Small Bowel Obstruction Secondary to Rare Duodenal Diverticulitis with Enterolith Formation

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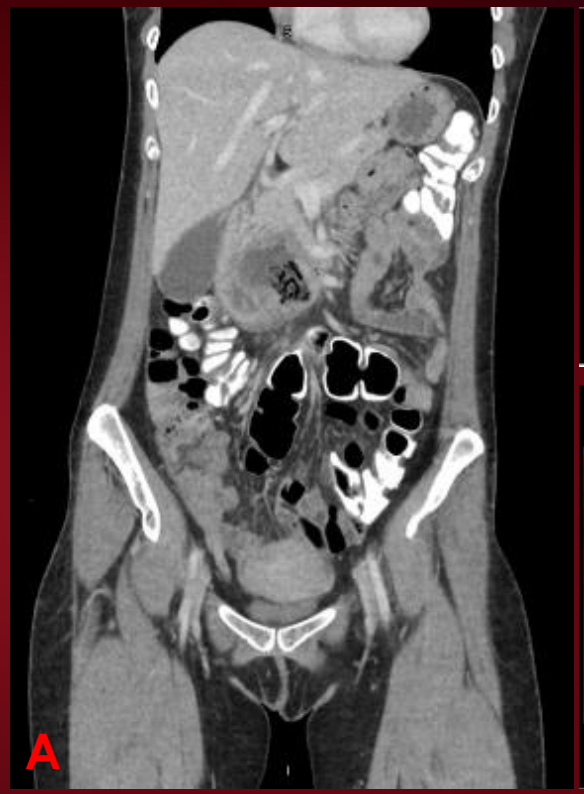
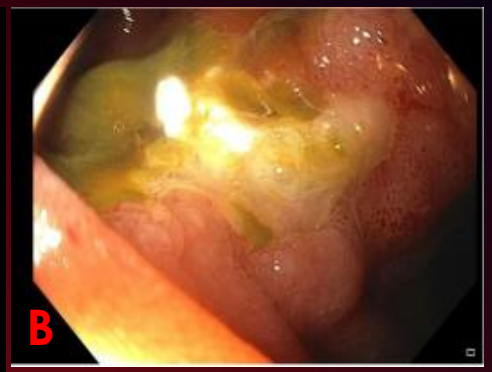
INTRODUCTION

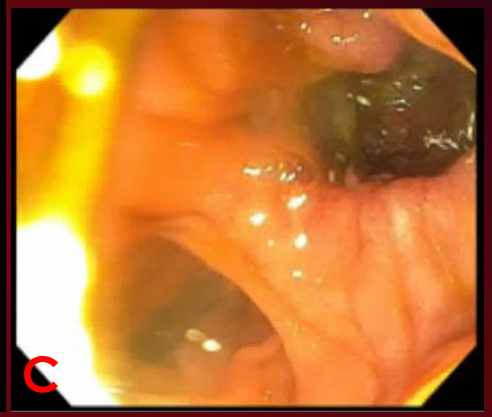
- Duodenal diverticula (DD) are common and are seen in >20% of the healthy population
- Majority are asymptomatic
- 1-5% of cases become symptomatic due to gastroduodenal, biliary, or pancreatic obstruction, or due to hemorrhage or perforation, with the latter having a mortality rate of up to 30%
- Rarely, DD can lead to enterolith formation with subsequent perforation and abscess formation, as well as small bowel obstruction

DISCUSSION

- DD was first reported in the literature in 1710 by Chomel
- Most commonly occurs in 2nd/3rd portion of duodenum along pancreatic or mesenteric border
- Traditional mgmt has been surgical though conservative treatment has started to gain traction
- Stapled or hand-sewn diverticulectomy with drainage of retroperitoneal space, followed by lavage + drain placement
- Conservative mgmt: bowel rest +/- nasogastric decompression, IV fluids, broad spectrum antibiotics, initiation of TPN when prolonged course anticipated
- Conservative mgmt for perforated DD: absence of peritonitis, old age, presence of significant comorbidities







CLINICAL CASE

- A 43-year-old healthy female presented with one day of sharp epigastric pain with non-bilious emesis
- CT: 2.5 x 4.3 x 2.5 cm duodenal outpouching with internal fecalization/necrosis and significant surrounding inflammation, representing an inflamed duodenal diverticulum or a contained perforated duodenal ulcer (Figure A)
- EGD: 30mm nonbleeding diverticulum in 3rd portion of duodenum with 10mm orifice and diffuse ulceration and friabilty with purulent appearing extravasating fluid. EUS not amenable to drainage (Figures B, C)
- Initial conservative management. CT showed interval improvement of the duodenal diverticulum but now with SBO in RLQ and extensive pancolitis
- Underwent diagnostic laparoscopy. The small bowel was run and the transition point was noted in the mid-jejunum, where a firm enterolith was identified
- There was evidence of ischemic discoloration of the jejunal segment involved and, given concern for breakdown of the suture line, it was partially resected
- Patient was discharged on post-operative day 7, concluding her 21-day hospitalization

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