



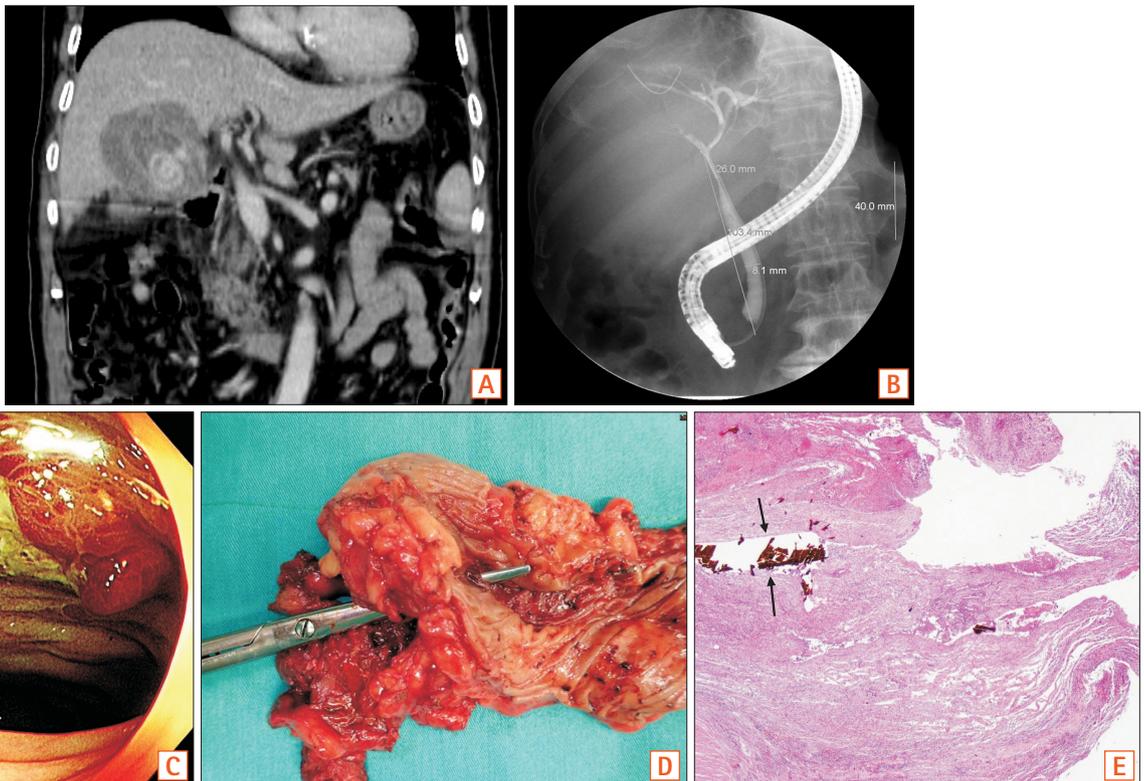
## A rare cause of gastrointestinal hemorrhage

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**Question:** An 88-year-old man with a 2-week history of right upper abdominal pain and fever was brought to MacKay Memorial Hospital. Physical examination revealed icteric sclera and tenderness in the right upper quadrant. Laboratory studies showed a white cell count of 21,000/ $\mu$ L and total bilirubin level of 9.1 mg/dL on admission. CT revealed acute calculous cholecystitis (Fig. A). Endoscopic retrograde

biliary drainage was performed for suspicion of Mirizzi's syndrome and jaundice was significantly improved (Fig. B). Massive bloody stool with hypovolemic shock occurred 5 days later. No abnormalities were observed on esophagogastroduodenoscopy. Colonoscopy revealed a protruding mass with superficial ulceration in the hepatic fracture (Fig. C). What is the most likely diagnosis?



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**Answer to the Images: Cholecystocolic Fistula**

The patient was taken to the operating room for exploration. A 3-mm fistulous tract was identified on the hepatic flexure of the colonic lumen (Fig. D). A segment of the transverse colon was resected, and cholecystectomy was performed. On pathological examination, the mucosa of the colon was focally necrotic. Meanwhile, a 2.5-cm fistula was connected to the gallbladder, and a calcium bilirubinate stone was found in the fistula (Fig. E, arrows; H&E, ×100). These findings were consistent with a diagnosis of cholecystocolic fistula.

Biliary-enteric fistulas have been found in 0.9% of patients undergoing biliary tract surgery.<sup>1</sup> The most common site was the cholecystoduodenal fistula (70%), followed by cholecystocolic fistula (10%–20%).<sup>1</sup> Diarrhea was the most common and valuable distinguishing symptom of cholecystocolic fistula.<sup>2</sup> Other symptoms of abdominal pain, cholangitis, weight loss, and bowel obstruction were reported.<sup>2,3</sup> Lower gastrointestinal bleeding was a rare presentation. The intermittent bleeding occurred from the stone necrosis of the gallbladder wall contiguous with the inflamed colon, and the migrating stone in the fistula could erode and seal off the bleeding vessels. Awareness of symptoms coupled with colonoscopic examination, barium enema, or biliary scintigraphy is required to make a preoperative diagnosis.

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**CONFLICT OF INTEREST**

No potential conflict of interest relevant to this article was reported.

**AUTHOR CONTRIBUTION**

W.C.L., collecting materials, drafting the manuscript; C.H.C., design, drafting the manuscript.

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