Journal of Gastrointestinal Surgery (2019) 23:1940–1941
https://doi.org/10.1007/s11605-019-04144-w

GI IMAGE

Gastric Hemorrhage Caused by Heterotopic Pancreas

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Received: 17 January 2019 / Accepted: 28 January 2019 / Published online: 13 February 2019

Keywords Gastrointestinal hemorrhage · Heterotopic pancreas · Gastric mass

Clinical Case

Our patient is a 47-year-old otherwise healthy Caucasian male, who presented to the emergency department with a history of one large volume episode of hematemesis and two episodes of melena over the preceding 24 h. On presentation, he became hypotensive and suffered a syncopal episode. His admission hemoglobin was 11.0 g/dl, down from a baseline of 13.4 g/dl. He had previously taken PPIs, did not use NSAIDs regularly and was not on any anticoagulants. He was a former smoker. After admission, his Hgb continued to decrease to a nadir of 7.2 g/dl despite resuscitation. He was treated with IV pantoprazole and an esophagogastroduodenoscopy was performed, which identified a large gastric subepithelial mass (Fig. 1). He required an embolization of his distal left and right gastric arteries for definitive hemostasis by interventional radiology. We also performed a diagnostic endoscopic ultrasound with biopsies, which found an intramural gastric mass with a significant cystic component on the lesser curvature of the stomach (Fig. 1). Final pathology was negative for a malignancy and demonstrated mostly reactive epithelial tissue with inflammation. CT of his chest, abdomen, and pelvis only demonstrated the mass in the antrum visualized during his endoscopy with no evidence of other lesions or lymphadenopathy. Despite the negative biopsies, we were concerned for a possible occult malignancy with a cystic degeneration of a gastrointestinal stromal tumor as our top diagnosis.[1] We performed a laparoscopic-assisted gastric wedge resection of his

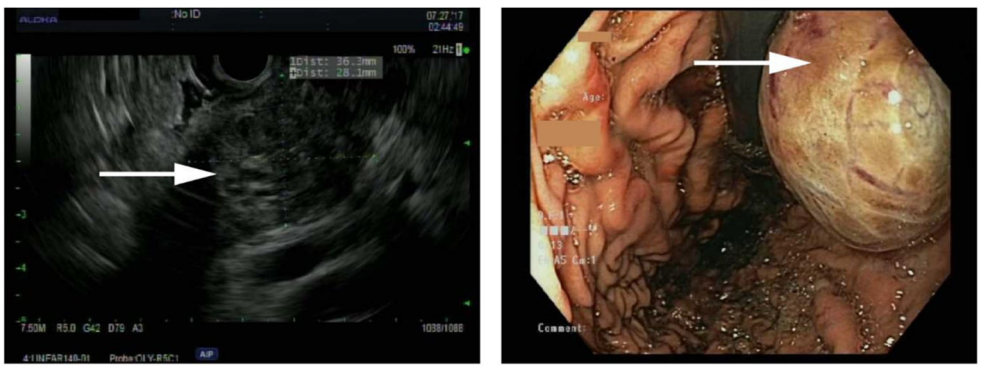

Fig. 1 Endoscopic ultrasound and upper endoscopy. Endoscopic ultrasound (left) and upper endoscopy (right) in our patient. Arrows point to the cystic gastric submucosal mass that was subsequently biopsied

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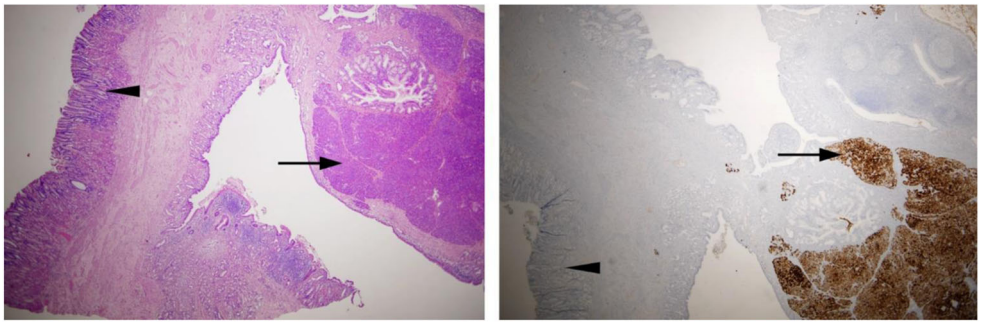

Fig. 2 Resection specimen histology. Hematoxylin/eosin staining (left) and chymotrypsin immunohistochemistry (right) of the resected gastric wall mass. The solid arrows point to the pancreatic acinar cell tissue marked by chymotrypsin in the gastric wall. The arrowheads point to the gastric mucosa

mass approximately 1 month after his initial admission. Repeat biopsies were deemed low yield given the cystic appearance of the mass. Initial diagnostic laparoscopy was negative for metastatic disease and we proceeded with a laparoscopic gastric mobilization. The mass involved most of the posterior wall of the stomach in the proximal antrum. We resected the mass with negative margins and performed a two-layered primary closure of the gastric wall given the size and location of the defect, which was not amenable to a stapled closure. The final pathology revealed heterotopic pancreatic tissue within the gastric wall with no evidence of a malignancy (Fig. 2). The patient has recovered without any complications and is doing well 6 months after his operation without any symptoms or further hemorrhage.

Discussion

Heterotopic pancreas within the gastrointestinal tract is rare but should be part of the differential diagnosis for a gastric or small bowel mass. It presents with a variety of symptoms including gastrointestinal hemorrhage.[2] Diagnostic approaches include CT or MRI imaging and endoscopic ultrasound with biopsies. The lesions can often mimic gastrointestinal stromal or other tumors with cystic degeneration on imaging.[1] The mass should be surgically resected for control of symptoms and due to the malignant potential within the heterotopic rest.[3]

Author Contributions Priscilla Chamberlain: acquisition, analysis, and interpretation of data; revision of the work.

Anoop Prabhu: acquisition, analysis, and interpretation of data; revision of the work.

Filip Bednar: study design, acquisition, analysis, and interpretation of the data; drafting and revision of the work; and study supervision.

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