

Acute gastrointestinal bleeding

General surgery

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Gastrointestinal Bleeding Causes

- Peptic ulcer
 - localized erosions of the mucosal lining of the digestive tract
 - usually occur in the stomach or duodenum.
 - breakdown of the mucosal lining results in damage to blood vessels, causing bleeding.
- Gastritis
 - results from an inability of the gastric lining to protect itself from the acid it produces
 - Usually by steroid, NSAID, trauma, burn, alcoholism
- Esophageal varices
 - swelling of the veins of the esophagus or stomach
 - usually resulting from liver disease
 - varices most commonly occur in alcoholic cirrhosis
 - Usually massive, catastrophic without warning.

Gastrointestinal Bleeding Causes

- **Mallory-Weiss tear**

- A tear in the esophageal or stomach lining,
- result of vomiting or retching
- mucosal tears also can occur after seizures, forceful cough or laughing, lifting, straining, or childbirth
- Physicians often find tears in people who have recently binged on alcohol.

- Cancer

- Inflammation

- unable to counteract the harsh effects of stomach acid. NSAIDs, aspirin, alcohol, and [cigarette smoking](#) promote gastric ulcer formation.
- [Helicobacter pylori](#) is a type of bacteria that also promotes formation of ulcers

Most common causes of LGI bleeding

- [Diverticular disease](#) ([diverticulitis](#))
- gastrointestinal cancers
- [inflammatory bowel disease](#) ([IBD](#))
- infectious [diarrhea](#)
- angiodysplasia
- polyps
- [hemorrhoids](#)
- anal fissures

Gastrointestinal Bleeding Symptoms

- Acute gastrointestinal bleeding first will appear as vomiting of blood, bloody bowel movements, or black, tarry stools.
- Vomited blood may look like "coffee grounds."
- Symptoms associated with blood loss.

Gastrointestinal Bleeding Symptoms

- [Fatigue](#)
- Weakness
- Shortness of breath
- [Abdominal pain](#)
- Pale appearance
- Vomiting of blood usually originates from an upper GI source.
- Bright red or maroon stool can be from either a lower GI source or from brisk bleeding from an upper GI source.
- Long-term GI bleeding may go unnoticed or may cause fatigue, [anemia](#), [black stools](#), or a positive test for microscopic blood.

Gastrointestinal Bleeding Diagnosis

- a complete history and physical exam
- PE with digital rectal exam to test for visible or microscopic blood from the rectum
- endoscopy or a colonoscopy to stomach and, then finding the source of bleeding; and therapeutic treatment
- Lab tests
 - [complete blood count \(CBC\)](#)
 - serum chemistries, liver tests
 - coagulation studies also can be helpful to determine the rate or severity of

Diagnosis

- Barium enema
 - Not for the initial exam
 - High sensitive for interscception and diverticulitis of colon
- Radionuclide scan
 - Blood loss rate more than 0.1ml/min
 - Tc 99 pertechnetate for meckel scan for unusual eosinophilic mucosa for baby and young adult
 - Because of short half life and phobic to liver and spleen, confusion with location near liver and spleen
- High selective angiogram

Gastrointestinal Bleeding Prevention

- Avoid foods and triggers, such as alcohol and [smoking](#) that increase gastric secretions.
- Eat a high-fiber diet to increase the bulk of the stool, which helps prevent [diverticulosis](#) and hemorrhoids.

Gastrointestinal Bleeding Prognosis

- The outcome of treatment for gastrointestinal bleeding greatly depends on several factors
 - The cause and location of the bleeding
 - The rate of bleeding when the person sees a doctor
 - Prior health problems and conditions

Therapy

- Correction the bleeding tendency
- H2 blocker, PPI, sucralfate, and antacid with irradiation for H pylori
- Sandostatin
- Pitressin for reduction the portal vein blood and pressure on varicose vein on esophagus and highly selective angiogram
- Endoscope for sclerosing treatment, ligation, epinephrine injection, and coagulation
- Embilization by angiogram at upper GI bleeding
- Sugery for intrable bleeding