Gastric Ectopic Pancreas with Pseudocyst Formation causing Gastric Outlet Obstruction

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BACKGROUND

- Ectopic pancreas (EP), also referred to heterotopic pancreas, accessory pancreas, or pancreatic rest, is a congenital anomaly of pancreatic tissue outside of the normal anatomic location.
- EP is often asymptomatic and found incidentally (in 1-2% of autopsies and 0.2% of laparotomies).[1,2]
- We present a rare case of gastric outlet obstruction due to pseudocyst formation in a gastric ectopic pancreas.

CASE PRESENTATION AND CLINICAL COURSE

A 59 year old man with a history of chronic back pain, peripheral artery disease, and coronary artery disease presented to the hospital with epigastric pain, nausea, and vomiting for a few days. He reported weight loss of 18 lbs over six weeks. Pain was described as radiating to back and worsened with eating. Vitals were within normal limits, and exam was notable for epigastric tenderness. Labs including serum lipase were unremarkable.

Index upper endoscopy showed extrinsic compression of gastric antrum **(Fig 1).** EUS demonstrated a multi-cystic intramural gastric lesion that appeared to originate from the submucosa **(Fig 2)**. Fine needle aspiration (FNA) cytology showed scattered histiocytes and benign appearing epithelial cells with no evidence of malignancy. Aspirated fluid amylase level was 32,150 U/L and CEA was 142.5 ng/dL. A repeat CT abdomen and pelvis for ongoing symptoms showed interval growth of the gastric submucosal mass with multiple cystic collections causing mass effect on a distended stomach **(Fig 3,4).** Due to the gastric outlet obstruction, distal gastrectomy with Roux-en-Y reconstruction was performed. Surgical pathology showed EP with histologic changes of chronic pancreatitis, fibrosis and multiple pseudocysts **(Fig 5,6)**. Patient did well after surgical resection.

IMAGING & ENDOSCOPY

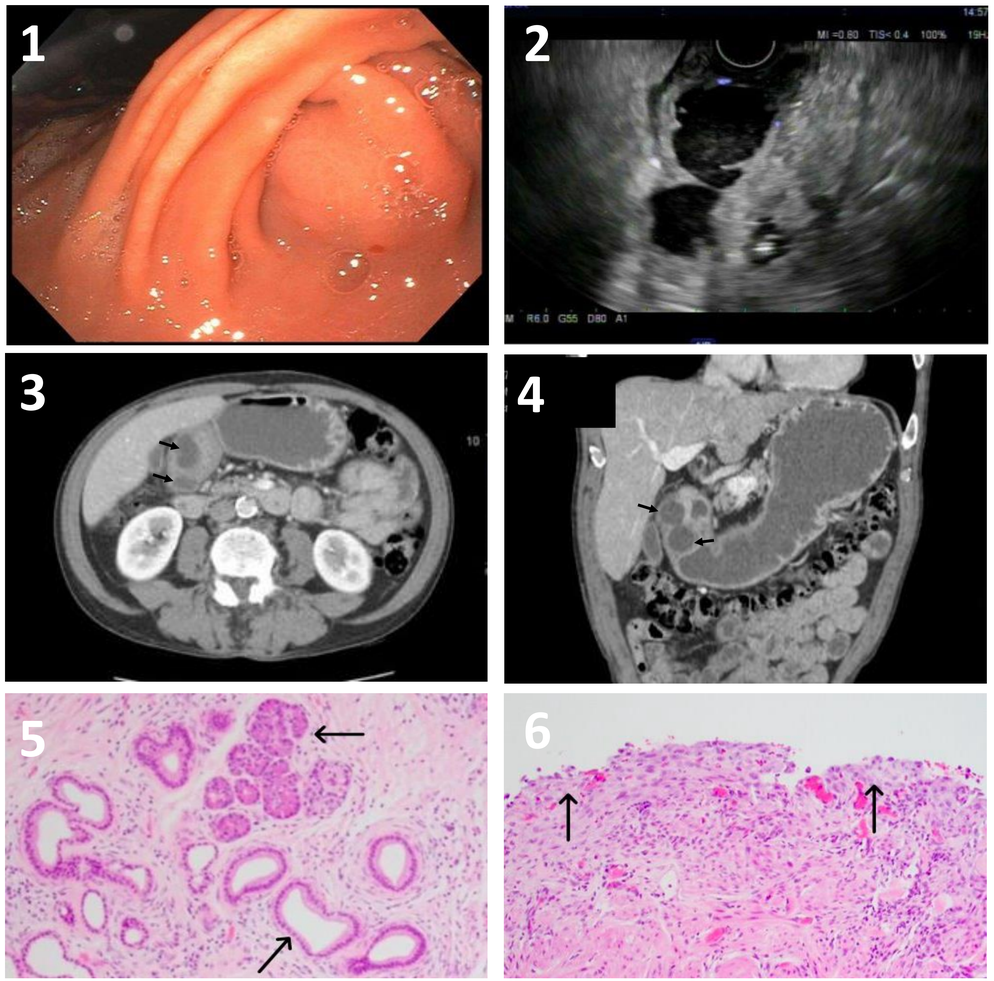

Figure legend: (1) Index EGD with extrinsic compression of antrum. **(2)** EUS showing submucosal cystic lesion. **(3)** Transverse and **(4)** coronal CT imaging showing multi-cystic mass in the gastric antrum (marked by arrows). **(5)** H&E stain at 10x of surgical pathology specimen (pancreatic ducts and acini marked by arrows). **(6)** H&E stain at 10x of surgical pathology specimen (pseudocyst border marked by arrows).

DISCUSSION

- EP are most commonly found in the pre-pyloric region, duodenum, and jejunum but have also been reported in the biliary system, spleen, pelvis and lung.[3]
- EP lesions >1.5 cm in diameter are more likely to cause symptoms with epigastric pain being the most common symptom.[4]
- Common findings of EP are reported below on various diagnostic testing modalities:
  - CT: location in antrum or duodenum, ill-defined border, endoluminal growth pattern, mucosal enhancement, ratio of long to short diameter of lesion >1.4.[5]
  - EGD: firm, submucosal mass with normal overlying mucosa +/- central umbilication.[6,7]
  - EUS: Imaging of choice for submucosal tumors. Frequent findings include indistinct borders, heterogenous echotexture, and anechoic duct like structure.[6]
- EP with pseudocyst formation causing gastric outlet obstruction is rare and may require surgical resection for diagnosis.

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