

Lower Gastrointestinal Bleeding

The source of bleeding is usually distal to the ligament of

Treitz [suspensory muscle of duodenum]

A fold of peritoneum that attaches the duodenojejunal flexure to the retroperitoneum

In other words → Between the right crus of diaphragm & the duodenojejunal flexure

Description

Cause

Melena

Black, tarry stool with a strong offensive odor

Most commonly due to bleeding in the upper GIT.

Hematochezia

The passage of bright red "fresh blood" through the anus (with or without stool)

Most commonly due to bleeding in the lower GIT

→ Colonic bleeding: maroon, jelly-like traces of blood in stools

→ Rectal bleeding: streaks of fresh blood in stool

NOTE

→ The dark discoloration of stool is due to hematin, a dark pigment that forms when the heme is oxidized in GIT. In UGIT, heme is usually oxidized by gastric acid. In lower GIT, oxidation of heme occurs with help of intestinal bacteria, these bacteria usually require slow transit of stool to metabolize heme.

→ The degree of bacterial oxidation of heme in final portions of GIT is limited → Hematochezia.

- Normal faecal blood loss → 1.2 ml/day

Types of GI Bleeding

① Occult GI Bleeding \Rightarrow Bleeding in quantities too small to be macroscopically observable (requires chemical test or microscope exam to be detected)

\rightarrow 10 ml/day of blood loss in stool is necessary to have stool occult blood +ve

② Overt GI Bleeding \Rightarrow macroscopically observable bleeding with accompanying clinical symptoms [Anemia, tachycardia, ...]

\rightarrow And it's 2 types

Massive
Bleeding

Moderate
Bleeding

- Diverticular Disease
- Angiodysplasia

• Hemorrhoids \rightarrow Blood after defecation

• Blood with mucus \rightarrow ① Ulcerative Colitis

② Intussusception

③ Ischemic Colitis

Angiodysplasia \Rightarrow DX requires Angiography

\rightarrow multiple dilated tortuous vessels, located most commonly in the Right sided colon

• Investigations \Rightarrow

Blood Inx \Rightarrow

- CBC
- Coagulation profile
- RET
- LFT
- Blood Sugar
- Tumor markers (AFP/CEA)

Imaging \Rightarrow

- Erect abdominal Xray
- Barium Enema
- Complete Colonoscopy (Gold-standard) for synchronous tumor
- CECT of abdomen, pelvis, chest.

- Staging

► Causes of Lower GI Bleeding ⇒

① Erosive or Inflammatory

- Diverticular Disease
- Ulcerative Colitis
- Chron's disease
- Rectal Ulcers
- Celiac disease
- proctitis [STD, Radiation, IBD]

② Vascular

- Hemorrhoids
- Ischemic Colitis
- Mesenteric ischemia
- AVN
- Angiodysplasia

③ Neoplastic

- Colorectal CA
- Anal Cancer
- Colonic polyps

④ Trauma or Iatrogenic

- Ano-rectal trauma
- Lower abdominal trauma
- During surgery or Colonoscopy
- Anastomatic bleeding
- Aortoenteric fistula → most commonly duodenum

⑤ Coagulopathy

⑥ Anal fissures

⑦ Massive UGIB

⑧ Infectious Colitis

- ↳ Amoebiasis
- ↳ EHEC

→ Can occur as a surgical complication or due to chronic compression of an abdominal aortic aneurysm with GIT.

⑨ Radiation - Induced Colitis

⑩ Meckel's Diverticulum

► Most likely dx → Left - sided Colonic tumor

Supporting points ↓

① old age

② Chronic PR Bleeding (1 year)

③ Chronic Constipation (6 months)

④ Dull Aching pain at L. flank (3 months)

⑤ Anorexia & weight loss

⑥ A palpable mass on examination seen in L. lumbar region

⑦ pallor

▶ Because this patient has obstruction so we can't do bowel preparation before surgery, so our primary goal here is to relieve obstruction.

⇓
so the surgery of choice here will be Hartmann's procedure

To avoid the risk of anastomotic breakdown due to poor vascularity

- If the patient didn't have obstruction we'd have prepared the bowel 1st, then do curative tumor resection by performing Left hemicolectomy + Lymphadenectomy

- Bowel preparation include

① NPO + NGIT

② IV fluids

③ Blood transfusion

④ Enema to evacuate the bowel.

Hartmann's procedure

[For emergency cases without previous bowel prep]

⇓
Is a procedure which involves bowel resection and creation of a stoma at the functioning end of the bowel
→
~ 6 months following the initial operation, do surgical reanastomosis to restore intestinal continuity.

⇓
After doing the resection, do anastomosis

⇓
This is for resectable tumors in operable patients

• you may need adjuvant chemo, if there's LN mets or vascular invasion.

⇓
so the operation done for non-obstructed cases is primary resection + anastomosis + Lymphadenectomy