

Like a Rolling Gallstone: A Case of Choledocholithiasis & Ileus with a Cholecystoduodenal Fistula

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Introduction

- Cholecystoduodenal fistula is a **rare** complication of chronic cholelithiasis.
- In severe cases, it is treated with surgical repair.
- The incidence of intrabiliary complication following surgical repair is currently unclear.

Case Presentation

- A 70-year-old male with a history of prior CVA, complete heart block post pacemaker, and ESRD presented with subjective fevers and chills associated with nausea and vomiting.
- 10 months prior, he was admitted for septic shock due to gallstone ileus. A cholecystoduodenal fistula was discovered and surgically repaired. Cholecystectomy was not performed.

Initial Labs

Hemoglobin	10.7 g/dL
WBC	13.3 thou/cmm
Plt	199 thou/cmm
Albumin	3.6 g/dL
Total Bilirubin	2.1 mg/dL
AST	331 U/L
ALT	245 U/L
Alkaline phosphatase	218 U/L
PT/ INR	1.2

Table 1. Initial labs revealed leukocytosis and abnormal liver function testing.

Workup

- Blood cultures grew *Klebsiella pneumoniae*, prompting Infectious Diseases consultation and IV antibiotic therapy. A hepatobiliary source was suspected.

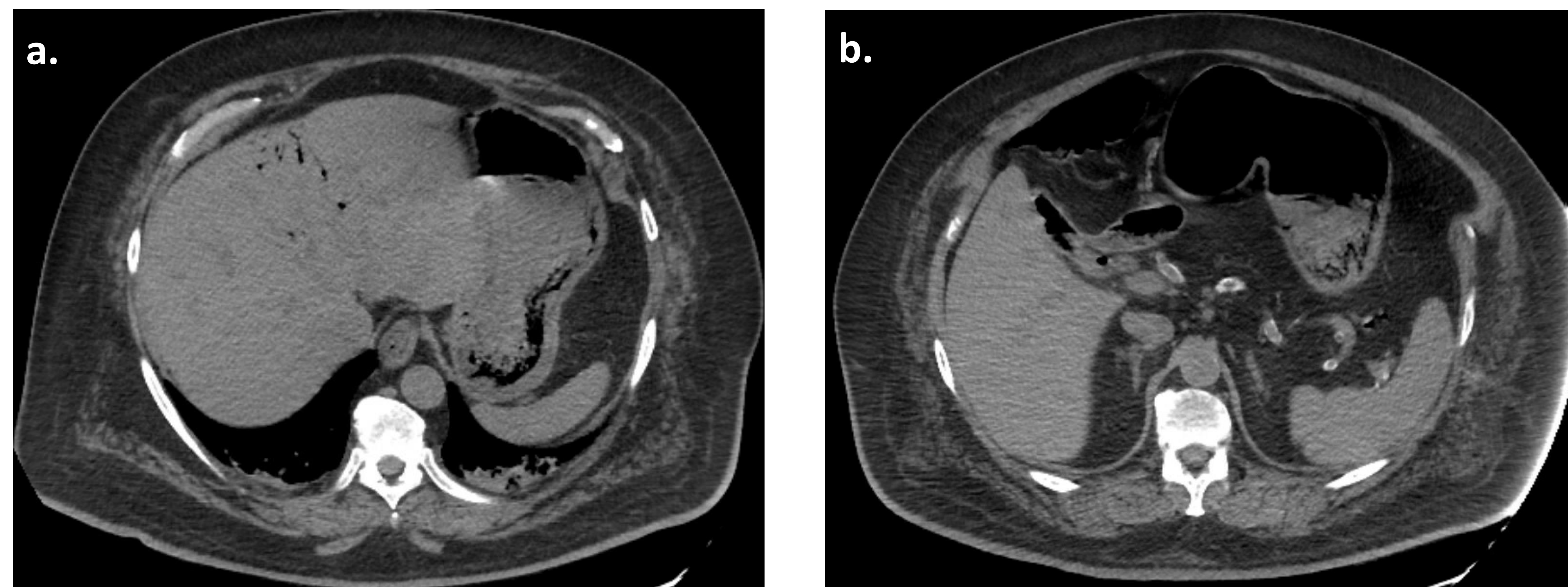


Figure 1. CT A/P revealed evidence of pneumobilia (a) as well as portal venous gas within the perigastric veins and intrahepatic vessels (b) without signs of biliary ductal dilation.

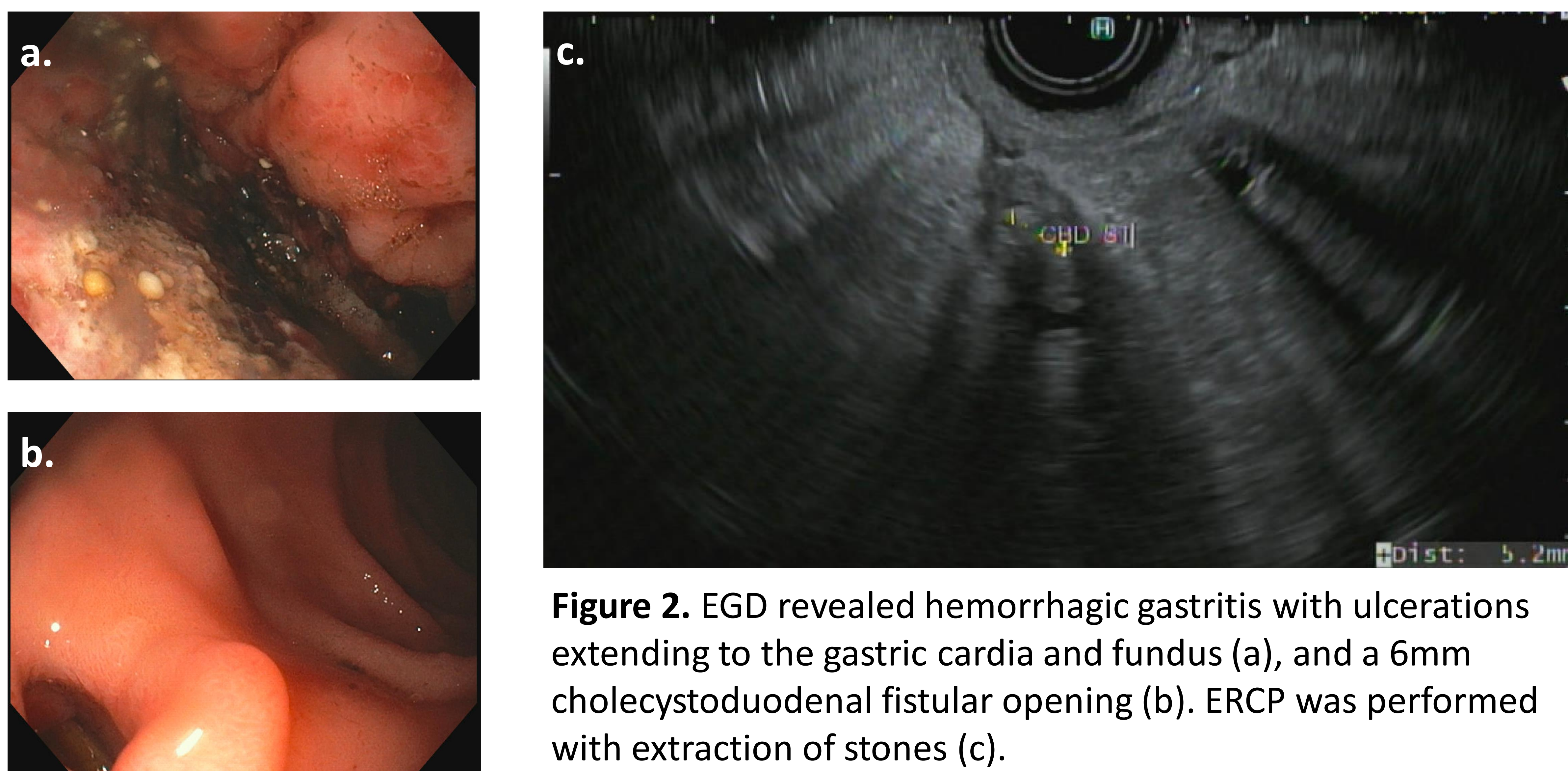
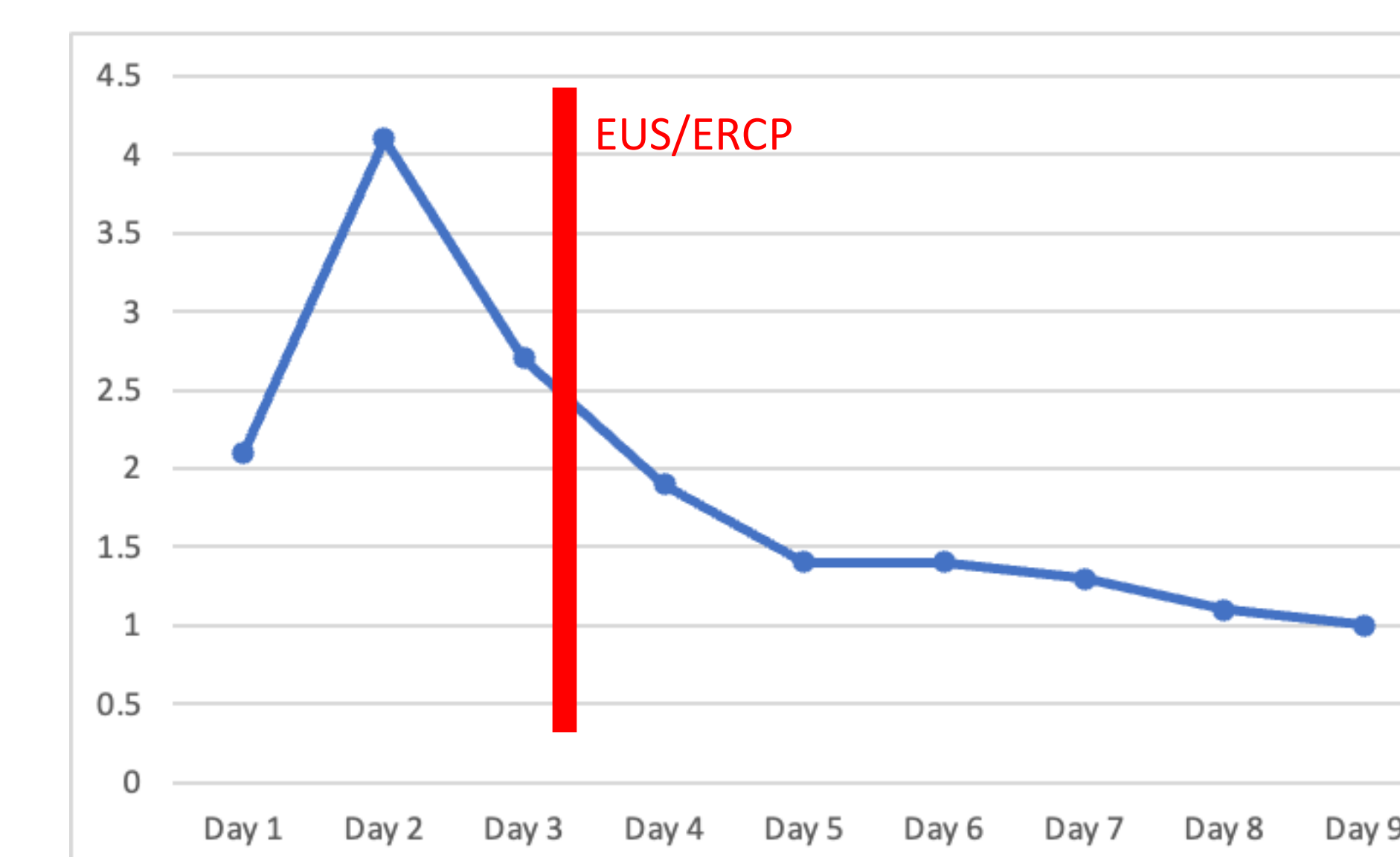


Figure 2. EGD revealed hemorrhagic gastritis with ulcerations extending to the gastric cardia and fundus (a), and a 6mm cholecystoduodenal fistular opening (b). ERCP was performed with extraction of stones (c).

Outcomes

- The patient tolerated EUS/ERCP well with no immediate postoperative complication.
- Following stone extraction, IV antibiotic therapy was continued for 7 days.
- Total bilirubin was monitored daily and normalized prior to discharge (*below*).



Discussion

- Cholecystoduodenal fistulae have become easier to detect with improved noninvasive imaging strategies.
- Cholelithiasis-induced extrinsic biliary compression is known to cause fistulization.
- In this case, cholelithiasis following surgical repair of the fistula may have caused choledocholithiasis with bacteremia.
- Some reports denote a role for endoscopic repair in place of surgery.

Conclusion

It is important to consider both common and uncommon intrabiliary pathologies in the setting of abnormal liver function testing.

References

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