

Post-ERCP Greater Curvature Hematoma Complicated By Polymicrobial Infection: Case Report and Literature Review

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Introduction

- ERCP-related complications occur in 2.5 - 8% of procedures and include pancreatitis, biliary hemorrhage, and cholangitis. Rarely, subcapsular hepatic, splenic, and duodenal hematomas have been reported in case reports [1]
- Here we present a rare case of an intramural **post-ERCP hematoma** at the greater curvature of the stomach, **complicated by polymicrobial infection**.

Case Report

A 67-year-old male with a past medical history of choledocholithiasis status-post ERCP with plastic stent placement three months prior presented as a transfer from an outside hospital in septic shock on vasopressors. Upon arrival ultrasound revealed a 13mm common bile duct and gallstones measuring up to 1 cm. Emergent ERCP was performed which showed a proximally migrated CBD plastic stent with distal flap not visible and pus extruding from the major papilla (Image 1A)

ERCP Course: Multiple maneuvers were required to extract the stent including balloon, rat-tooth forceps, and flower basket. The patient was too unstable for further maneuvers such as Spyglass. The CBD was swept with a balloon and a fully-covered metal stent was placed (Image 1B)

Post ERCP Course: Liver function tests after the ERCP improved; however, patient had a hemoglobin drop of 2 g/dL and continued to require pressors thus a CT of abdomen and pelvis and EGD were pursued

CTAP Result: **11.3 cm fluid collection** centered around the greater curvature of the stomach with hyperattenuating foci concerning for blood of varying chronicity (Image 2A,2B)

Afterwards: Patient was given multiple different antibiotic regimens due to resistance and hematoma has nearly resolved after a month

Discussion

- While ERCP is very useful in diagnosis and treatment of biliary and pancreatic diseases, risks do follow even when done by skilled endoscopists
- Complex interventions are more likely to cause such complications
- Scope placement in the "long scope position" as the endoscope "bows" in attempt to reach to the duodenum can cause torsion on greater curvature of the stomach -> shearing of the gastric vessels which can result in hematoma like our patient [2]
- Common symptoms for hematoma include abdominal pain, hypotension, with common lab value of declining hemoglobin, but may be nonspecific
- While it is a rare complication, hematoma formation can cause ischemia and infection -> lead to significant morbidity or mortality, thus need early recognition

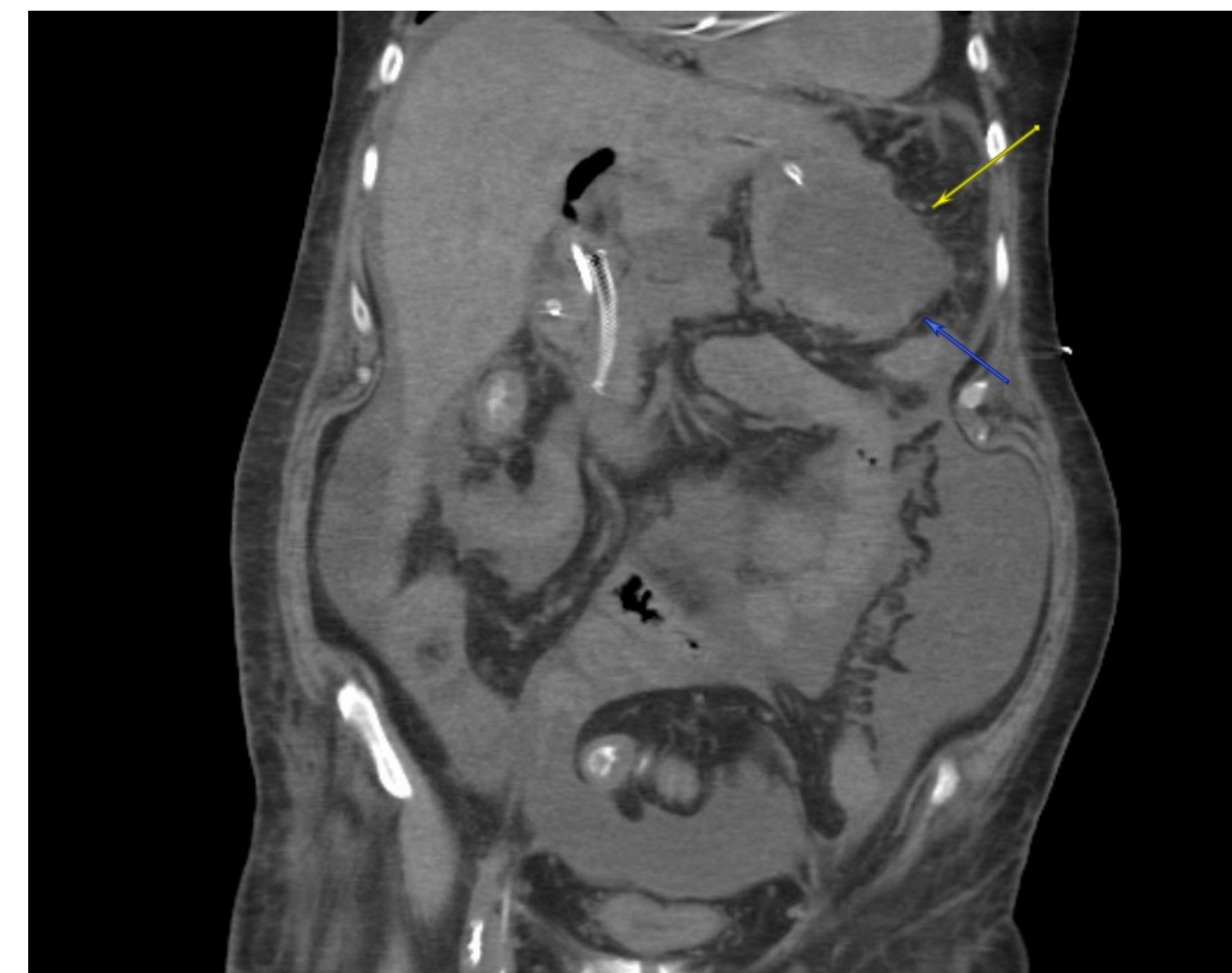


Image 2A: Hematoma around greater curvature of stomach, coronal view

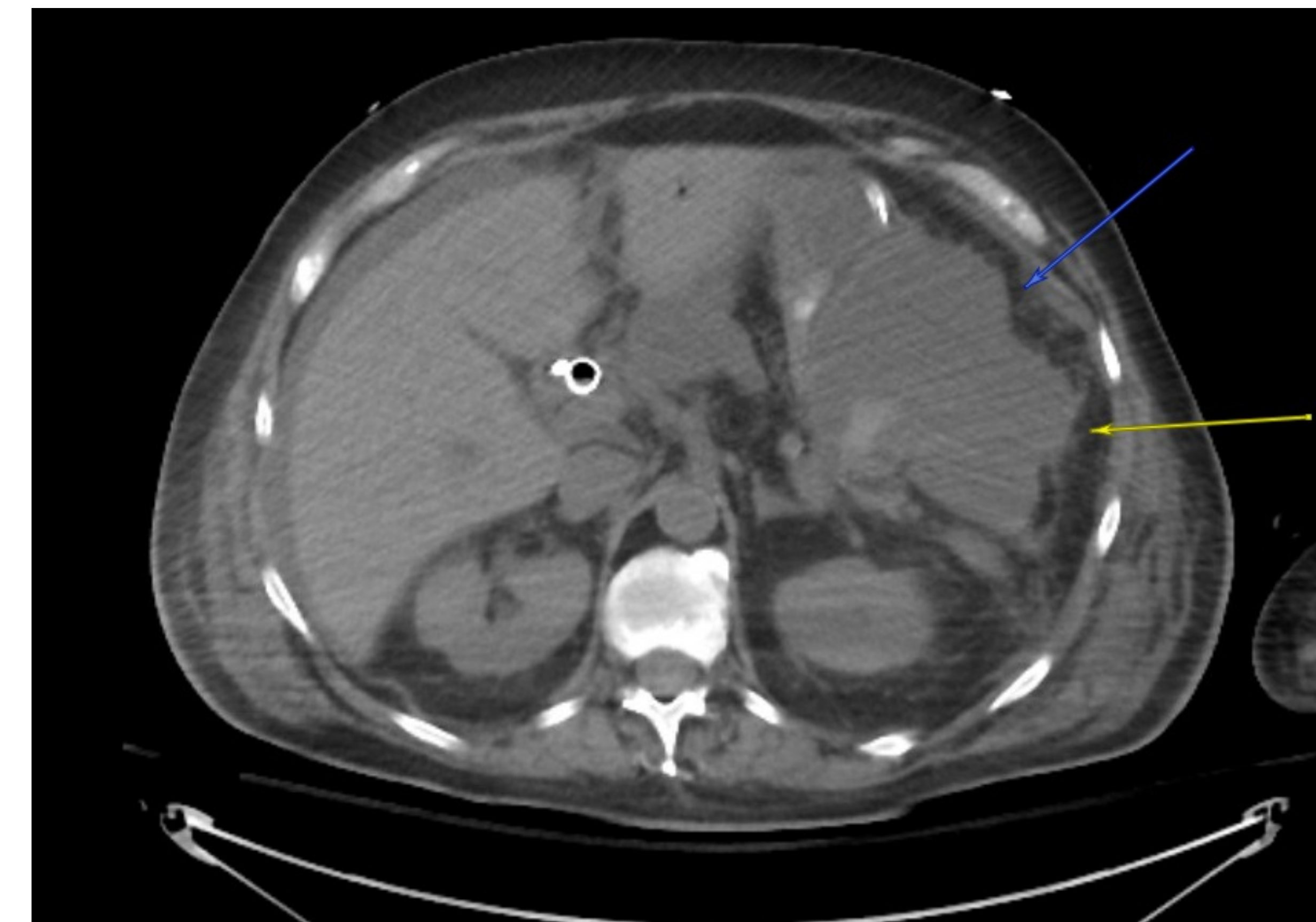


Image 2A: Hematoma around greater curvature of stomach measuring 11.3cm, axial view

EGD Result: Significant bulging into the lumen of the stomach found on the greater curvature without active extravasation from overlying mucosa (Image 3)

Complication: The collection was drained by radiology the next day and appeared grossly bloody. Pigtail drain was placed and upon culture the fluid grew *Pseudomonas aeruginosa*, *Enterococcus faecalis*, and *Candida albicans*

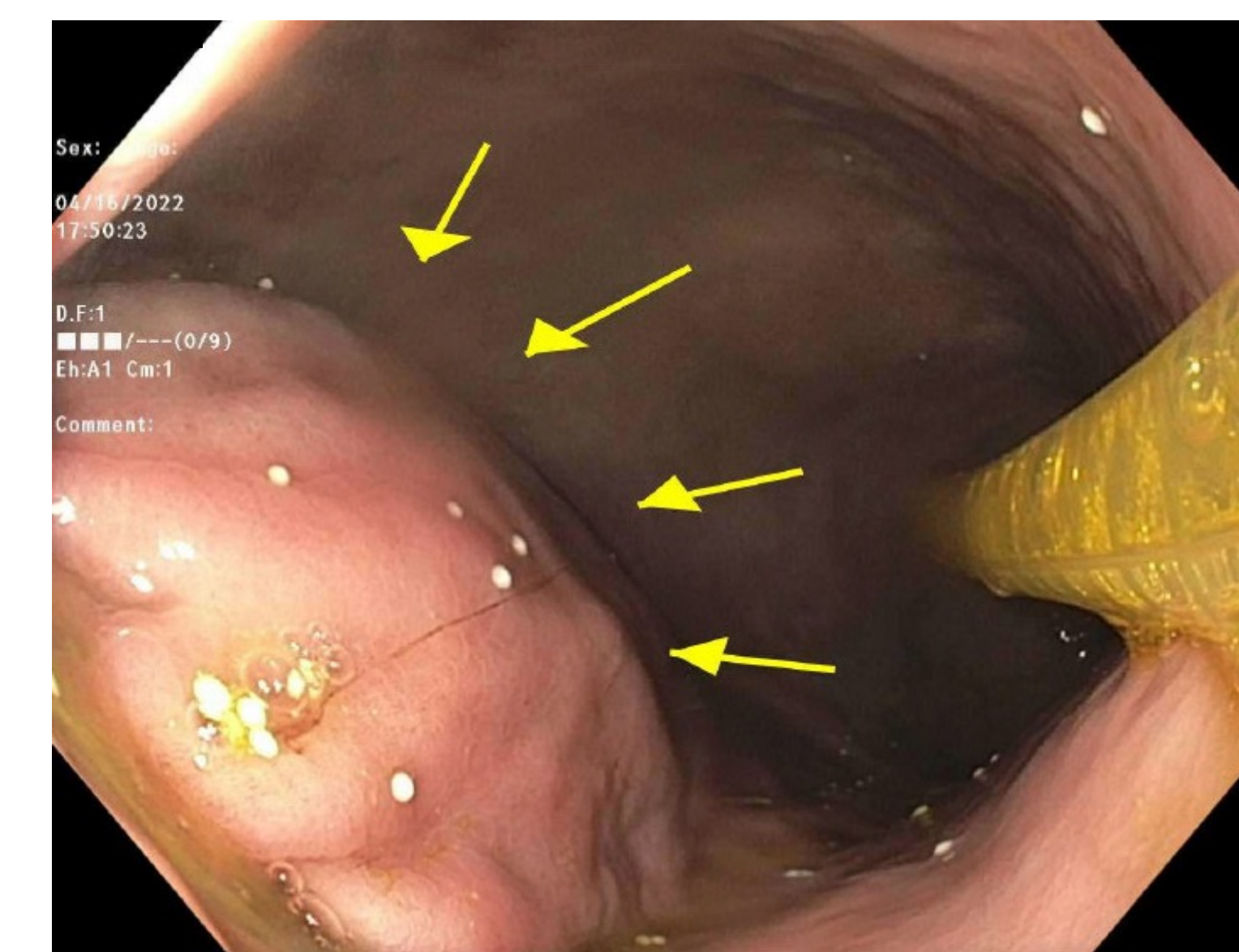


Image 3: Hematoma bulging into stomach, EGD view

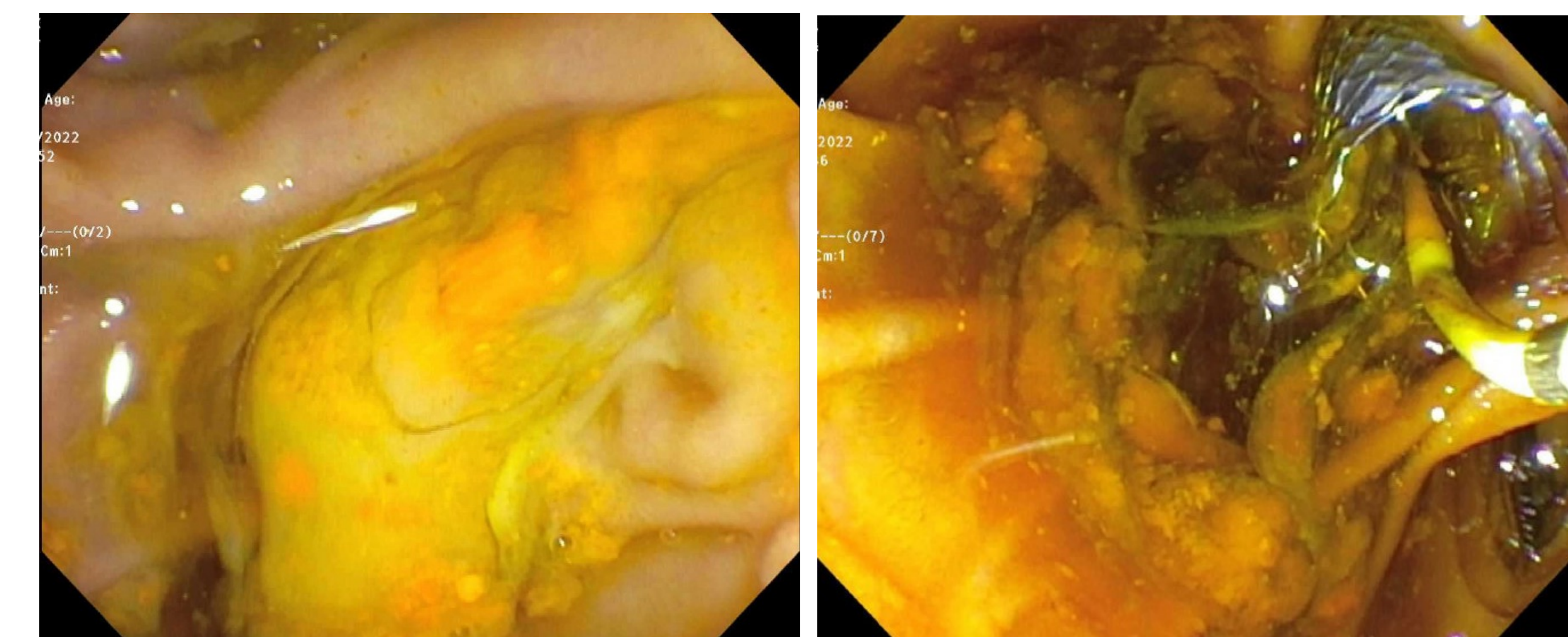


Image 1A: Pus near major papilla, ERCP view

Image 1B: Biliary metallic stent placed, ERCP view

References

1. Hart, et al. Endoscopy. 1990; 22(5): 229-233.
2. Momani, et al. J Investig Med High Impact Case Rep. 2018 Jan Dec;6: 2324709618779417.