Not GIST Any Bleed – A Rare Case of GIST Presenting as a Gastrointestinal Bleed



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INTRODUCTION:

- Gastrointestinal stromal tumors (GISTs) are mesenchymal neoplasms that account for 1-3% of gastrointestinal (GI) tumors with less than 5% of GISTs occurring in the duodenum.
- We present an interesting case of a 53-year-old patient who presented with hematemesis and melena secondary to a duodenal GIST.

CASE REPORT:

- 53-year-old male presented with hematemesis and melena. Vital signs stable and examination unremarkable at time of initial arrival.
- Laboratory values revealed a hemoglobin of 12.7 g/dL and INR of 1.04. BUN was 26 mg/dL and creatinine 1.15 mg/dL. Hepatic function panel was within normal limits.
- EGD revealed a 5 cm submucosal mass with an ulcerated central area and nonbleeding visible vessel. The mass was on the inferior wall and distal to the ampulla. Epinephrine was injected into the mass, the nonbleeding vessel was cauterized, and 3 clips were placed to achieve hemostasis.
- The patient required 6 units of packed red blood cells transfusions during his hospital stay. Subsequently, CT was performed which revealed a mass in the duodenum consistent with GIST.
- Follow up outpatient EUS with FNA of the mass was performed and confirmed the diagnosis of GIST.
- The patient underwent 6 months of neoadjuvant chemotherapy with Gleevac followed by tumor resection.
- The decision was made to continue Gleevac for a total of 3 years to prevent recurrence. Now one year following resection and 8 months after restarting chemotherapy, the patient remains in remission.

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DISCUSSION:

GISTs are often asymptomatic or lead to a constellation of non-specific symptoms. GI bleeding is a commonly reported symptom of GIST, but severe bleeding requiring multiple transfusions and endoscopic intervention is very uncommon. Timely diagnosis of these tumors is imperative given their malignant potential and need for surgical or endoscopic resection to allow for definitive cure.

IMAGES:

(A) EGG revealing a submucosal mass 5 cm in size with a central ulcerated area and nonbleeding visible vessel. (B, C) Three clips applied during EGD to achieve hemostasis which resulted following cauterization of the visible vessel. (D, E) CT CAP demonstrating a 3.2 x 2.5 x 4.4 cm mass within the transverse portion of the duodenum demonstrating an exoenteric growth pattern. (F) EUS demonstrating an oval and hypoechoic mass measuring 34 mm x 32 mm with well-defined and smooth margins in the second part of the duodenum contained within the muscularis propria. (G) Duodenal mass resection with CD117 IHC stain, 20X, diffusely positive in GIST tumor cells. (H) Duodenal mass resection with DOG1 IHC stain, 20X, diffusely positive in GIST tumor cells. (I) Duodenal mass resection, H&E stain, 40X with bland spindle cells and absent necrosis consistent with GIST, spindle cell type.

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