

Lower GI Bleeding

↓ urea or normal / stable H₊

Blood below the Lig. of Treitz

↳ fibromuscular band originating from the right Diaphragmatic crus and is fixed on the duodeno-jejunal flexure.

Etiology :- * → common in west.

- * ① Diverticular (MCC)
 - * ② Colitis (Ischemic or IBD) 15-20%
 - ③ Carcinoma, Polyps 10/13%
 - * ④ Angiodysplasia 10%
 - * ⑤ Anorectal D.V.
 - ⑥ UGIB 10-31%
 - ⑦ Unknown 2-8%
- rare causes: Radiation, Mickle's diverticulum, Varices.

* **Mid GI Bleeding** → from Lig. of Treitz to Ileocecal valve
 Angiodysplasia (MCC) Ulceration (IBDs, NSAIDs) Neoplasia

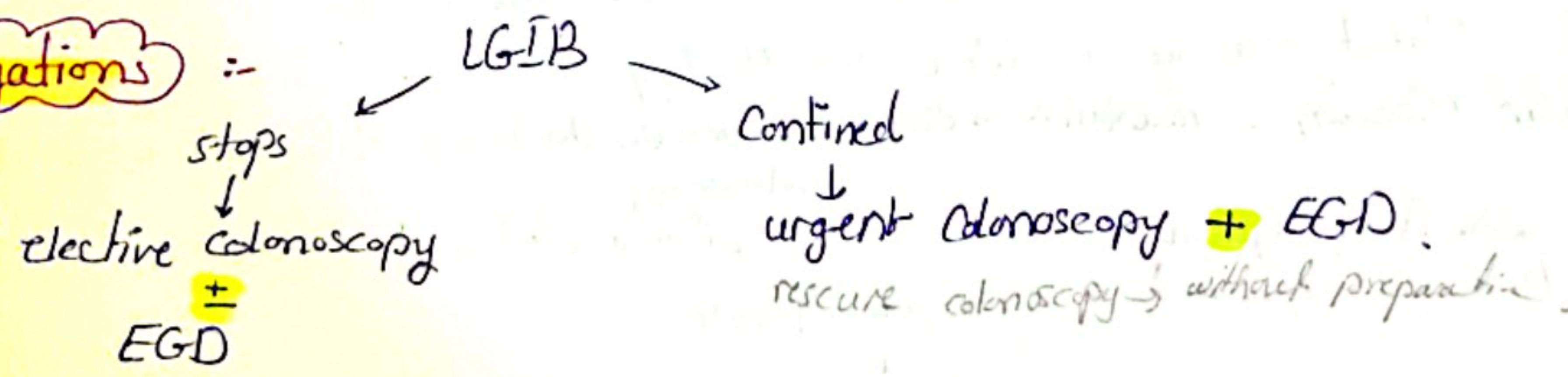
Clinical presentation :-

- ① Fresh Blood in stool (unless hemodynamically unstable and ↑ urea → UGIB).
- ② Melena if proximal lesion (distal to D-J junction)
- ③ Hypotensive and Shock without overt evidence of Bleeding → always do a rectal exam.

Hx or Diagnosis :-

- * Hx of hemorrhoids, Radiation (radiation colitis, Telangiectasias), IBD, Iatrogenic colon
- Bleeding delayed up to 10 days ← polypectomy.
- Prior episodes, presence of liver or renal diseases
- * Drug Hx (NSAIDs, Warfarine, Antiplatelet drugs)
- * Mixed Blood with stool or separate from stool.
 - ↳ inflammatory process
 - ↳ anorectal (benign)
- * change in Bowel Habits.
- * amount of stool.

Investigations :-



Explaining the causes :-

1. **Diverticulosis** large volume, brisk, painless

Local trauma to the vasa recti within diverticulae can lead to arterial bleeding that spontaneously stops, and rebleeding is common, commonly from the Rt colon diverticuli. even though most diverticuli are left colon based. larger diverticuli.
 It's false Diverticuli (only mucosa and submucosa) → Artery penetrates the Muscularis to reach the submucosa & Mucosa → weak point. Near of the Artery from one side → massive Bleeding that's hard to stop unless hypotension → vasoconstriction → stops.

Ischemic Colitis (low flow state) \rightarrow Embolization OR thrombotic.
 More common than \rightarrow Duo to hypotension.

So what cause Hypo?

Burns, Hemorrhagic shock, Dehydration, chronic smokers (atherosclerosis) \rightarrow low flow

\rightarrow Watershed Area \rightarrow compromised Area that can't handle ischemia (Blood Supply low)

Clinical:- Sudden cramping pain in left lower quadrant with bloody stool with mild to moderate Abdominal tenderness.

Diagnosis:- X-Ray: classical thumbprinting (Submucosal hemorrhage/edema)
 contrast CT + careful endoscopy
 CT angiogram

Single Stripe Sign Triple S
 \downarrow
 ulcer on one wall of the colon and normal opposite Mucosa.

Bleeding Colonic Polyp: \uparrow growth rate that exceeds the blood supply; Ischemia to the top part \rightarrow erosions \rightarrow Bleeding

Post polypectomy

Infectious Colitis: Shigella, Ameba, Enteroinvasive E-Coli, Yersenia Enterocolitica

Colonic Tumor Bleeding

UC flare Bleeding

Radiation Colitis

Meckel's Diverticulum

vitelline Duct is NOT absorbed in 7th week Both Stomach and pancreas.

DX: Meckel's Scan (IV Technetium) acid secreting cells uptake the ^{99m} Technetium ^{99m} So stomach + Meckel's will light up. Small Bowel

Treatment of LGIB:

① Endoscopic [Adrealarin, clip, polypectomy (endoloop)] \rightarrow Arterial Lesion.

[Argon plasma coagulation] \rightarrow Angiodysplasia.

② Interventional Radiology: Angiography with selective Embolization.

③ Surgery (Must accurately localize the bleeding source).

Diverticular Bleeding: resuscitation \rightarrow diagnose + localize the source of Bleeding \rightarrow treat the cause
 colonoscopy
 \downarrow if unsuccessful + Bleeding is massive.

Radiation Colitis Tx: Argon plasma Telangiectasia, coagulation

Hemodynamically Stable
 \downarrow
 Angiography

Unstable
 \downarrow
 Surgery

Medical: BS flare

\rightarrow IV hydration + steroids + IV Antibiotics.

Infectious Colitis: IV Hydration + Antibiotics.

Ischemic Colitis: ① If there's signs of perforation or infection + increasing tenderness, fever and DIs \rightarrow Surgery.

② No signs of perforation or infection \rightarrow Bowel rest, IV hydration + antibiotics + correction of underlying condition more than 50% resolve on conservative management.