Hematochezia Due to Cholecystoenteric Fistula and Gallstone in the Transverse Colon

Christina Lee, MD[1]; Nicha Wongjarupong, MD[1,2] ; Robert Matlock, MD[2]
[1]University of Minnesota, Department of Internal Medicine, Minneapolis, MN; [2] Hennepin County Medical Center, Gastroenterology, Minneapolis, MN

Introduction

We present this case, because cholecystoenteric fistulas are rare. This case emphasizes the unique finding of a cholecystocolonic fistula causing gallstone-induced hematochezia and the importance of thorough clinical work-up for timely diagnosis.

Patient Presentation

- A 65 year old man, with a history of hypertension, hereditary spherocytosis, and alcohol-associated cirrhosis (MELD-Na of 20) with prior non-bleeding esophageal varices.
- Presented with hematochezia. Reported three episodes of gross bloody stools for one day. Denied hematemesis and abdominal pain.
- Seven years prior to this admission, patient had a history of choledocholithiasis and presented with painless jaundice. At that time, he underwent an endoscopic retrograde cholangiopancreatography (ERCP) with sphincterotomy and biliary stent placement.

Exam and Labs on Presentation

Vitally stable

General: Well nourished, appears anxious and uncomfortable.
Cardiovascular: RRR, no murmurs. No JVD.
Respiratory: Clear to auscultation bilaterally.
Abdomen: Soft, not tender, no rebound tenderness or guarding.

Alkaline phosphatase 108 IU/L	Hemoglobin 8.3 g/dL (baseline 12.7 g/dL)
ALT 19 IU/L	BUN 6 mg/dL
AST 41 IU/L	Creatinine 0.7 mg/dL
Total bilirubin 3.3 mg/dL	
Direct bilirubin 1.7 mg/dL	

Clinical Course

- Due to the concern for bleeding, both an esophagoduodenoscopy (EGD) and colonoscopy were obtained.
- The EGD was unremarkable.
- The colonoscopy revealed a 2 cm gallstone surrounded by friable mucosa at the proximal transverse colon.

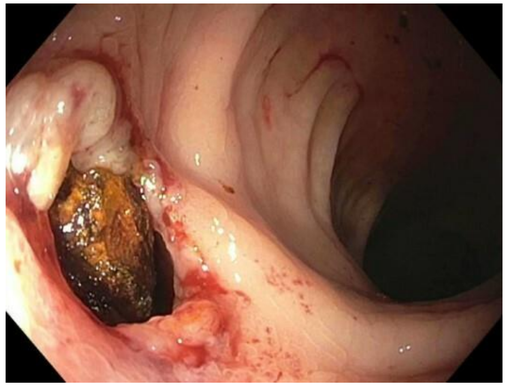

Figure1. Colonoscopy showing a gallstone in the transverse colon, causing mucosal irritation and erythema.

- Subsequently, a CT abdomen/pelvis showed a fistula connecting the gallbladder and transverse colon, presence of a stone in the gallbladder, and pneumobilia, with no intrahepatic or extrahepatic bile duct dilation.
- Patient's hematochezia resolved during the hospitalization.

Clinical Course

- With the image confirmed cholecystocolonic fistula as the cause of the gallstone in the transverse colon, general surgery recommended conservative management given the resolution of the patient's hematochezia and his poor surgical candidacy given his other medical co-morbidities.

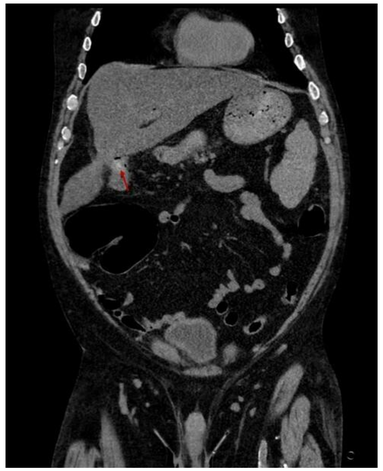

Figure2. CT abdomen/pelvis showing a gallstone in the gallbladder (marked with the red arrow) and pneumobilia

- On follow-up after discharge, patient had no further bleeding.

Discussion

- This case emphasizes the rare finding of a cholecystocolonic fistula.
- The gallstone traveled from the gallbladder and into the transverse colon via the cholecystocolonic fistula, leading to mucosal irritation and hematochezia.

- Cholecystoenteric fistula is a very rare complication of chronic cholecystitis. [1]
- The most common type is the cholecystoduodenal fistula, followed by the cholecystocolonic fistula. [2]
- Clinical presentation is nonspecific and variable, and very difficult to diagnose because they are often asymptomatic. [1,2]
- Management for these uncommon but clinically significant fistulas is not described well in literature. [2]

- Although these fistulas are typically challenging to diagnose given non-specific symptoms and although our patient presented with a fistula in the transverse colon with no cholecystitis, sound correlation of reported history with labs, procedures, and imaging lead to timely diagnosis and appropriate follow-up.

Learning Objectives

- Cholecystocenteric fistulas can cause hematochezia, gallstone ileus, and obstruction.
- Given the challenge of diagnosing a cholecystocolonic fistula, it is important to perform appropriate work-up guided by sound correlation of all data.

Contact

Christina Lee
University of Minnesota
Email: clee730@gmail.com
Phone: 412-526-3932

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