A 45-year-old man who had undergone surgery for a giant hepatic hydatid cyst 1 month ago presented to the emergency room with abdominal pain and fever. Computed tomography (CT) revealed a right pleural effusion and a collection in the right hepatic lobe, suggestive of a biliary leak (▶Fig. 1).

After two failed endoscopic retrograde cholangiopancreatography (ERCP) attempts, the common bile duct (CBD) was punctured using a 22-G needle, and a 0.018-in guidewire was advanced for an endoscopic ultrasonography-guided rendezvous. Cholangiography identified a major bile leak from one of the branches of the right main bile duct (▶Fig. 2). An 80 × 10-mm fully-covered metal stent was inserted.

Given the lack of improvement, a second ERCP was performed showing the previous stent was in place. The leaking bile branch was selectively cannulated. Four 0.035-in Tornado coils (Cook Medical, Bloomington, Indiana, USA) were introduced through a retrieval balloon and deployed in the terminal end of the leaking duct (▶Fig. 3). During cholangioscopy, a second leak was identified and later embolized with coils. A subsequent cholangiogram revealed cessation of the leaks (▶Fig. 4; ▶Video 1).

Six months after discharge, the patient presented with abdominal pain, and CT revealed a dilated CBD with a migrated coil inside (▶Fig. 5). ERCP was performed and the coil extracted.
A bile leak is a serious complication after hepatobiliary surgery. Traditional endoscopic therapy consists of sphincterotomy or stent placement [1]. Endoscopic embolization with coils can be an alternative treatment of biliary leaks when other approaches fail [2, 3]. Coil migration to the CBD is a complication that had already been described in coil embolization with or without N-butyl cyanoacrylate [4, 5].

Endoscopy_UCTN_Code_TTT_1AR_2AG

Competing interests

Dr. Aparicio is a consultant for Boston Scientific. The other authors declare they have no conflict of interest.

References


The authors

Sandra Baile-Maxía, Lucía Medina-Prado, Maryana Bozhychko, Carolina Mangas-Sanjuan, Juan Antonio Casellas, José Ramón Aparicio

Endoscopy Unit, Department of Gastroenterology, Hospital General Universitario de Alicante, Instituto de Investigación Sanitaria y Biomédica de Alicante, ISABIAL, Alicante, Spain

Corresponding author

José Ramón Aparicio, MD

Hospital General Universitario de Alicante, Endoscopy Unit, C/ Pintor Baeza 12, 03010 Alicante, Spain

Fax: Fax: +34-633-03-99-69

japariciot@gmail.com

Bibliography

DOI https://doi.org/10.1055/a-1113-7263

Published online: 4.3.2020

Endoscopy 2020; 52: E322–E323

© Georg Thieme Verlag KG

Stuttgart · New York

ISSN 0013-726X

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

Video 1 Endoscopic coil embolization of major intrahepatic biliary leak after partial hepatectomy.