

A Rare Case of Glomus Tumor of the Stomach Presenting With Upper Gastrointestinal Bleeding

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ABSTRACT

INTRODUCTION

- Glomus tumors are mesenchymal neoplasms arising from glomus bodies – thermoregulatory arteriovenous shunts, mainly located in the extremities.
- Gastrointestinal (GI) glomus tumors are rare, with gastric involvement being even less common. Given their rarity and non-specific presentation, they are a challenge to diagnose.

Case Description

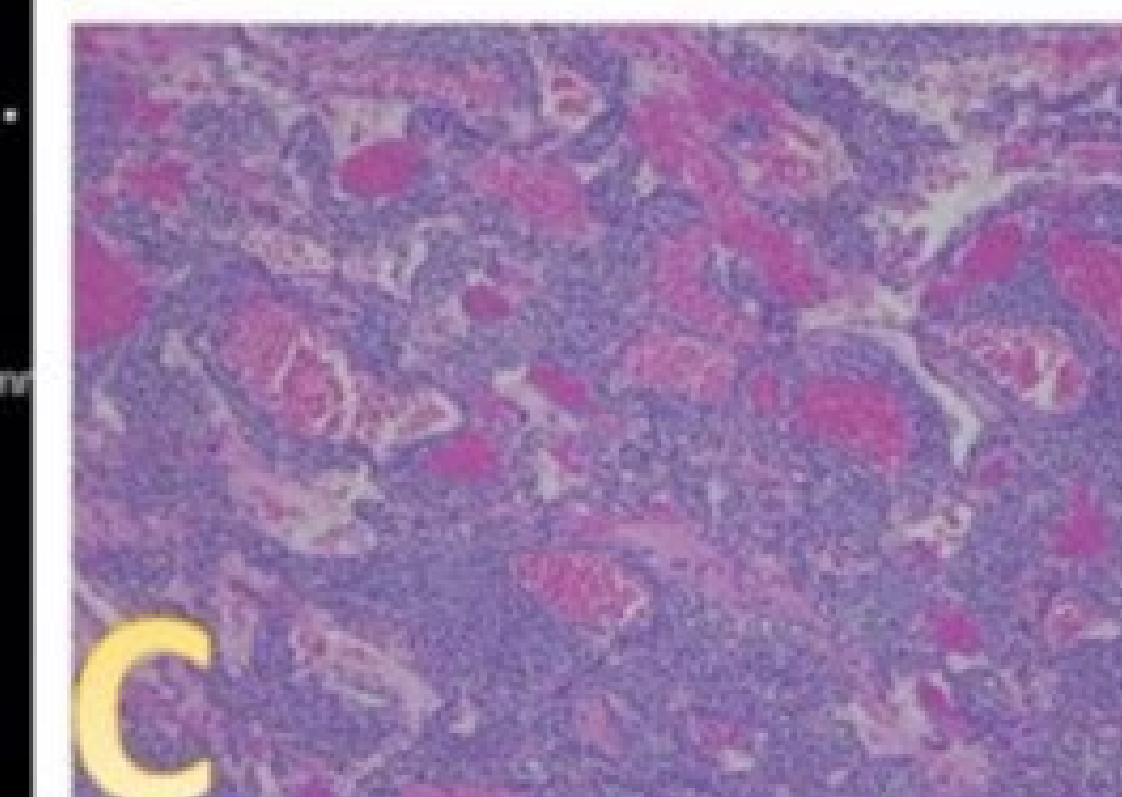
- A 27-year-old female with no significant past medical history presented with new-onset melena and lightheadedness. Her hemoglobin (Hb) was 6.5 g/dl. EGD showed a single 15-mm cratered ulcer with an overlying blood clot in the gastric body.
- An endoclip was placed for site marking. Hb continued to fall, and multiple blood transfusions were needed.
- CT abdomen showed a 3-cm rounded prominence along the inferior wall of the gastric antrum, adjacent to the metallic clip.
- Repeat EGD revealed a fresh clot and oozing from previous site. No discrete vessel or lesion was visible. Hemostasis was achieved with epinephrine injection. Hb remained stable in the 7s, and patient was discharged.
- She re-presented to the ER 2 days later with dizziness and melena. BP was 89/65 and Hb was 5.2 g/dl. On EGD, an ulcer with an adherent clot was seen in the gastric antrum.
- This appeared to arise from a 1-2 cm submucosal nodule, suggestive of an ulcerated GIST.

Continue Case Description

- The defect was closed with Endoclips. Hb continued to drop, and surgery was consulted, who proceeded with laparoscopic robotic-assisted local wedge resection of the bleeding gastric mass. Post-operative course was uneventful. The fluctuation in Hb stopped.
- On histopathology, proliferation of glomus cells around blood cells was seen. Immunohistochemistry (IHC) was positive for calponin and actin, consistent with a glomus tumor.
- On a follow-up visit 4 weeks later, patient reported resolution of symptoms.

DISCUSSION

- Gastric glomus tumors commonly present with epigastric pain. GI bleeding is seen in 1/4th of the cases, when the tumors bulge towards the mucosa and ulcerate.
- EUS can help identify their origin from the submucosa and muscularis propria, though EUS-guided biopsy may cause bleeding. Radiological appearance mimics hypervascular gastric tumors like GIST and neuroendocrine tumors.
- These can be differentiated via histopathology and IHC. Glomus tumors are composed of vasculature surrounded by small, monomorphic cells without atypia. IHC is suggestive of smooth muscle differentiation with positive actin and vimentin.
- Surgical resection is preferred. Cases of recurrence and malignant transformation have been reported.



- Figure A: CT scan of the abdomen showing a 3 cm heterogeneous slightly rounded prominence along the inferior wall.
- Figure B: EGD showing A 1-2 cm submucosal nodule with an overlying bloody ulcerated mucosa in A.
- Figure C: Classic features of glomus tumor with solid sheets of neoplastic cells in a background of blood vessels with varying caliber (hematoxylin and eosin, magnification 200x).

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