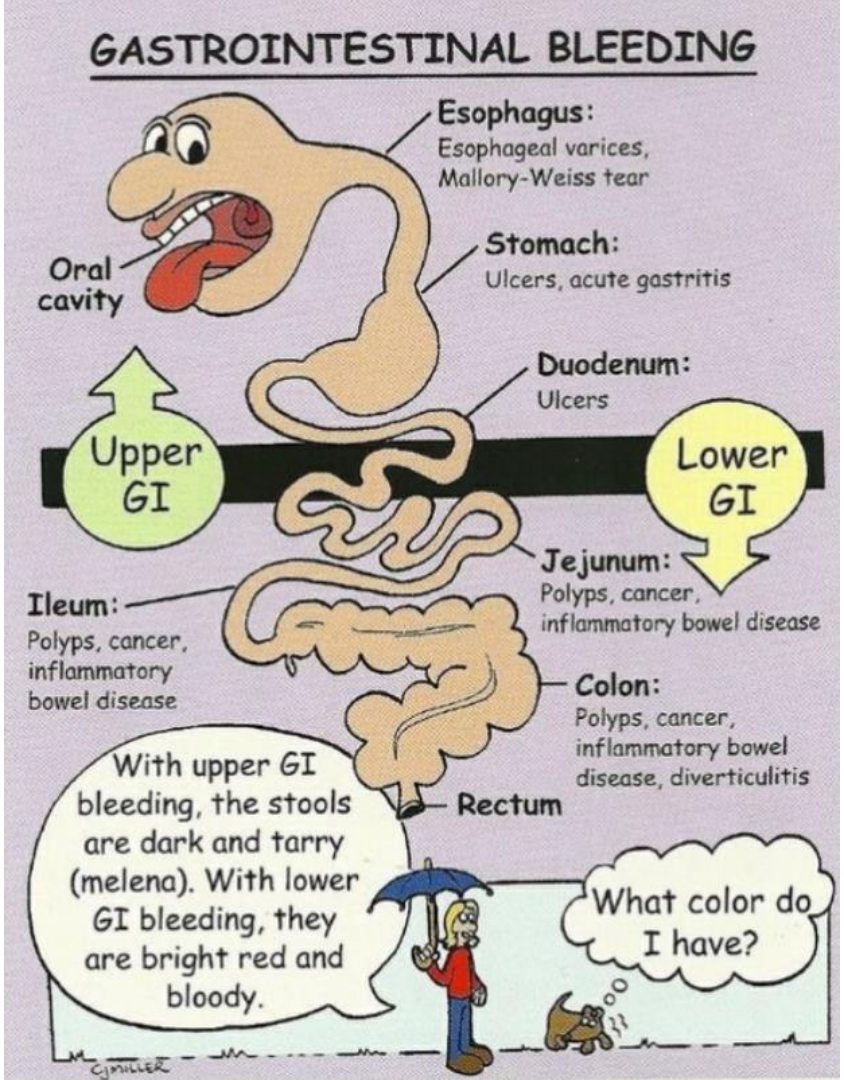
Gastrointestinal Bleeding

D Millar MD FACS
University of Cincinnati
Trauma and Emergency Surgery

Gastrointestinal bleeding

Sources of Bleeding	Proportion of Patients, %
Ulcers	31–67
Varices	6–39
Mallory-Weiss tears	2–8
Gastroduodenal erosions	2–18
Erosive esophagitis	1–13
Neoplasm	2–8
Vascular ectasias	0–6
No source identified	5–14

Upper or Lower GI Bleeding


GASTROINTESTINAL BLEEDING
Esophagus:
Esophageal varices, Mallory-Weiss tear
Oral cavity
Stomach:
Ulcers, acute gastritis
Duodenum:
Ulcers
Upper GI
Lower GI
Jejunum:
Polyps, cancer, inflammatory bowel disease
Ileum:
Polyps, cancer, inflammatory bowel disease
Colon:
Polyps, cancer, inflammatory bowel disease, diverticulitis
Rectum
With upper GI bleeding, the stools are dark and tarry (melena). With lower GI bleeding, they are bright red and bloody.
What color do I have?

Case 1

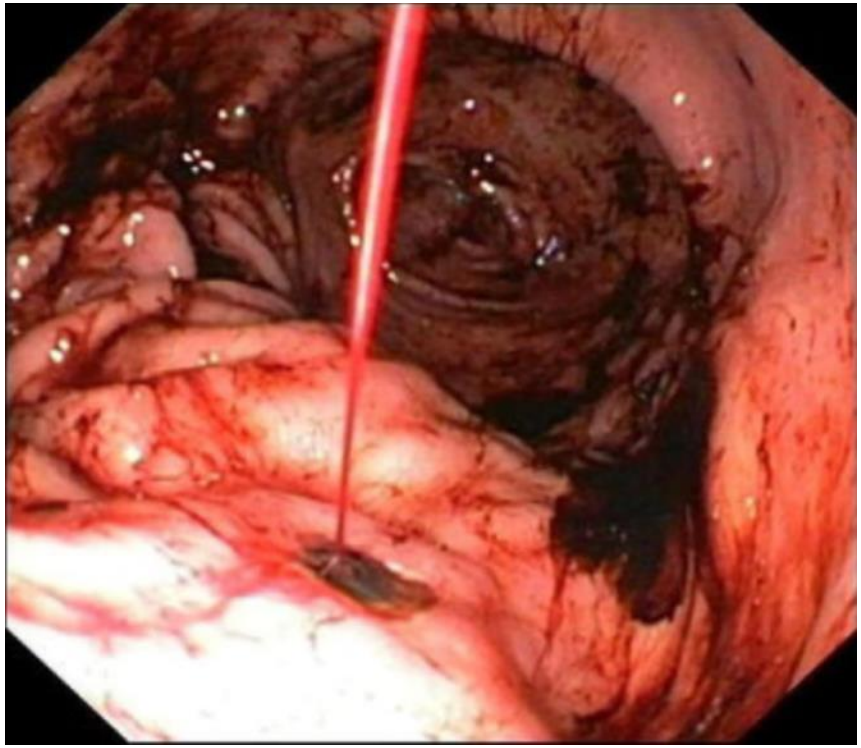
65 yo Female with known CAD, HLD, on ASA and statin admitted for syncope, has orthostatic hypotension, hemoglobin of 6 and a report of black tarry stools.

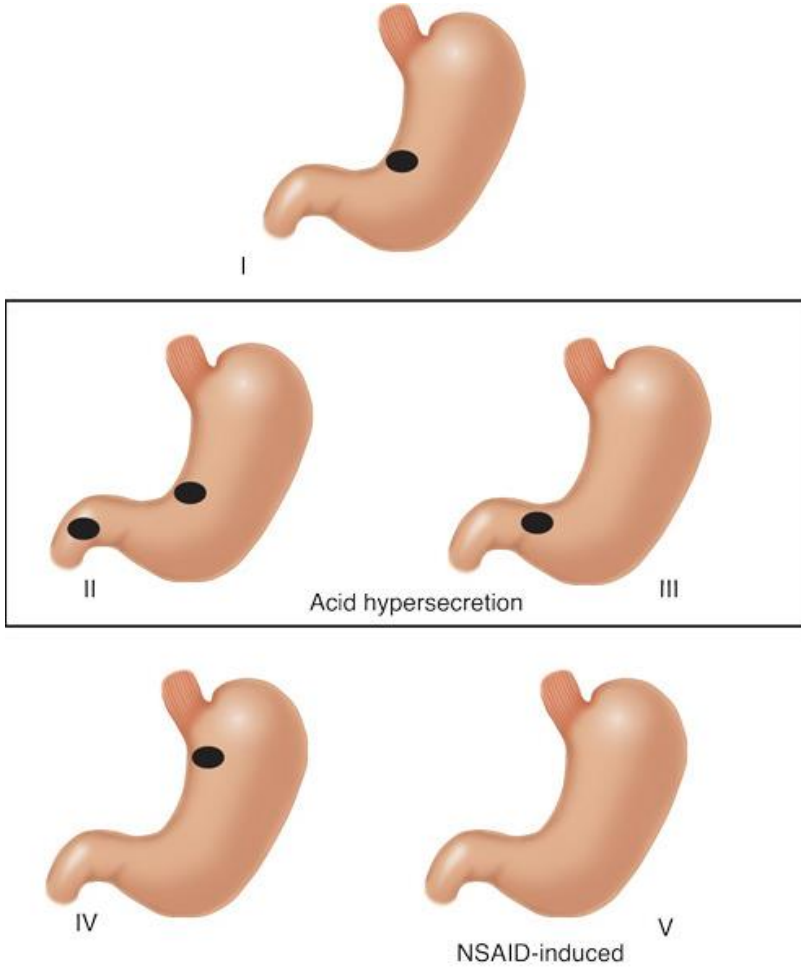
- Initial resuscitation and workup?
- Upper or Lower
- Differential Diagnosis
- Next steps and interventions

Keep it Simple and Do it the Same

- ABC’s
  - Secure Airway if needed
  - Large bore IV Access
- Type and Cross, Transfuse as needed
  - You’re bleeding whole blood
  - Transfuse in appropriate ratios (One to One)
- Locate source
  - NGT w Lavage
  - Endoscopy

Peptic Ulcer Disease





Intervention

Endoscopy

- Cautery
- Clip
- inject

Helicobacter Pylori

Common Cause of Peptic Ulcer disease

Diagnosis: Biopsy, stool antigen, urea breath test, serology

Treatment

- Omeprazole, amoxicillin, and clarithromycin (OAC) for 10 days
- Bismuth subsalicylate, metronidazole, and tetracycline (BMT) for 14 days
- Lansoprazole, amoxicillin, and clarithromycin (LAC), for either 10 days or 14 days

Case 2

45 yo Male with known ETOH cirrhosis complicated by mild ascites, caput medussa, chronic kidney disease from hepatorenal syndrome, but no encephalopathy or jaundice. He presents with large volume hematemsis with bright red blood, tachycardia, hypotension, and confusion.

- Initial resuscitation and workup?
- Upper or Lower
- Differential Diagnosis
- Next steps and interventions

Keep it Simple and Do it the Same

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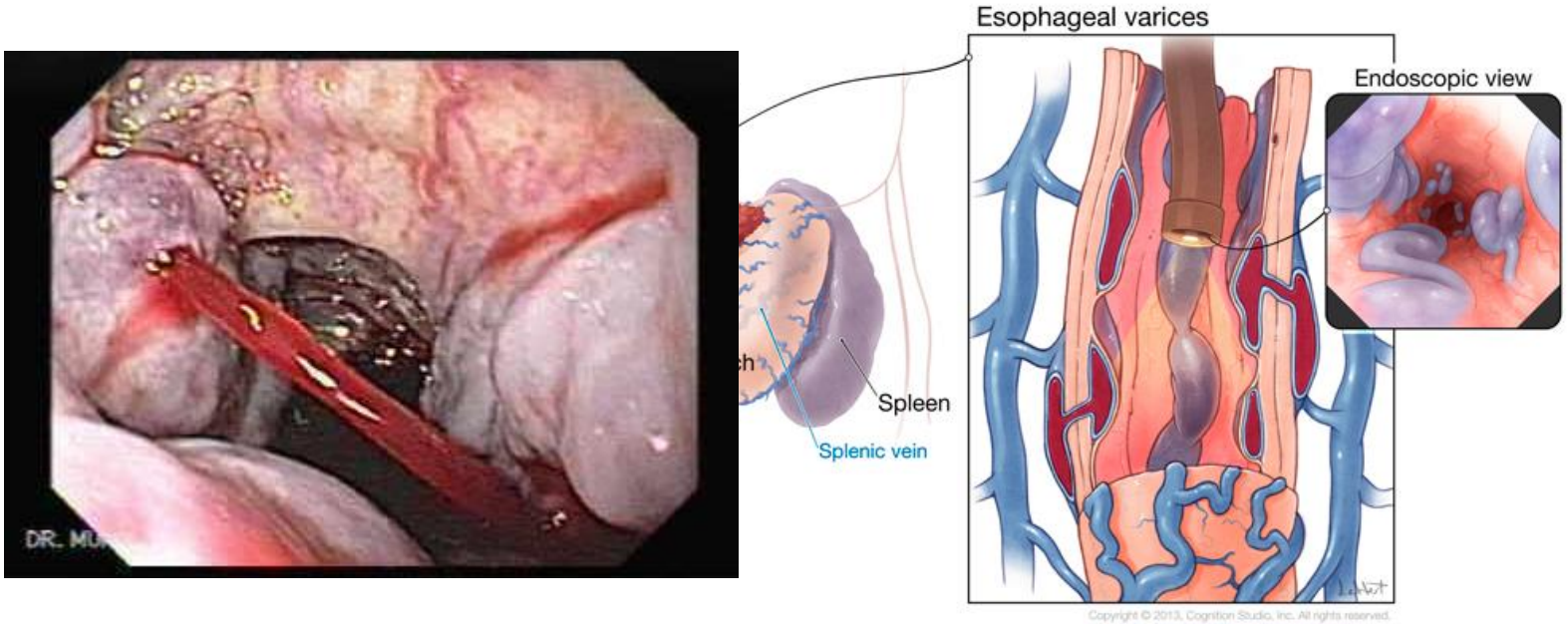
Esophageal Varices



Interventions

Endoscopic

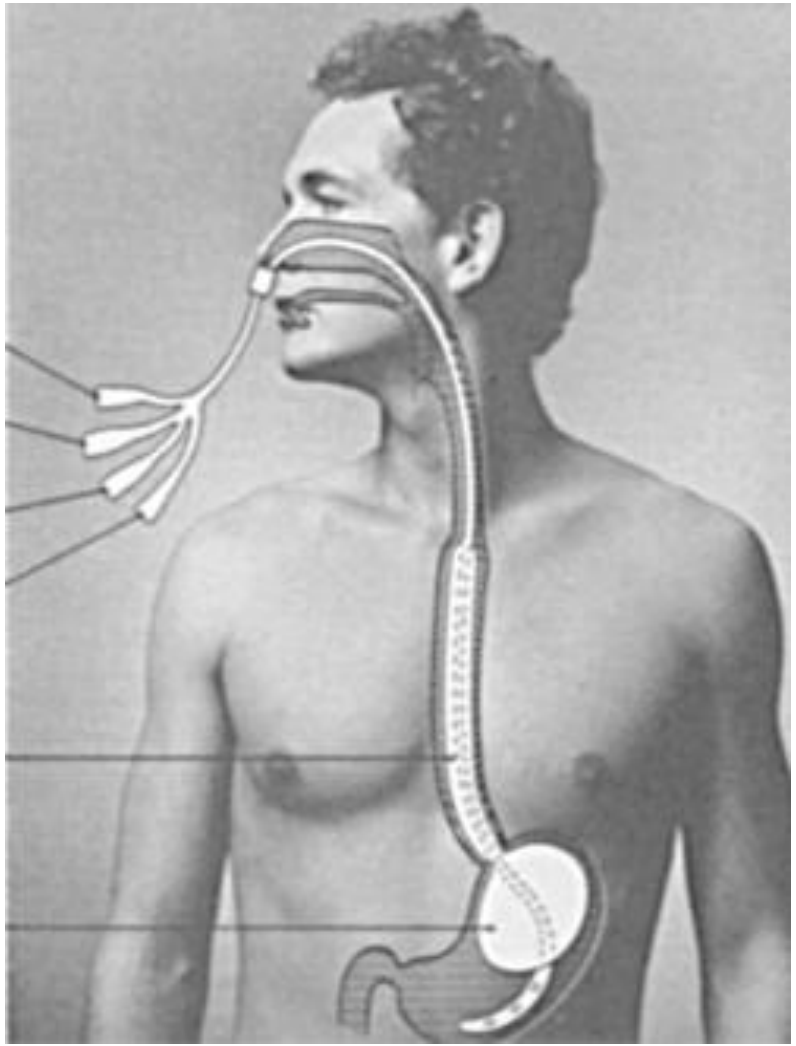
- Variceal banding
- Sclerotherapy

Tamponade

- Sengstaken–Blakemore tube
- Minnesota Tube

Medical Therapy

- Octreotide and Vasopressin



Surgical or Endovascular Shunt

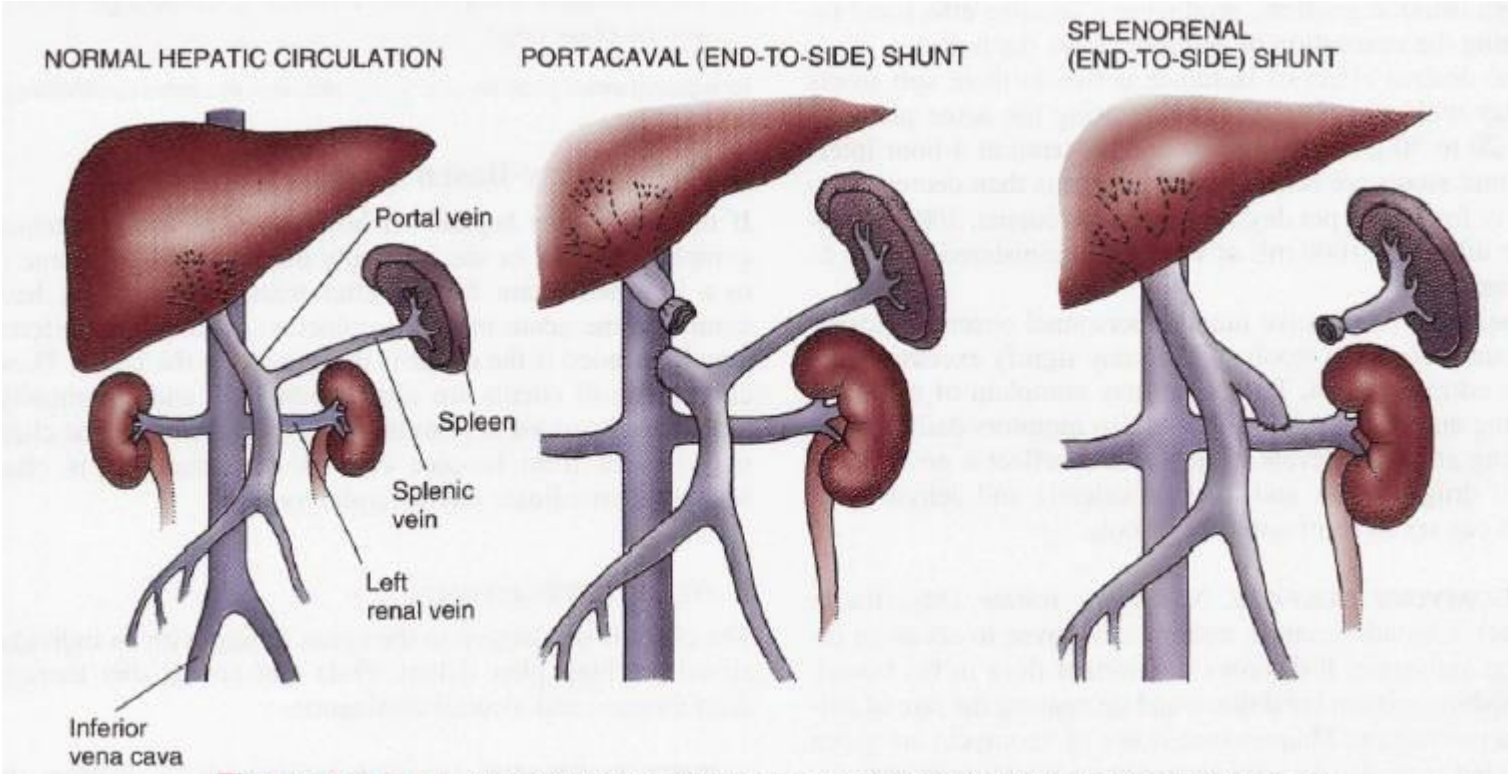
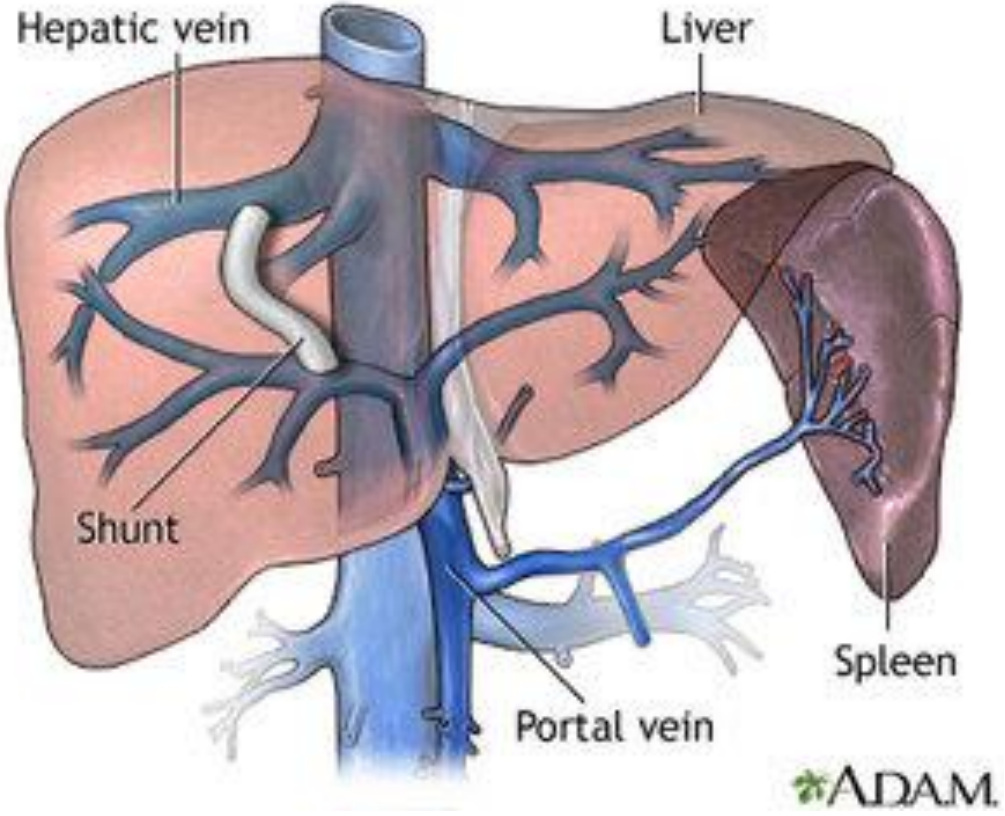


Figure 59-6 ● Surgical shunting diverts portal venous blood flow from the liver to decrease portal and esophageal pressure.

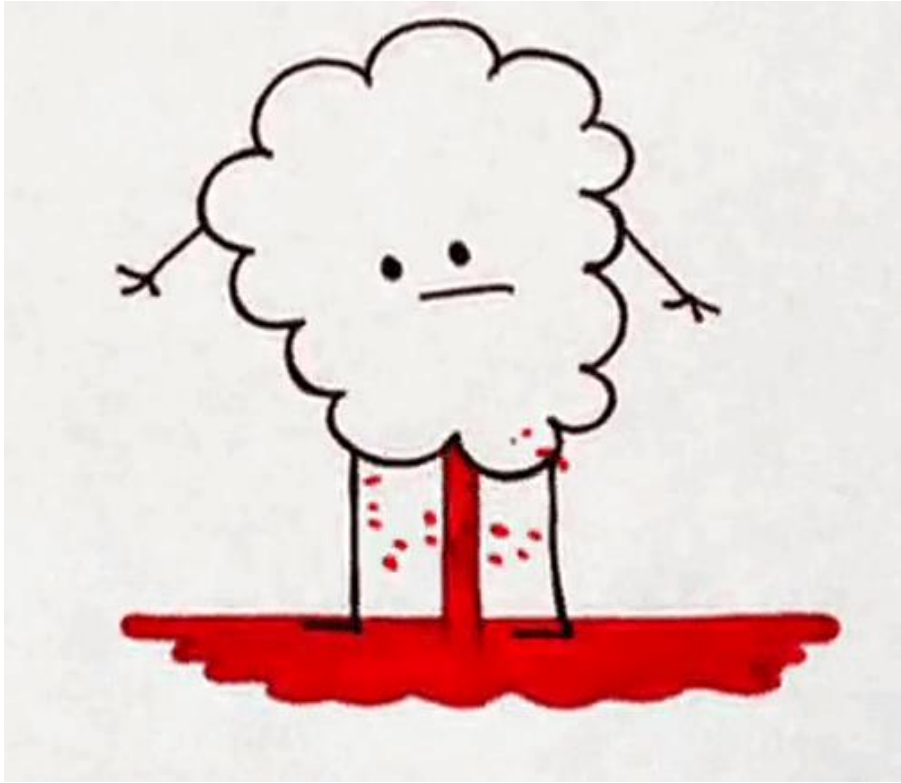
Transjugular Intrahepatic Portosytemic Shunt



Case 3

75 yo Male with DM2, CAD, HLD who presents with large volumes of bright red blood from his rectum. He is dizzy and lightheaded. HR 120 and blood pressure is 90/75. He has multiple bright red bloody stools in the ED. no nausea or vomiting.

- Initial resuscitation and workup?
- Upper or Lower
- Differential Diagnosis



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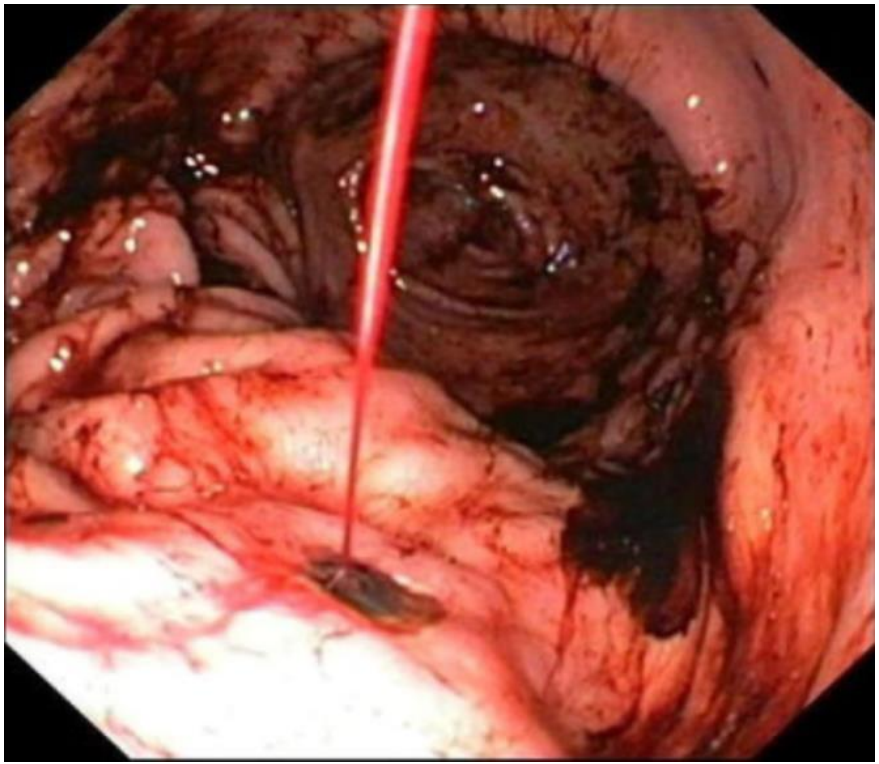
  - Upper or Lower???

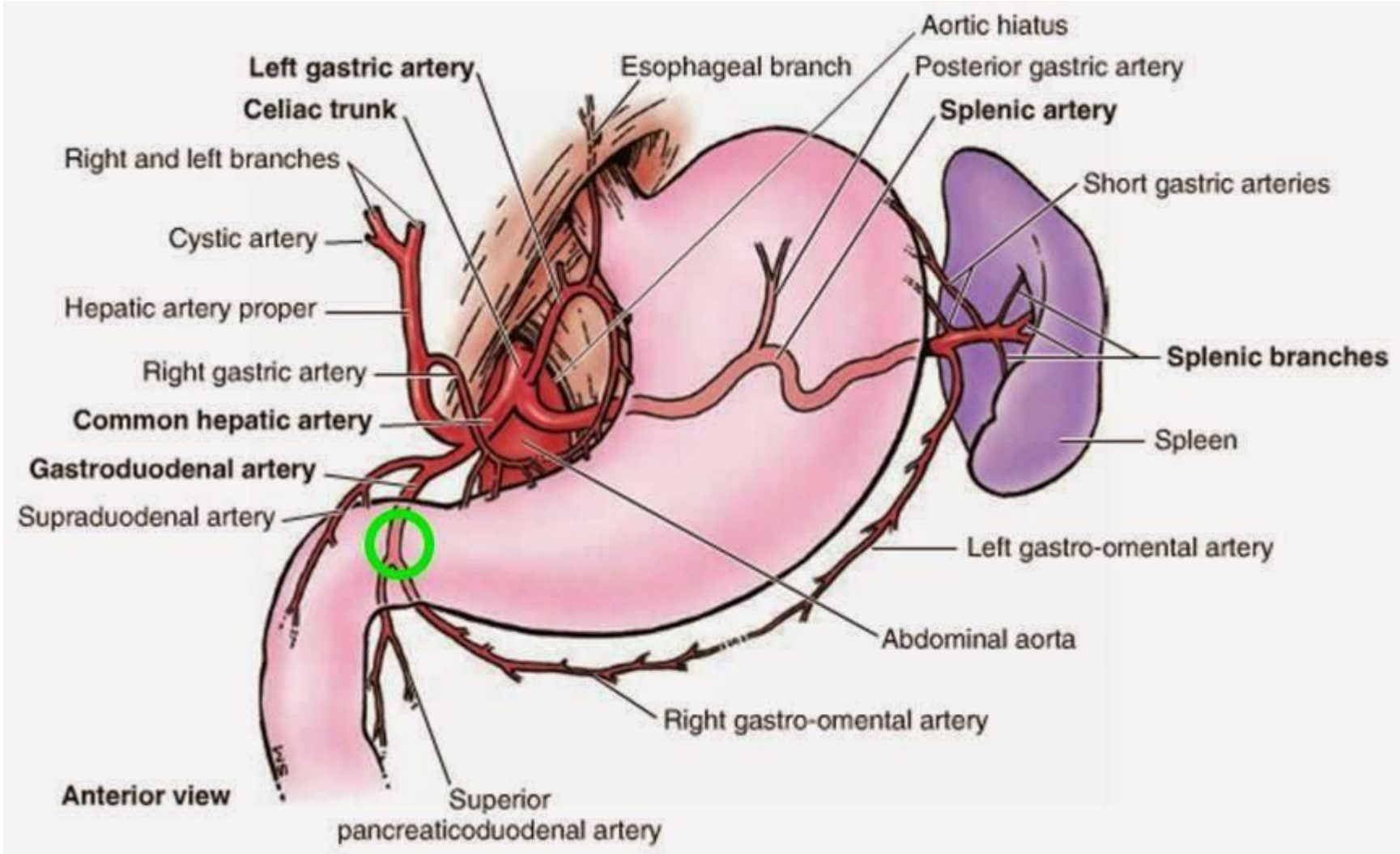
Always rule out UGI Bleed with Hematochezia

Endoscopy

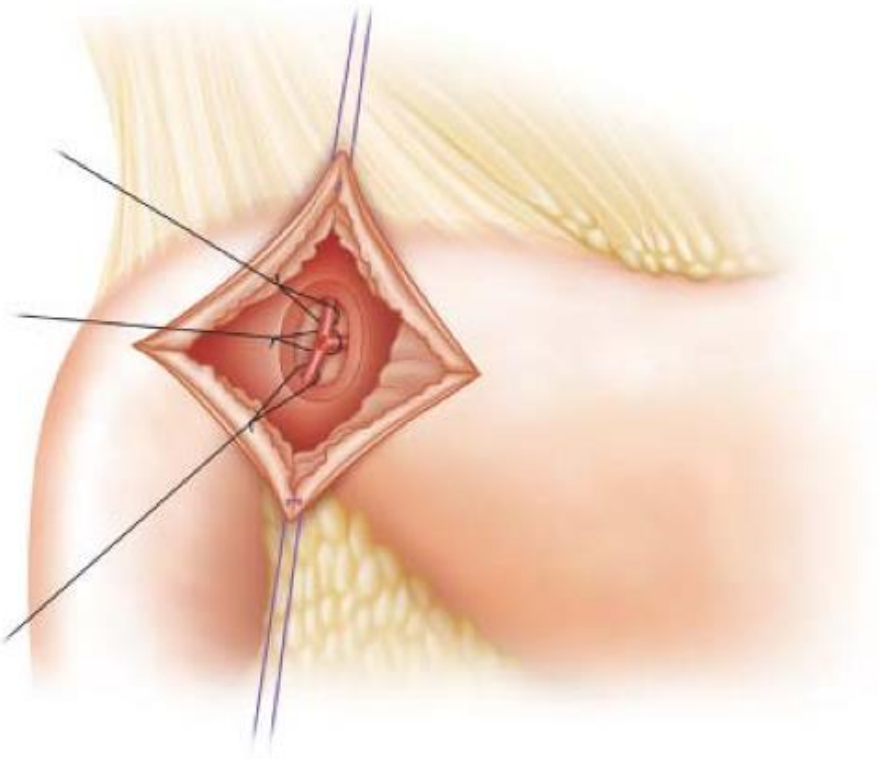
- Inject
- Clip
- Cautery

What if this fails?




Aortic hiatus
Left gastric artery
Esophageal branch
Posterior gastric artery
Celiac trunk
Splenic artery
Right and left branches
Short gastric arteries
Cystic artery
Hepatic artery proper
Splenic branches
Right gastric artery
Common hepatic artery
Spleen
Gastroduodenal artery
Supraduodenal artery
Left gastro-omental artery
Abdominal aorta
Right gastro-omental artery
Anterior view
Superior
pancreaticoduodenal artery

Surgery for Bleeding Ulcer

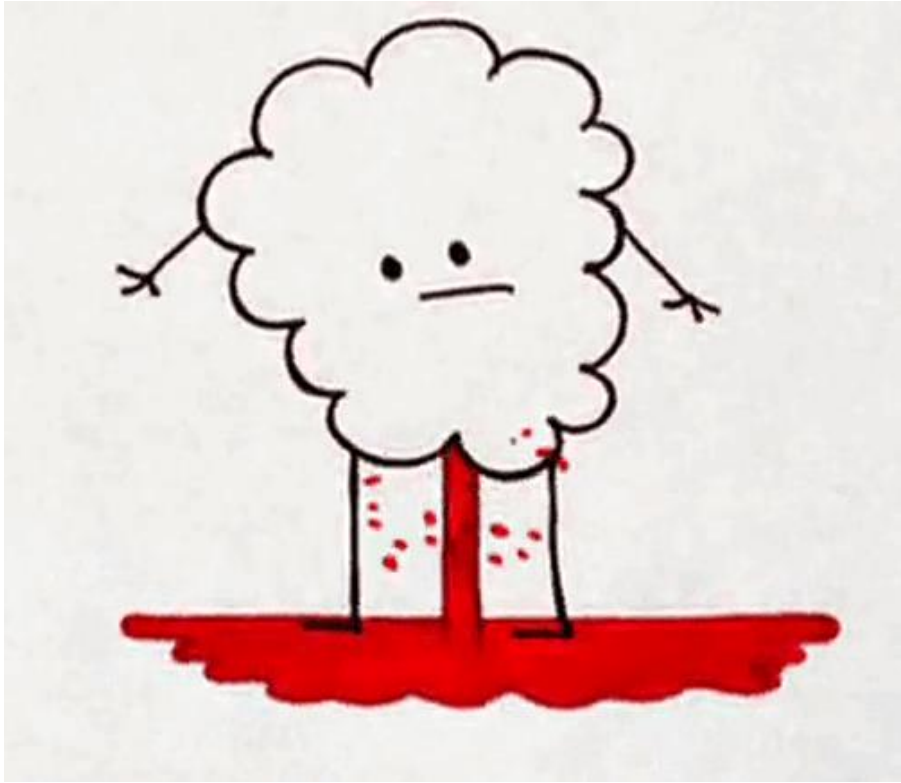


Case 4

75 yo Male with DM2, CAD, HLD who presents with large volumes of bright red blood from his rectum. He is dizzy and lightheaded. HR 120 and blood pressure is 90/75. He has multiple bright red bloody stools in the ED. no nausea or vomiting.

Upper Endoscopy is normal

Now What



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  - Upper or Lower???

Presumed Lower GI Bleed

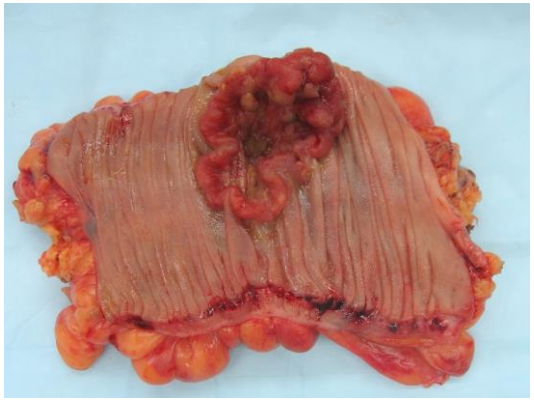
Diverticulosis

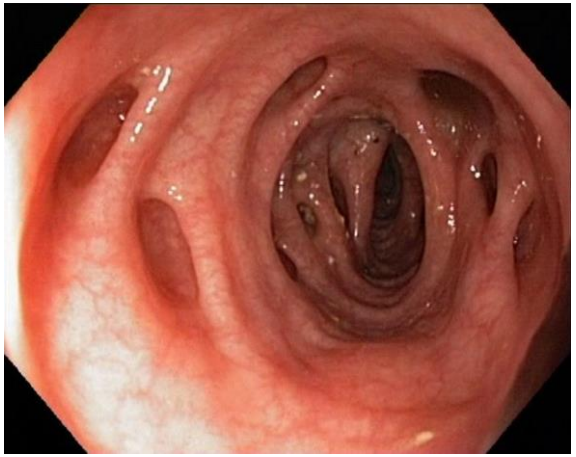
Hemorrhoids

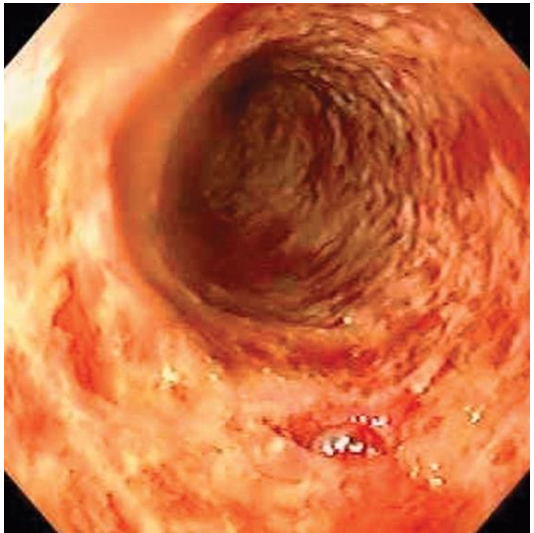
anal fissures

vascular ectasias

neoplasms



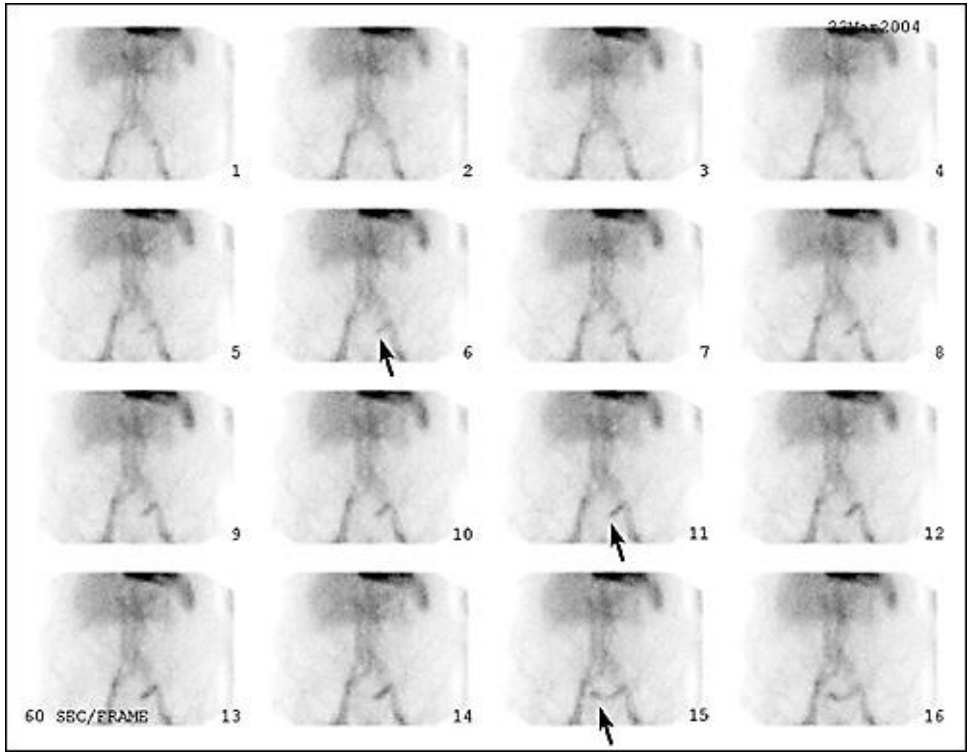




tomy bleeding

Diagnose, Localize and Intervene

- Colonoscopy
  - Diagnosis
  - Clip
  - Tatoo
- Radiology
  - Nuclear medicine: ≤0.1 mL/min
  - CT angiography: ≥0.35 mL/min
  - Angiography: ≥0.5 mL/min

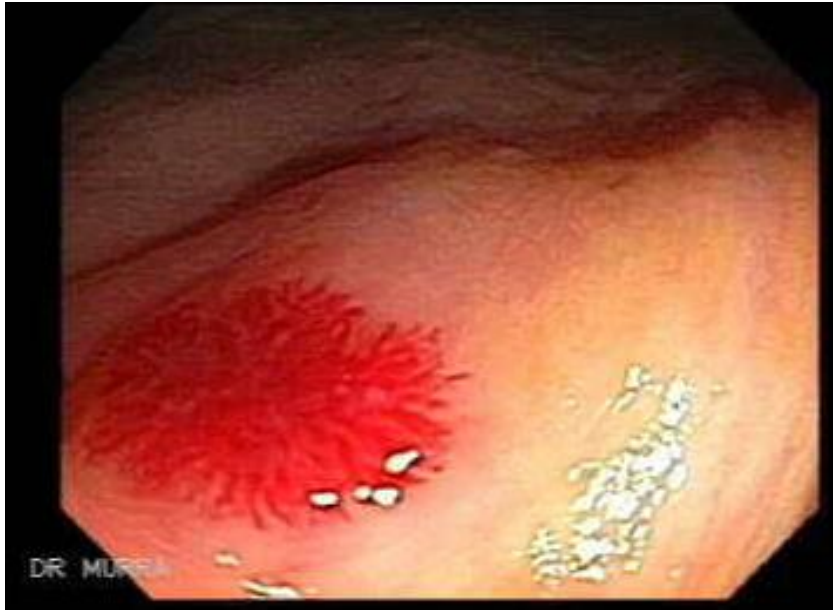


Difficult Lesions to Localize

AVM / Telengectasias

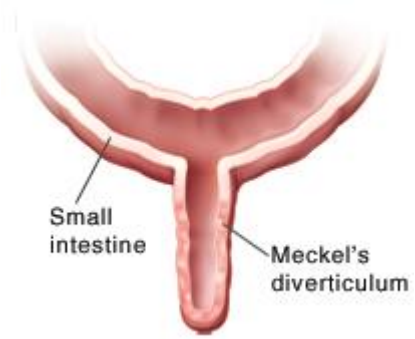
Jejunal and Ileal Lesions or Tumors

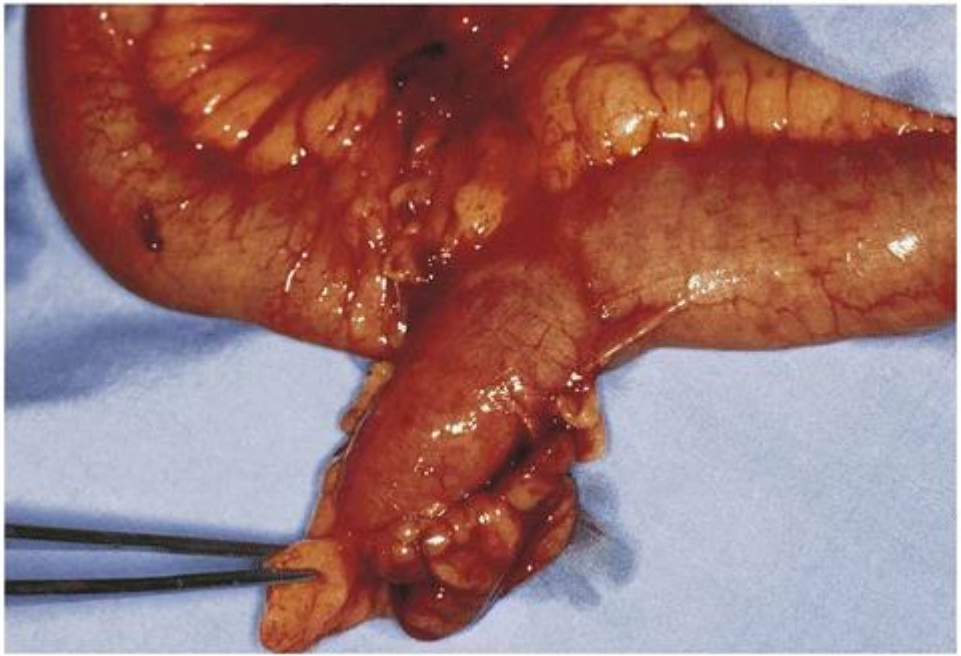
Hemobilia



Pediatrics

Meckel’s Diverticulum





Mallory-Weiss Tears

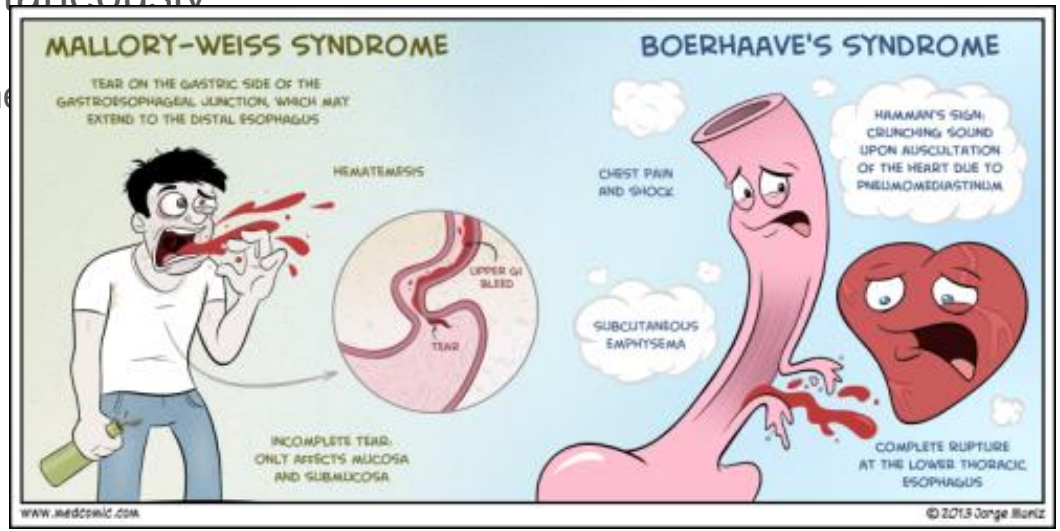
Nontransmural tear at the gastroesophageal junction

Most patients present with hematemesis. Antecedent vomiting

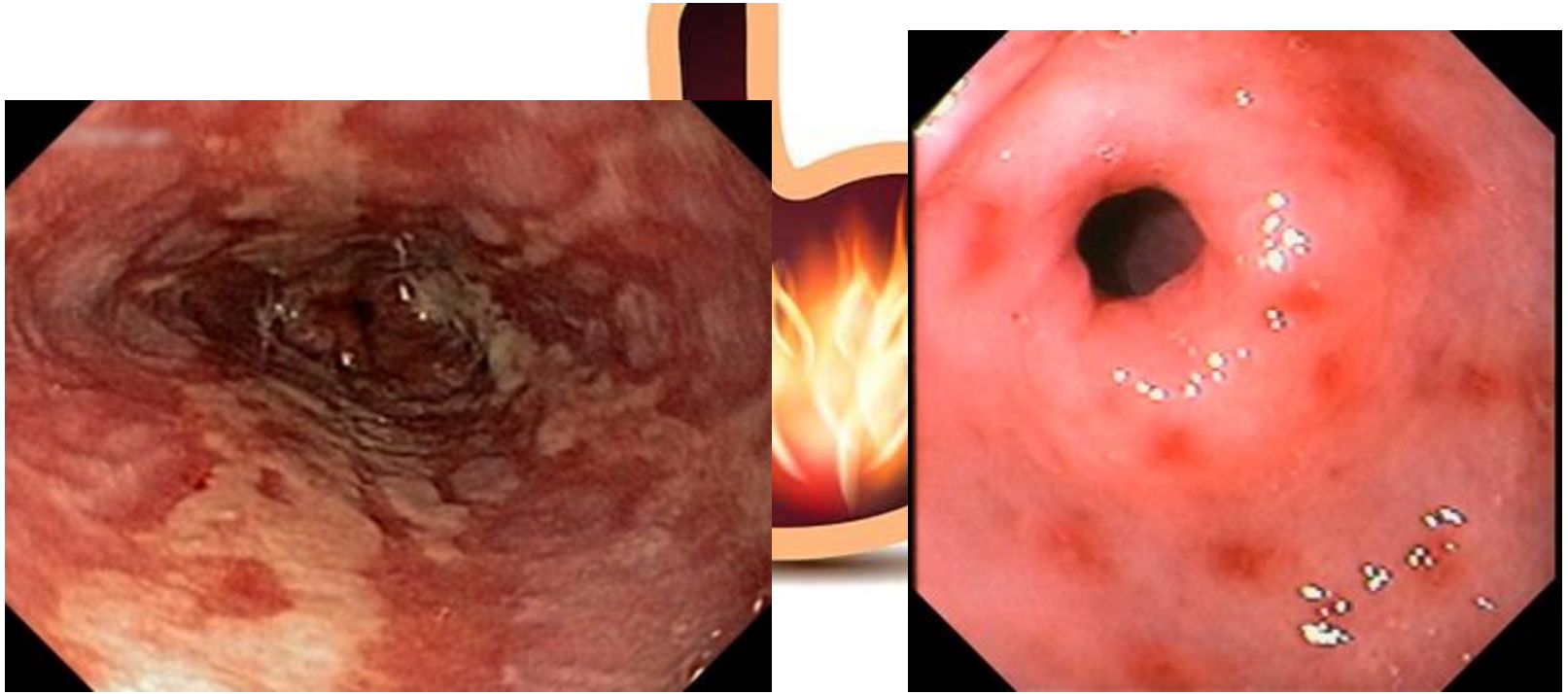
Bleeding usually abates spontaneously

May respond to local epinephrine
embolization.

Surgery is rarely needed.



Hemorrhagic and Erosive Gastropathy (Gastritis)



Catastrophic Bleeding- Aortoenteric Fistula