GIST - An Unusual Cause of Upper GI Bleeding

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Learning Objectives
- Highlight the importance of a systematic approach in diagnosing GI bleeding
- Educate on the significance of obtaining a large differential diagnosis when working up GI bleeding
- Enlighten clinicians on this rare tumor

Introduction
- A GIST (gastrointestinal stromal tumor) is a neoplasm that arises out of the GI tract
- GISTs are the most common mesenchymal tumors of the GI tract
- This case profiles a unique circumstance where a patient with a recurrent upper GI bleed, visualized on initial endoscopy, was ultimately found to have a GIST on subsequent imaging and surgical pathology

Patient Case
- HPI
  - 64 y.o. Asian female with generalized weakness and black tarry stools of 1 day duration. H/O NSAID use from chronic musculoskeletal pain
- ROS
  - Positive for rectal bleeding, diarrhea
  - Negative for abdominal pain, emesis
- PMH
  - HTN, HLD, chronic pain
- PSH
  - No prior colonoscopies or endoscopies
- Social Hx
  - No recent travel or sick contacts
- Family Hx
  - No gastrointestinal disorders or cancers
- Labs
  - Hb – 8.2, BUN-36, Cr 0.68
- Imaging
  - Endoscopy - 3cm vascular lesion
  - CT A/P - 4.8 cm x 4.1 cm lobulated mass in proximal stomach just beyond GE junction
- Hospital Course
  - Sustained GI bleeding post endoscopy
  - Thoracoabdominal esophagogastrectomy w/ mediastinal lymph node biopsy
- Post Hospital Course
  - Pathology – encapsulated mucosal tumor with spindle cells. Positive staining for KIT protein CD117 and CD34
  - Negative tumor margins and lymph nodes
  - Oncology - imatinib therapy initiated

Discussion
- GIST Facts
  - 5% genetically inherited
  - Can originate from any point in the GI tract but most common location is the stomach (50%)¹
  - Average age 60-65³
  - Incidence rate of 7-20 cases per million in U.S.³
  - Gold standard therapy is complete resection¹
  - 5 year survival rate is 54%³
  - Tumors express CD117 and KIT proto-oncogene³
  - High propensity for re-bleeding³

Conclusion
- GIST is a very rare GI tumor
- This case highlights the importance of obtaining a wide differential and systematic, evidence based workup for GI bleeding to insure that infrequent types of GI bleeding are not missed.

Spindle Cell Histology

References