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. 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 leak-age 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].

Competing interests: None

Endoscopy_UCTN_Code_CPL_1AJ_2AI

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Acknowledgments
Intraoperative images were kindly provided by Charlotte Vercauteren, MD, and Sebastiaan Van Cauwenbergh, MD.

References

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.

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.