Not all Gastroparesis is Gastroparesis: A case report and review of literature

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Introduction

- Gastroparesis is a chronic disorder characterized by delayed gastric emptying in the absence of mechanical obstruction.
- About 4 million people in the US suffer from the disease with the most common etiology being diabetes followed by idiopathic causes, surgical complications and intestinal pseudo-obstruction.
- Most patients present with unexplained nausea, vomiting, and weight loss. Our patient presented with gastroparesis-like symptoms and was treated for several months and because of refractory symptoms was scheduled for gastric electrical stimulation at another institution, but found to have groove pancreatic adenocarcinoma masquerading as gastroparesis.

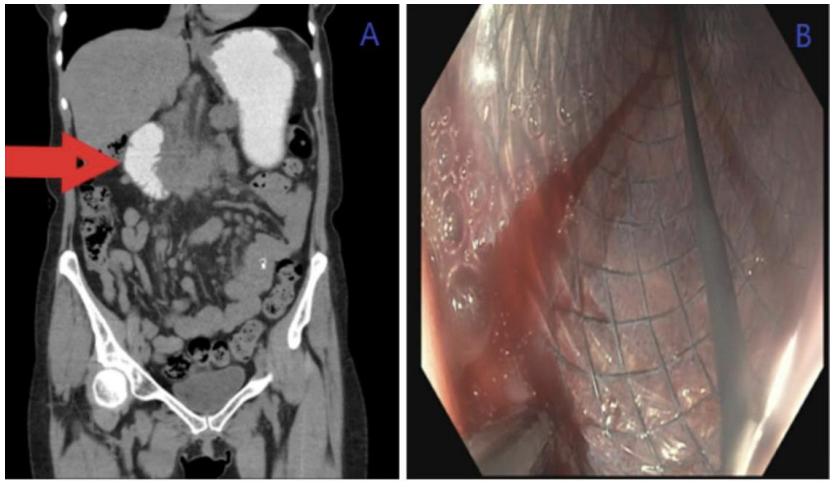

Image A – Red arrow shows the area of abrupt duodenal narrowing with proximal duodenum and stomach showing opacification with oral contrast.
Image B - 20 mm wide x 12 cm long fully covered metal stent at the site of duodenal stricture.

Case

- A 62 year-old female with a past medical history of recurrent gallstone pancreatitis with recent cholecystectomy presented with nausea, vomiting, bloating, reflux, and 22 lb. weight loss.
- Gastric emptying study at an outside hospital showed 95% retention at 4 hours. Patient was referred for a gastric pacemaker. However, patient sought second opinion at our motility clinic.
- Physical exam was positive for succussion splash.
- Labs showed an elevated alkaline phosphatase, normal lipase.
- CTA w/ contrast revealed an ill-defined soft tissue structure centered at the pancreaticoduodenal groove with associated duodenal stenosis – indicating groove pancreatitis(Image 1 & 2) . MRI w/o contrast revealed that the aforementioned pancreatitis appeared to be causing short segment luminal narrowing at the junction between the second and third portions of the duodenum. This was concerning for duodenal stricture leading to duodenal obstruction.
- A FCMS was placed to bypass the duodenal stricture – patient reported interval improvement of symptoms.
- In the weeks following the duodenal stent placement, patient began to suffer from nausea, vomiting, abdominal pain and new-onset jaundice. Repeat CTA w/ contrast demonstrated intra and extrahepatic biliary duct dilation concerning for distal CBD obstruction. The patient underwent a PTC placement of external and internal bile duct drainage and associated CBD brush biopsy demonstrated non-viable cells without evidence of malignancy.

Case Continued

- Patient underwent another EGD which showed duodenal stent migration with intussusception of the duodenal mucosa through the stent.
- The existing stent was removed and a new stent was placed.
- Biopsies of the duodenum and pancreas were performed and pancreatic FAS was positive for adenocarcinoma.

Discussion

- Groove pancreatitis and groove pancreatic adenocarcinoma are both rare etiologies of duodenal stricture and need to be identified in patients with suspected upper GI obstruction. Here it masqueraded as gastroparesis and was treated as such for several months
- Groove pancreatitis is a rare form of chronic pancreatitis that affects the anatomical area between the head of the pancreas, duodenum, and common bile duct. Its common complications include biliary stricture with obstructive jaundice and duodenal stricture.
- Groove pancreatitis and pancreatic adenocarcinoma are diagnostically difficult to differentiate as they present with similar symptoms.
- The management of groove pancreatitis is analgesics, pancreatic rest and abstinence from alcohol.
- Treatment of groove pancreatic adenocarcinoma is typically pancreaticoduodenectomy.