Lower GI Bleed

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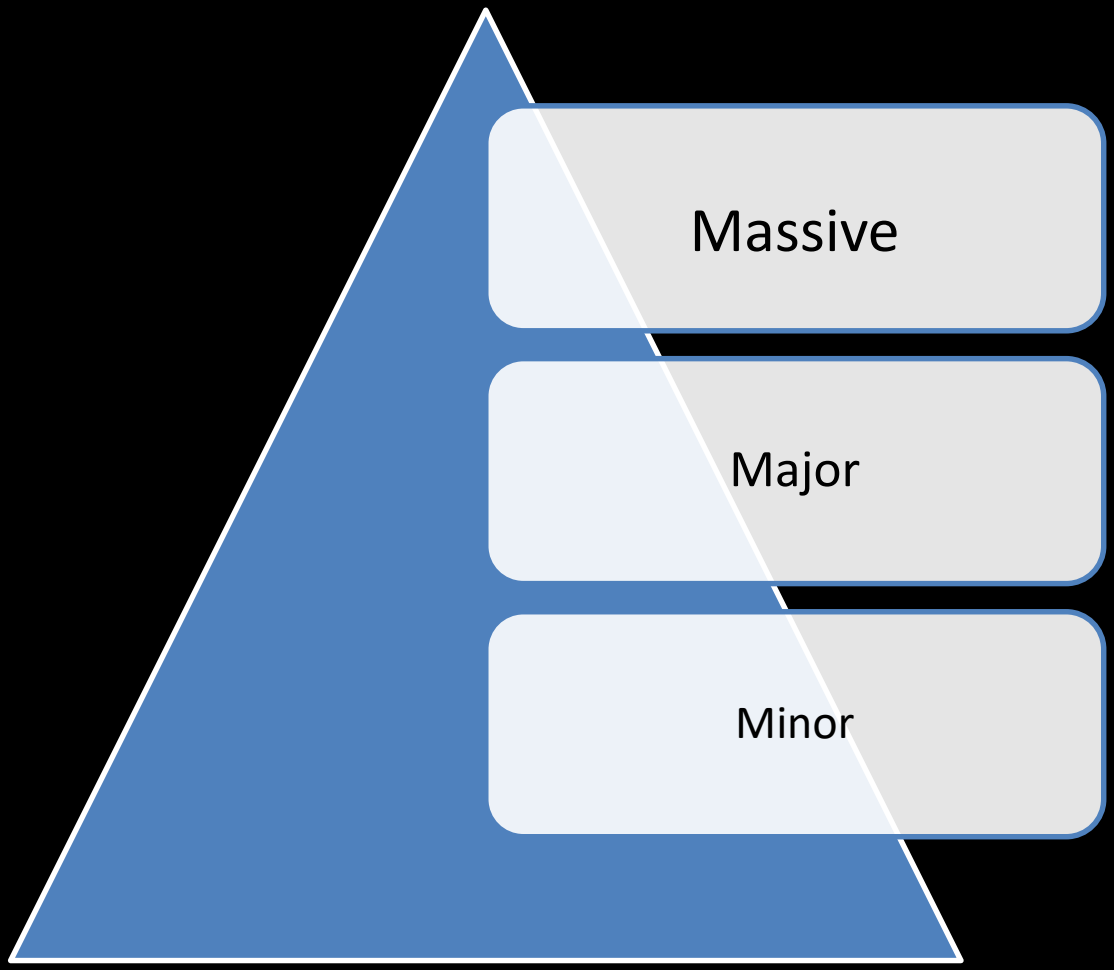
Introduction

- LGIB means bleeding distal to Ligament of Trietz
- Responsible for 20% of all GI bleed
- Initial symptoms are hematochezia, maroon or bright red colored blood or blood clots per rectum
- The most common cause of hematochezia is UGIB
- NG tube to rule out UGIB

Types of LGIB



Minor bleed

- Hemodynamically stable Pt. and can be evaluated in OPD
- Hemorrhoids
- Fissures

- IBD
- Infective colitis
- AV malformations
- Polyps
- Colonic cancer
- Are potential sources

Major & Massive Bleed

Major

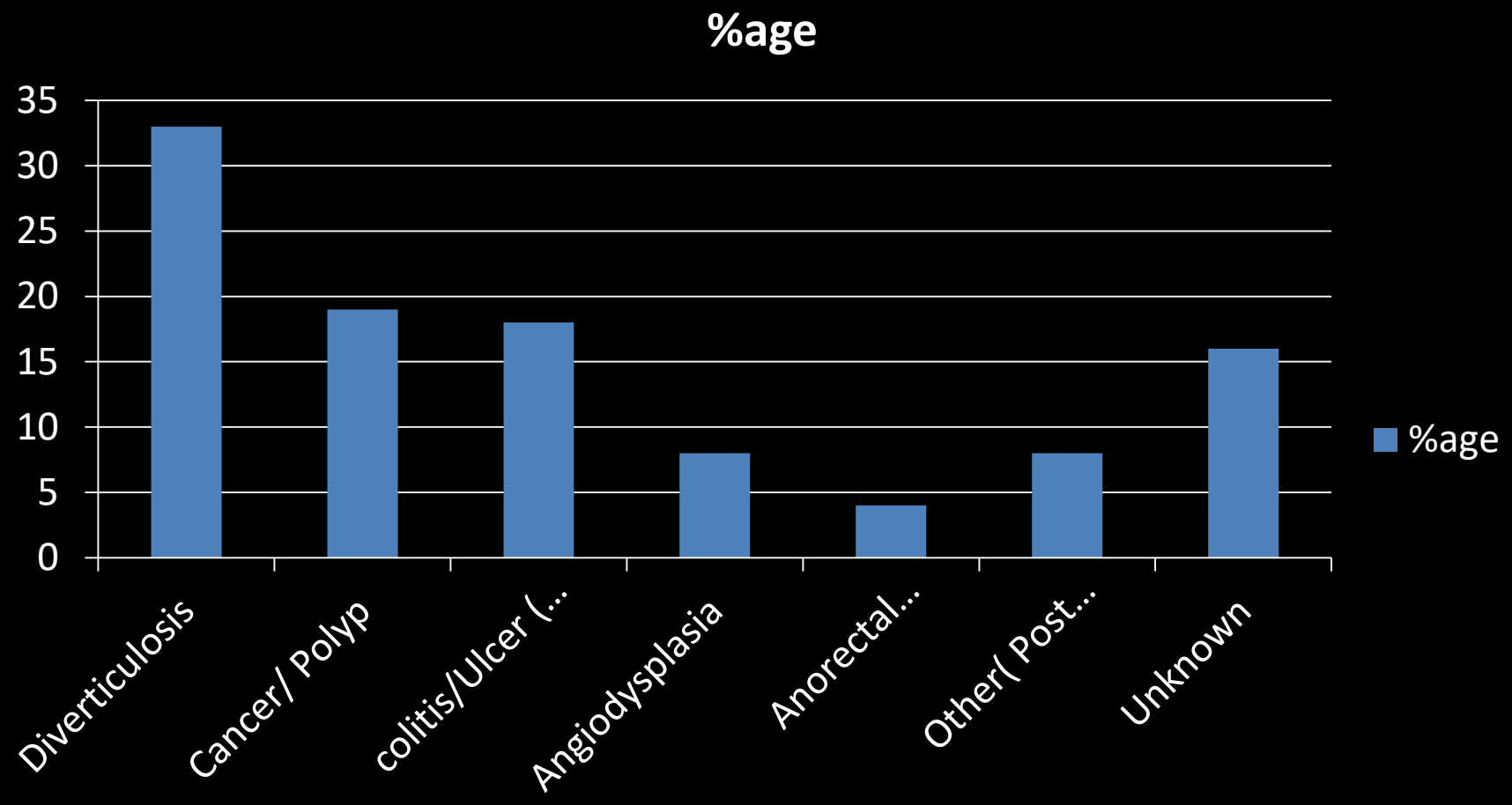
- Hemodynamic instability
- Altered mental status
- Need for 2 or more units of blood

Massive

- Need for >10 units of blood
- Colonic diverticular disease most common cause of massive and major LGIB

Etiology	%age
Diverticulosis	33%
Cancer/ Polyp	19%
colitis/Ulcer (IBD,Infective,Ischemic,radiation,Vasculitis,Unknown inflammation	18%
Angiodysplasia	8%
Anorectal (Haemorroids,Fissure,Idiopathic rectal ulcer	4%
Other(Post polypectomy bleeding, aortocolonic fistula, trauma from fecal impaction, anastomic bleeding	8%
Unknown	16 %

Etiology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Diverticulosis
Cancer/ Polyp
colitis/Ulcer (...
Angiodysplasia
Anorectal...
Other(Post...
Unknown
%age

Colonic Diverticulosis

- Most common cause of LGIB
- Small out pouchings
- Relatively weak point
- Advanced age, DM anticoagulation risk factors
- Most diverticulae on left side but more bleeding right side

Colonic Diverticulosis

- Abrupt presentation
- Painless hematochezia
- 70-90% resolve spontaneously
- Rebleeding in 20-40%
- Inflammatory changes absent
- Diverticulitis does not increase risk of bleeding

Colonic Neoplasm

- Due to erosion or ulceration on luminal surface of tumor
- Usually low grade & recurrent
- Endoscopy limited to biopsy & to exclude synchronous lesion

Hemorrhagic Colitis

- May be due to

  Infections

  Ischemia

  Radiation induced

  Vasculitis

- Crampy abdominal pain
- Bloody diarrhea
- Endoscopy

  friable, edematous

  erythematous or ulcerated mucosa

Ischemic Colitis

- Accurate onset of crampy abdominal pain
- Pain might be more severe than tenderness or other way
- Diagnosis on clinical suspicion
- Bleeding mostly self limited
- Correction of hypoperfusion

Angiodysplasia

- Small vascular malformations resulting from obstruction submucosal veins
- Presentation same as diverticular disease
- May occur throughout colon but most common site of bleeding is caecum
- Bleeding painless, episodic & self limiting
- Endoscopy--- flat, bright red lesions
- As source is venous so bleeding brisk & less risk

Postpolypectomy Bleeding

- Most common complication of polypectomy
- Can occur immediately or several weeks after procedure
- Risk factors include
- Removal of large sessile polyp
- Anticoagulation
- Bleeding usually self limiting
- If active bleeding – immediate colonoscopy after stabilization

Surgical Causes

- Aortoenteric fistula
- Serious matter
- Staple line bleeding after anastomosis
- Endoscopic evaluation
- Epinephrine, coagulation, clipping
- Even surgery

Hematochezia in Children

- Unusual in children
- Necrotizing enterocolitis
- Malrotation complicated by midgut volvulus
- Intussusception
- Meckel's diverticulum
- Juvenile polyp

Diagnosis & Assessment

- Large bore I/V access
- Volume resuscitation
- Blood products
- Colonoscopy
- Angiography
- Nuclear studies
- Helical CT scan
- Small evaluation

Colonoscopy

- Diagnostic & therapeutic
- Risk of perforation
- Need for sedation & GA
- Need for bowel preparation
- Difficult to see

Angiography

- Important diagnostic tool
- Provides imaging of entire
-
- mesenteric system with high specificity but low sensitivity
-
- Bleeding rate of 1ml/min

- Risk factors are
- Thrombosis
- Bleeding
- Dissection
- Distal embolization
- Nephropathy
- Allergic reaction
- Bowel ischemia

Nuclear Studies

- Technetium labelled red cell infused I/V
- Scan performed at several intervals
- Allow identification of bleeding as little as0.1 ml/L

Helical CT Scan

- Non invasive
- Easy to perform
- Contrast risk
- Potential for imaging artefact
- Needs bleeding rate of 0.4ml/L

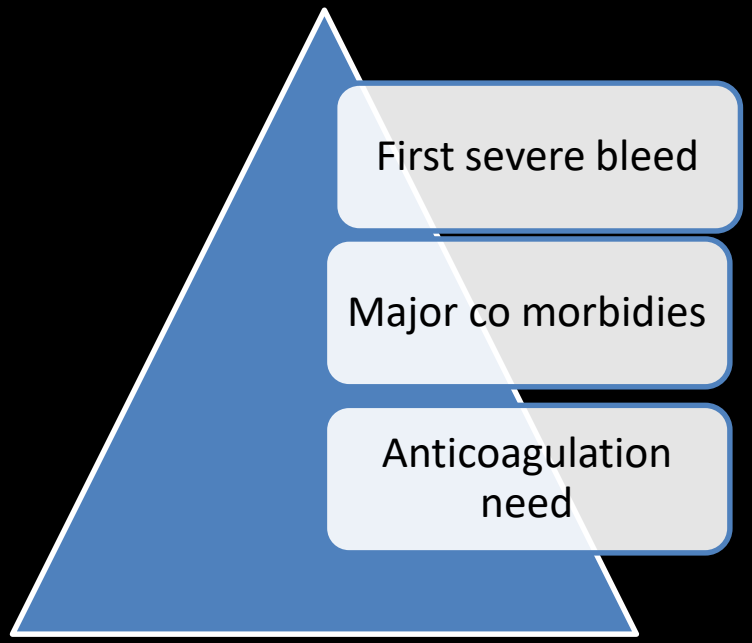
Small Bowel Evaluation

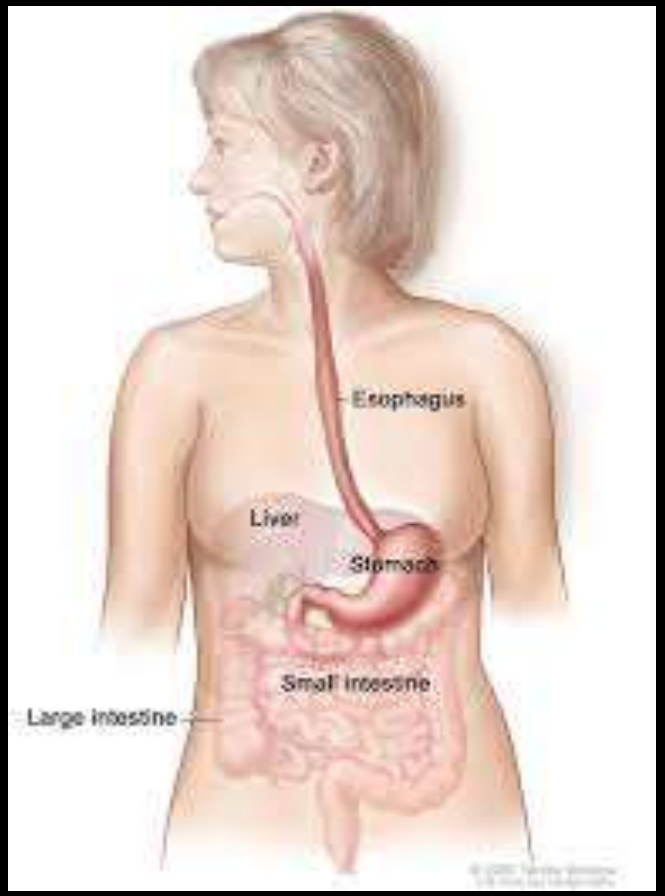
- Push enteroscopy
- Capsule endoscopy
- Double balloon enteroscopy

Operative Management

- Surgery last resort
- If persistent hemodynamic instability
- Need for 4 or > transfusion /24 hrs or 10 units overall
- Type of surgery controversial
- Blind segmental resection on clinical judgment unacceptable
- Segmental resection or subtotal colectomy

- LGIB resolves on its own in 80%
- After major second bleed prophylactic resection needed
- Risk factors for rebleed are




Esophagus
Liver
Stomach
Small intestine
Large intestine