Massive Lower Gastrointestinal Bleeding due to a Cholecysto-colonic Fistula

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Introduction

- Gastrointestinal bleeds are a common and potentially life-threatening presentation to the inpatient setting.
- Hemorrhage from within the biliary system can sometimes be the underlying source.
- Fistula formation between the gallbladder and bowel/colon can be a rare complication of chronic and advanced gallstone disease, occurring in 0.06-0.14% of cases.
- Gastrointestinal bleeding in the setting of fistulizing disease makes localization difficult and imposes a clinical challenge without the aid of angiography or endoscopy.
- Here, we present a case of massive lower gastrointestinal bleeding from a cholecysto-colonic fistula.

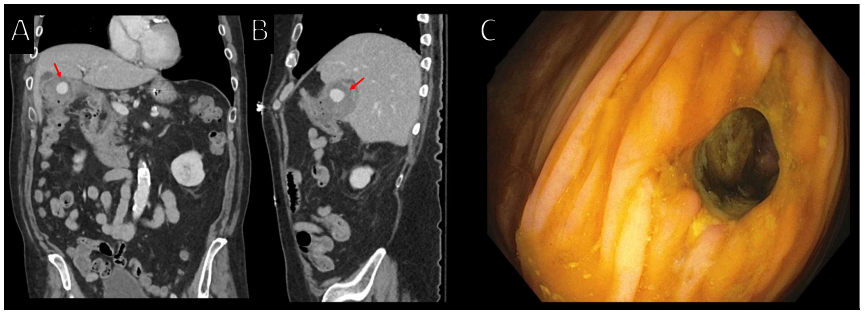
Imaging

Figures A and B: Coronal and sagittal views of a CTA of the abdomen and pelvis showing contrast extravasation near the hepatic flexure (arrows).

Figure C: Image from colonoscopy visualizing the fistula from the hepatic flexure to the gallbladder.

Case Description

- A 78-year-old Caucasian male with a past medical history of coronary artery disease on dual antiplatelet therapy presented to the hospital with two days of large-volume hematochezia.
- He was in hemorrhagic shock on admission, with a blood pressure of 66/34 mmHg and initial hemoglobin of 6.2 g/dL.
- Computed tomography angiography (CTA) of the abdomen and pelvis revealed active extravasation in the area of the gallbladder and hepatic flexure with a local 5.6 x 5.1 cm hematoma containing foci of air, suggestive of a communication with the bowel (Figures A and B).
- Mesenteric angiography localized the bleed to the cystic artery, for which the patient underwent successful arterial embolization.
- Hepatobiliary iminodiacetic acid (HIDA) scan revealed a cystic duct obstruction.
- Colonoscopy later identified an 8 mm fistula at the hepatic flexure (Figure C).
- The patient had no further hematochezia and was discharged with outpatient surgical follow-up.



Discussion

- Fistulizing disease between the gallbladder and bowel/colon lacks common symptoms and is often diagnosed during abdominal surgery.
- Gastrointestinal bleeding in the setting of fistulizing disease can occur, making early diagnosis challenging, though angiography, cholangiography and endoscopy prove to be beneficial.
- Awareness of this entity and early recognition can prevent catastrophic outcomes.
- No consensus exists regarding optimal treatment.
- Management ranges from endoscopic fistula closure to extensive surgery.

References

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