Abdominal pain and jaundice after colonoscopy

An 82-year-old man underwent colonoscopy 6 months after open low anterior resection for an occlusive rectal carcinoma. The colorectal anastomosis appeared normal, and no metachronic polyps were detected. The patient developed abdominal pain and jaundice 2 days after colonoscopy. An abdominal computed tomography (CT) scan showed free fluid in the gallbladder fossa that extended into the hepatorenal recess, suggestive of a bile leak (**Fig. 1**). Endoscopic retrograde cholangiopancreatography (ERCP) confirmed a leak at the insertion of the cystic duct into the common bile duct (CBD; **Fig. 2**); the leak was managed by sphincterotomy and plastic biliary stenting.

Fig. 1 Abdominal computed tomography (CT) scan in a patient who had developed pain and jaundice 2 days after undergoing colonoscopy showing free fluid in the gallbladder fossa extending into the hepatorenal recess, suggestive of a bile leak.

The patient was readmitted 1 week after the biliary stenting with fever and abdominal pain. A repeat CT scan revealed a multiloculated abscess, indicative of an infected biloma. During laparoscopic drainage, multiple dense adhesions were observed to the ventral abdominal wall and between the gallbladder, transverse colon, and omentum (**Fig. 3**). Given their fibrous nature, the adhesions were attributed to the prior abdominal surgery. Two drainage tubes were placed and antibiotics were started; cholecystectomy was not performed. The postoperative course was uneventful, with the drainage tubes being removed after 5 days. The patient was discharged with additional antibiotic therapy and recovered well. No bile leakage was demonstrated at a follow-up ERCP 2 months later and the biliary stents were removed.

To our knowledge, no previous cases of bile leakage after colonoscopy have been reported [1]. We presume the underlying mechanism to be a rupture of the insertion of the cystic duct into the CBD caused by repetitive traction on the adhesions between the gallbladder, colon, and omentum during the colonoscopy. A similar model has been proposed for splenic rupture after colonoscopy in the presence of adhesions between the colon and spleen [2].

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Competing interests: None

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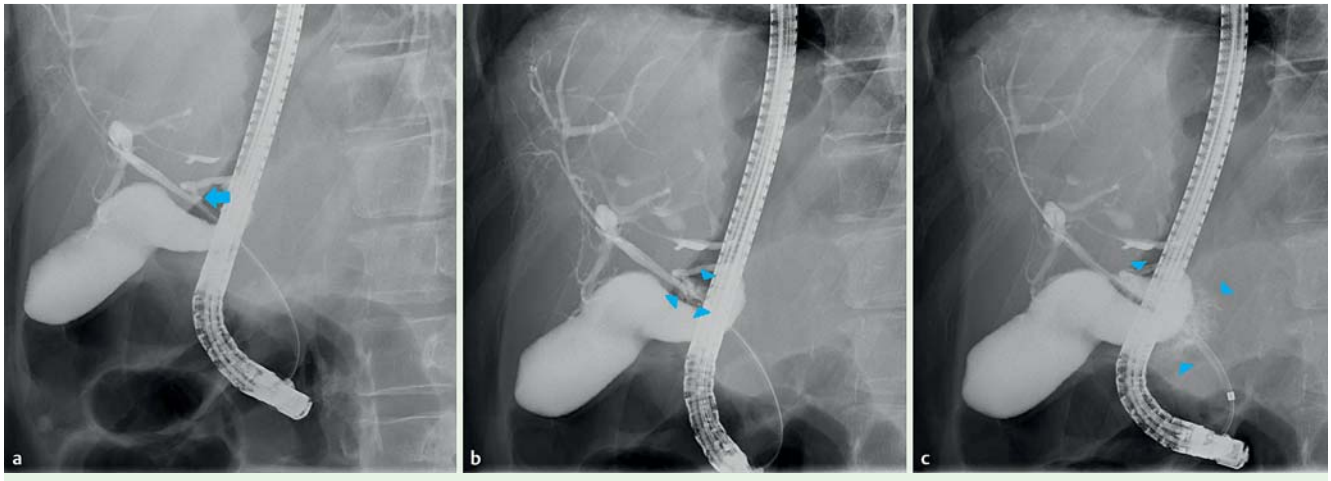

Fig. 2 Images during endoscopic retrograde cholangiopancreatography (ERCP) showing: **a** the initial cholangiogram; **b, c** a bile leak (arrowheads) at the insertion of the cystic duct (arrow) into the common bile duct (CBD) that became evident after progressive injection of contrast agent.

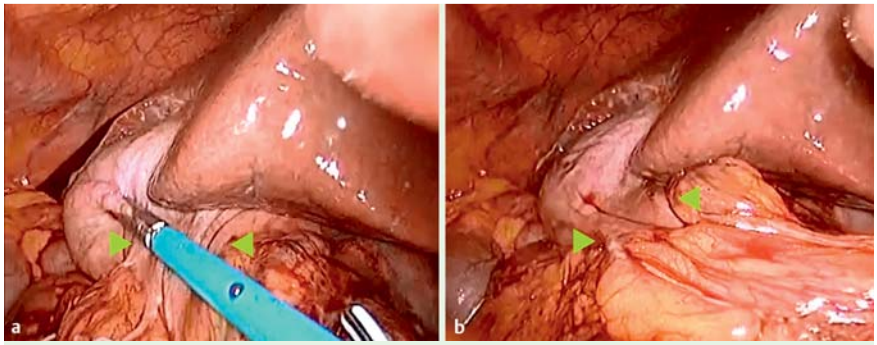

Fig. 3 Intraoperative images showing dense adhesions (arrowheads) between the gallbladder and mesocolon.

Bibliography
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