Internal Duodeno-Pancreatic Fistula likely Secondary to Concealed Perforation

Rewanth Katamreddy MD , Dema Shamoon MD, Sarahi Herrera MD, Modupeoluwa Owalabi MD, Yatinder Bains MD
Internal Medicine Residency Program & Gastroenterology Fellowship program at St Michael's Medical Center-New York Medical College

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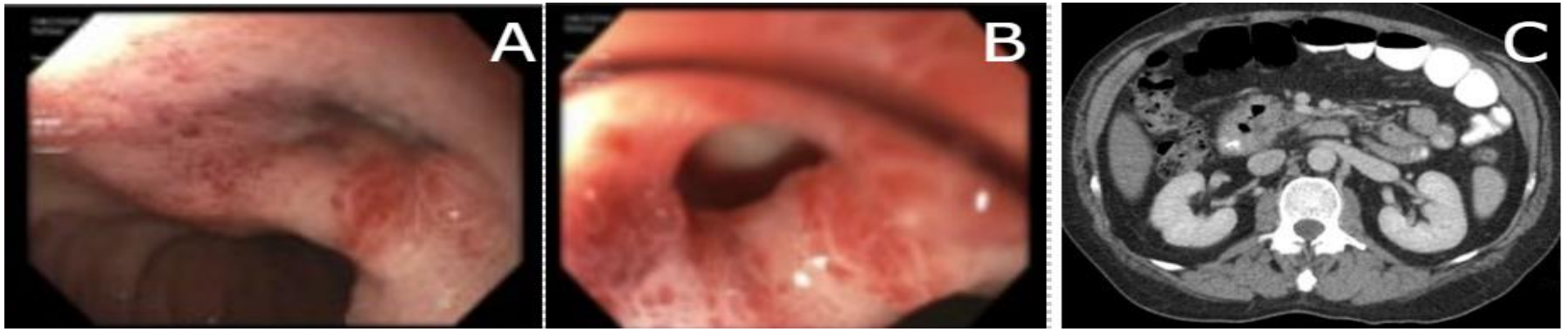
Introduction

Pancreatic fistulas can be classified as internal and external fistulas depending on whether they are opening onto the skin or internal structures. An internal fistula can be secondary to acute or chronic pancreatitis, malignancy, trauma, post-operative, or chronic inflammatory disease like ulcerative colitis or Cohn's disease[1,2]. Except for post -operative pancreaticoduodenal fistulas, other types are uncommon and rarely reported. We report a case of an asymptomatic duodeno-pancreatic fistula likely secondary to concealed perforation.

Case Presentation

A 55-year-old male with a medical history of asthma and alcohol use presented to the hospital with multiple episodes of hematemesis associated with dizziness and palpitations for one day. He reports no use of NSAIDs or blood thinners but consumes one pint of vodka daily. The abdomen was distended with tenderness on palpation in the epigastrium. No spider nevi or asterixis. Esophagogastroduodenoscopy (EGD) revealed recently bleeding grade I esophageal varices that were, completely eradicated and banded, erythematous mucosa of antrum and duodenum, and a duodenal fistula with a crater-like opening in the duodenum. Biopsy of the duodenum showed non-specific chronic inactive inflammation with no evidence of Helicobacter pylori. CT of the abdomen was done and it showed an air-containing fistulous tract is noted extending from the second portion of the duodenum medially to the pancreatic head. There is no gross evidence of mass. There was also some thickening of the gastric antrum and duodenum, fatty infiltration of the liver, and perisplenic varices. The patient was treated with IV fluids, Somatostatin analogs, and Beta-Blockers and was referred to an advanced gastroenterologist for evaluation with endoscopic ultrasound.



A/B: Duodenal fistula with a crater-like opening; C: Duodeno-Pancreatic fistula in axial film with no evidence of acute or chronic pancreatitis

Discussion

Pancreaticoduodenal fistulas are commonly mostly post-operative in addition to other causes including pancreatitis, malignancy, duodenal ulcer, trauma, and inflammatory bowel disease. Pancreatico-duodenal fistula can be asymptomatic. Symptomatic patients can be managed conservatively using TPN, and somatostatin analogs. Patients that fail to respond may be managed with a minimally invasive or surgical approach using diversion or resection techniques. For high output fistulas, a diversion can be achieved by percutaneous duodenostomy, or transhepatic biliary or trans biliary approach. Alternatively, a more invasive open surgical diversion or resection and anastomosis can be performed[3].

Conclusions

We report this case to highlight the rarity of concealed perforation which can fistulize through pancreas. However, knowledge of common causes of pancreatic fistulas is essential before arriving at this rare diagnosis.

Contact
Rewanth Katamreddy
Saint Michaels Medical center
Email:rkatamreddy1@phsi.us

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