 1 month later was not successful using a radiological approach with percutaneous transhepatic cholangiography (Fig. 3).

A combined percutaneous and endoscopic treatment was planned (Fig. 4, Video 1). The stenosis of the CBD was dilated and a cholangioscope was introduced in the collection via ERCP. A guide was advanced via percutaneous transhepatic cholangiography, captured within the collection with direct vision using a snare, and advanced to the duodenum. With maintained endoscopic traction of the guide, a percutaneous 8.5 F plastic catheter was inserted, with the proximal fenestrated portion in the intrahepatic bile duct and the distal fenestrated portion in the CBD. Finally, a plastic biliary stent (9 cm/10 F) was placed. Fluoroscopic control images showed continuity between the intrahepatic and common bile duct (Fig. 5). The plastic catheter was exchanged for a biodegradable biliary stent 6 weeks later. Final recanalization was achieved.

Biodegradable biliary stents show good technical and clinical success in biliary fistula treatment [4]. In this case, the cholangioscope was the key element for the described rendezvous, illustrating the diagnostic and therapeutic advantages of direct visualization of the biliary duct [5]. A multidisciplinary approach is crucial for a good clinical outcome in these challenging cases [2, 3].

Endoscopy_UCTN_Code_TTT_1AR_2AK
Competing interests

The authors declare that they have no conflict of interest.

The authors

Carolina G. González-Olivares1, José R. Foruny1, Andreína Olavarría2, Juan Ángel González Martín1, Sergio López-Durán1, Enrique Vázquez-Sequeiros1, Agustín Albillos1

1 Gastroenterology and Hepatology Department, University Hospital Ramón y Cajal, IRYCIS, University of Alcalá, CIBEREHD, Madrid
2 Radiology Department, University Hospital Ramón y Cajal, Madrid

Corresponding author

José R. Foruny, MD
Servicio de Gastroenterología y Hepatology, Hospital Universitario Ramón y Cajal, Carretera de Colmenar Viejo km. 9,100, 28034 Madrid, Spain
Fax: +34-91 336 80 00
forunyj@yahoo.es

References


Video 1 Spyglass cholangioscopy-assisted rendezvous in postsurgical bile duct disruption. We combined a radiologic approach via percutaneous transhepatic cholangiography with an endoscopic approach via endoscopic retrograde cholangiopancreatography and intraductal cholangioscopy, achieving reconnection of the bile ducts.

CORRECTION

Postsurgical bile duct disruption: Digital single-operator cholangioscopy-assisted recanalization


Endoscopy 2020, 52: 10.1055/a-1258-4176

In the above-mentioned article, the title has been corrected. Correct is: Postsurgical bile duct disruption: Digital single-operator cholangioscopy-assisted recanalization. This was corrected in the online version on May 6, 2021.

ENDOSCOPY E-VIDEOS
https://eref.thieme.de/e-videos

Endoscopy E-Videos is a free access online section, reporting on interesting cases and new techniques in gastroenterological endoscopy. All papers include a high quality video and all contributions are freely accessible online.

This section has its own submission website at https://mc.manuscriptcentral.com/e-videos