An Unusual Cause of Gastric Outlet Obstruction

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INTRODUCTION

- Choledochoduodenal fistula (CDF) is a rare form of biliary tract fistula characterized by an abnormal connection between the common bile duct and duodenum.
- It is associated with duodenal ulcers, cholelithiasis, choledocholithiasis, and even malignancy.[1]
- Given its low prevalence, understanding of CDF pathology remains limited.

CASE DESCRIPTION

- A 75-year-old woman with hypertension, diabetes mellitus, osteoarthritis (OA), and stage IIIb right-sided colon cancer (in remission after FOLFOX and right hemicolectomy 3 years prior) presented to the hospital with one day of nausea and vomiting.
- She reported 20 episodes of coffee-ground emesis and taking up to 8 200mg ibuprofen daily for months to treat her OA.
- Labs were notable for hemoglobin of 8.7 g/dL without known baseline.
- She was started on intravenous pantoprazole given concern for upper gastrointestinal bleed.
- Esophagogastroduodenoscopy revealed 1.5 liters of retained non-bloody fluid with obstructing objects in the duodenal bulb immediately distal to the pylorus that were unable to be removed and adjacent ulcerations not amenable to endoscopic therapy.
- A nasogastric tube was placed for decompression. The obstructing bodies were initially thought to be bezoars, but later identified as gallstones.
- Abdominal CT demonstrated a CDF with adjacent abscess (Figure 1). The patient underwent exploratory laparotomy, gastrotomy, gastroduodenoscopy with morcellation and removal of gallstones, and successful decompression of the duodenum.
- The CDF was visualized with a free-flowing stone in the lumen. Post-operatively, the patient had resolution of nausea and vomiting and was discharged tolerating an oral diet.

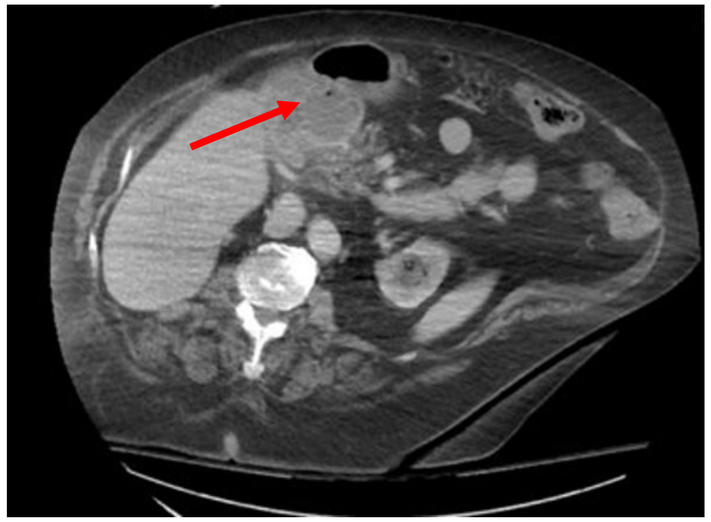

Figure 1 *Abdominal CT* demonstrating choledocho-duodenal fistula and associated abscess

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DISCUSSION

- CDF is usually an incidental and asymptomatic finding. When symptomatic, they commonly present with cholangitic symptoms such as fever, abdominal pain, and jaundice.[2]
- Rarely, patients can present with Bouveret Syndrome, a clinical process describing gastric outlet obstruction in the setting of gallstone ileus and CDF.
- Nausea, vomiting, and abdominal pain are common presenting symptoms, but hematemesis and melena have also been described.[2]
- There is no standardized management, but the treatment goal involves removing the culprit obstruction either via endoscopic or surgical retrieval.
- Symptomatic CDF patients are at risk for recurrence, although ongoing debate exists on risk-stratifying candidates for CDF repair based on location versus size of fistula.[1]
- Proper management of symptomatic CDF is important for preventing further morbidity.