GI Bleeding

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Background

Incidence (U.S)

- 100 hospitalizations per 100,000 adults per year (UGIB)
- M>F
- Risk increases with age
- Mortality: ~5-12% (has remained stable at ~10% past 45 years)

Background

Definition:

- Acute:
  - arbitrarily defined as less than a 3 day duration
  - Can result in hemodynamic instability
  - May require a blood transfusion
- Upper vs. Lower GI:
  - Upper: proximal to LT
  - Lower: distal to LT

General Goals

- Assessment
- Determination of the source
- Stop any active bleeding
- Treat underlying cause
- Prevent recurrence

Signs and symptoms - Generally

- Hematemesis or “coffee ground” emesis
- Melena
- Hematochezia
- Occult GI bleeding
- May present only with symptoms of blood loss or anemia

Upper GI Bleed

Definition:

- Bleeding from the foregut—mouth to ligament of Treitz
- Can be acute or chronic

Upper GI Bleed

Acute:

- Epistaxis
- Oropharyngeal lesions
- Mallory-Weiss
- Esophageal varices
- Duodenal or Gastric ulcer
- Gastritis

Upper GI Bleed

Chronic:

- Esophageal Cancer
- Gastritis
- Duodenal or Gastric Ulcer
- Gastric tumor
- Hiatal hernia-Cameron lesions

Upper GI Bleed

Rare Causes:

- AVM
- Dieulafoy's lesion
- Watermelon stomach (GAVE)
- Hemobilia
- Surgical anastomoses

Upper GI Bleed

Workup:

Patient History (VERY important) and Physical, Labs, Diagnostic Procedures, Treatment

Upper GI Bleed

History:

- "Coffee ground"/hematemesis is the most common presentation in acute upper GI bleed.
- Melena often presents later on
- NSAID's
- GERD
- Alcohol/Cirrhosis
- Pain
- Trauma/Major Surgery

Physical Exam

Upper GI Bleed

Labs:

- Electrolytes
- Hb
- Fe, Ferritin
- Hct
- PT/PTT
- BUN/Creatinine

Upper GI Bleed

Nasogastric aspiration:

Used in acute bleed – Can't rule out if negative

- Bright red/clots – active UGI bleed
- Coffee-grounds – slow bleeding, oozing, stopped
- Clear – indeterminate (16% still bleeding)
- Bilious – UGI bleeding has stopped

Upper GI Bleed

Upper Endoscopy:

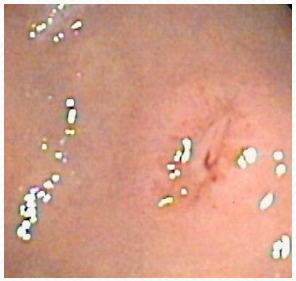
- Most useful single diagnostic tool—90% success
- Nearly all sources of UGI bleeding may be identified
- Can be done in ICU
- If needed, therapy/treatment may be delivered simultaneously

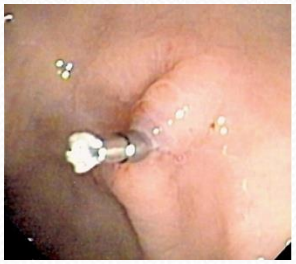
Upper GI Bleed

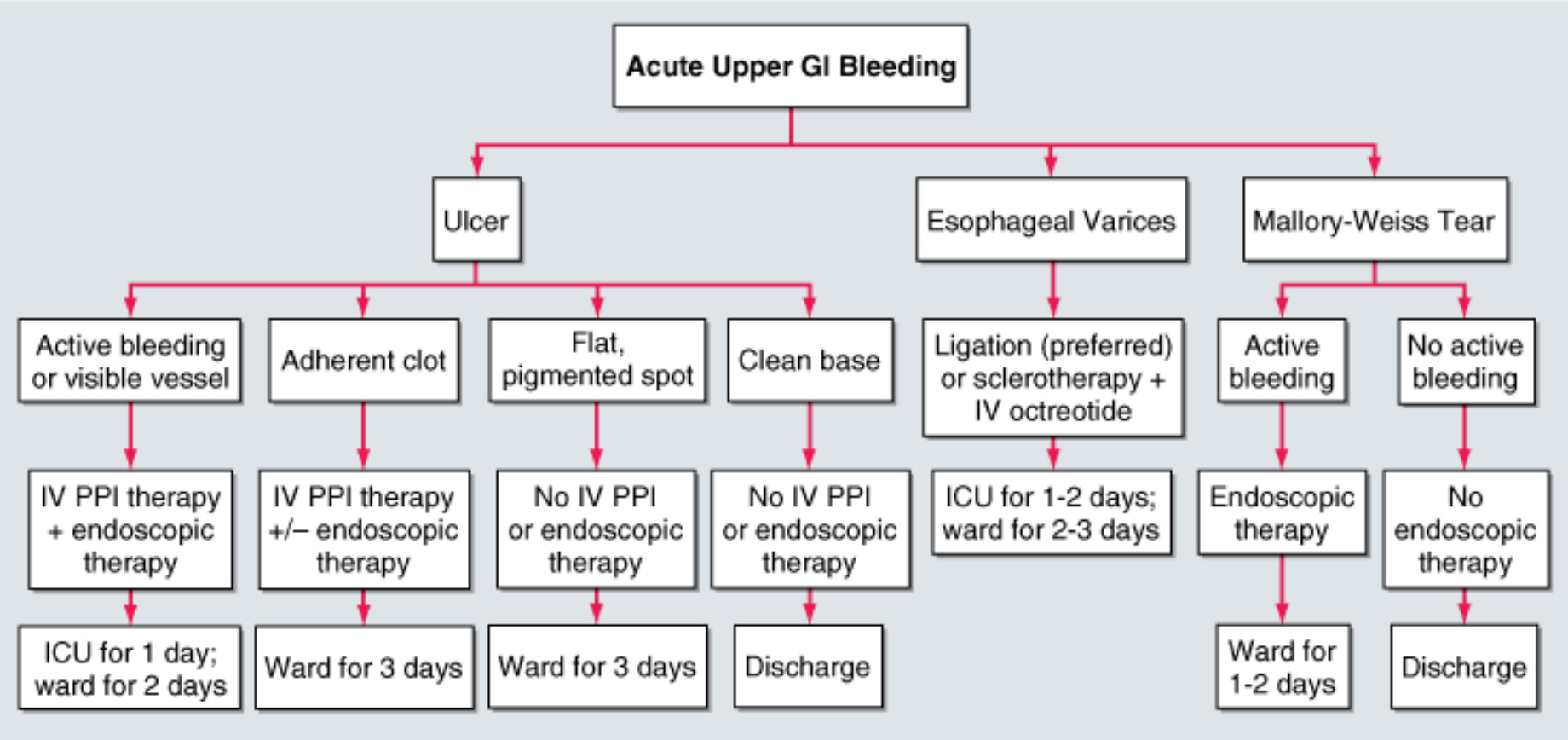
Treatment

- Via Endoscopy:
  - For Varices
    - Sclerotherapy
    - Banding
  - For Ulcers
    - Clipping
    - Injection or Coagulation

- Via Pharmacotherapy
  - PPI's
  - Octeotride
  - Triple Therapy







Harrisons, 17th edition

Lower GI Bleed

Definition:

Bleeding source distal to ligament of Treitz

- Mean age of presentation 63-77 y/o
- Can presents with:
  - Bright red blood per rectum with or without clots
  - Fecal Occult blood
  - Melena
- Often more difficult to localize than UGI bleed

Lower GI Bleed

Acute:

- Diverticulosis
- Angiodysplasia (AVM)
- Meckel's diverticulum
- Ischemic colitis
- Infectious colitis
- IBD
- Malignancy

Lower GI Bleed

Chronic:

- Hemorrhoids
- Malignancy
- IBD
- Benign small or large bowel polyps
- Angiodysplasia
- Anal fissure

Lower GI Bleed

Workup (just like UGIB)

Patient History and Physical, Labs, Diagnostic Procedures, Treatment

Lower GI Bleed

History:

- Character and quantity of blood
- History of IBD
- History of Traveling
- History of PVD, HTN, CAD
- Coagulopathy or Anticoagulation

Physical Exam:

- Look for Abdominal Masses
- Listen for bruits
- Rectal Exam
- Rectal Exam
- Rectal Exam

Lower GI Bleed

Labs:

(Like in UGIB…)

- Electrolytes
- Hb
- Hct
- PT/PTT

and…

- Radiologic Studies

Lower GI Bleed

Sigmoidoscopy:

- Used as a first measure if no preparation readily available
- Used mainly in younger patients (<40) with minimal bleeding

Colonoscopy:

- Many times, first line
- Visualization can be difficult

Tagged RBC scan:

- 99mTc-pertechnaetate-labeled RBCs
- Can see when rate of bleed=0.1-0.5ml/minute
- Repeated evaluation over time
- Problems with distinguishing between colon and small bowel

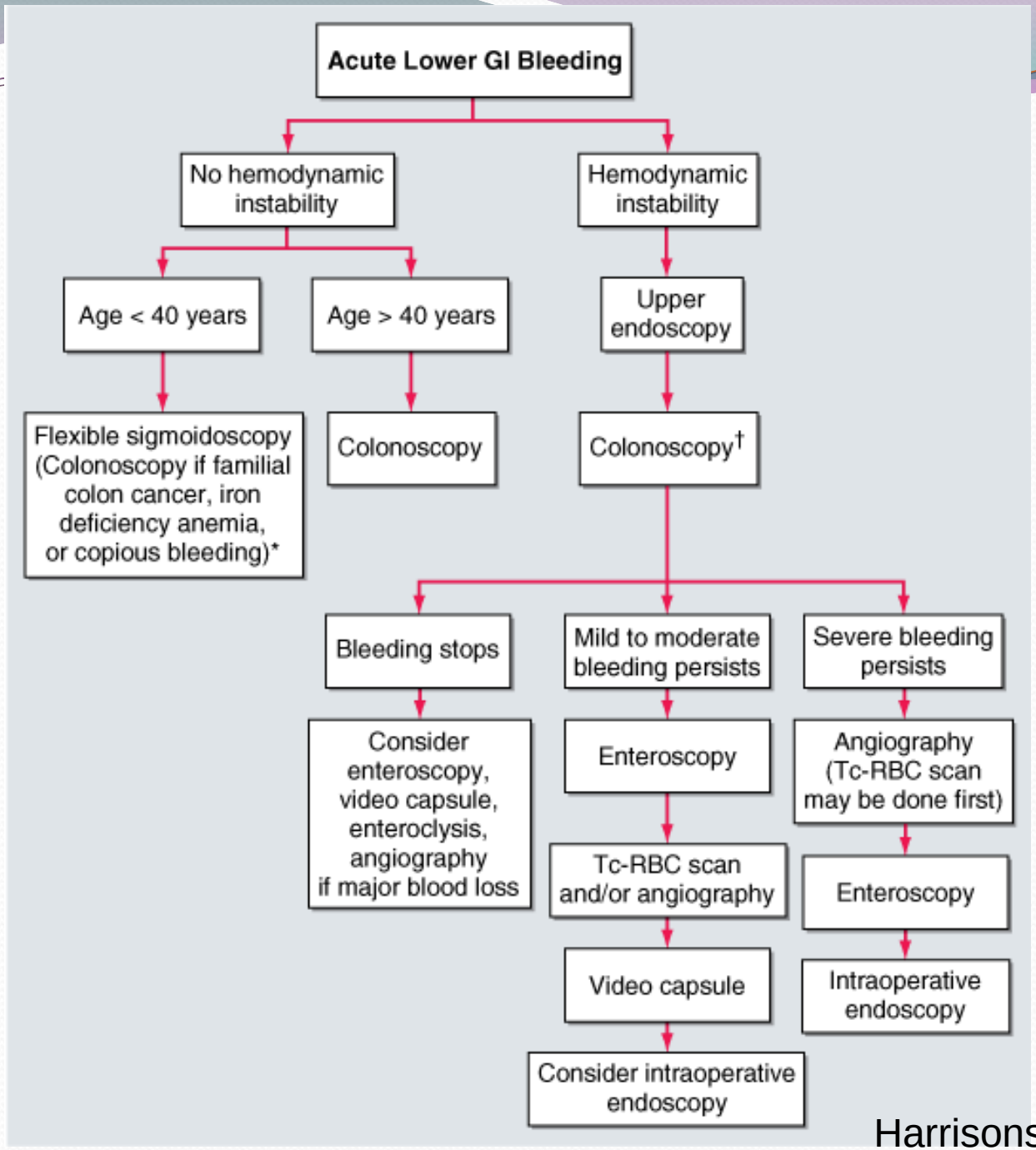
Lower GI Bleed

Angiography:

- Better for localizing bleed
- Can see when rate of bleed is 0.5-1.5ml/minute
- Large amount of contrast needed (CI in renal insufficiency)
- Possibly therapeutic (embolization, vasopressin)

Capsule Endoscopy:

- May be effective in localizing intermittent bleed
- May be the only way to identify small bowel source



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Thank you