

# Bleeding in the Digestive Tract

*National Digestive Diseases Information Clearinghouse*



U.S. Department  
of Health and  
Human Services

NATIONAL  
INSTITUTES  
OF HEALTH

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NATIONAL INSTITUTE OF  
DIABETES AND DIGESTIVE  
AND KIDNEY DISEASES

Bleeding in the digestive tract is a symptom of a disease rather than a disease itself. A number of different conditions can cause bleeding. Most causes of bleeding are related to conditions that can be cured or controlled, such as ulcers or hemorrhoids. Some causes of bleeding may be life threatening.

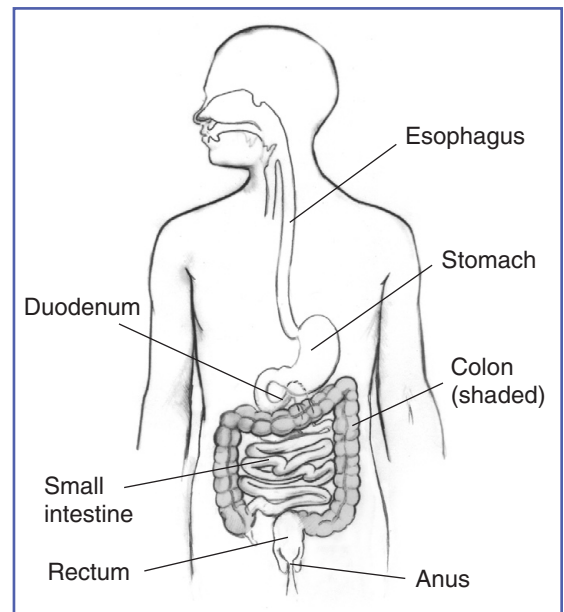
Locating the source of bleeding is important. Different conditions cause bleeding in the upper digestive tract and the lower digestive tract. The upper digestive tract includes the esophagus, stomach, and upper portion of the small intestine, also called the duodenum. The lower digestive tract includes the lower portion of the small intestine; large intestine, which includes the colon and rectum; and anus.

## What are the signs of bleeding in the digestive tract?

The signs of bleeding in the digestive tract depend on the site and severity of bleeding.

Signs of bleeding in the upper digestive tract include

- bright red blood in vomit
- vomit that looks like coffee grounds
- black or tarry stool



The digestive tract

- dark blood mixed with stool
- stool mixed or coated with bright red blood

Signs of bleeding in the lower digestive tract include

- black or tarry stool
- dark blood mixed with stool
- stool mixed or coated with bright red blood

Sudden, severe bleeding is called acute bleeding. If acute bleeding occurs, symptoms may include

- weakness
- dizziness or faintness
- shortness of breath
- crampy abdominal pain
- diarrhea
- paleness

A person with acute bleeding may go into shock, experiencing a rapid pulse, a drop in blood pressure, and difficulty producing urine.

Light bleeding that continues for a long time or starts and stops is called chronic bleeding. If bleeding is chronic, a person may notice that fatigue, lethargy, and shortness of breath develop over time. Chronic blood loss can also lead to anemia, a condition in which the blood's iron-rich substance, hemoglobin, is diminished.

A person may not notice a small amount of bleeding in the digestive tract. This type of bleeding is called occult bleeding. Simple tests can detect occult blood in the stool.

## What causes bleeding in the digestive tract?

A variety of conditions can cause bleeding in the digestive tract. Causes of bleeding in the upper digestive tract include the following:

- **Peptic ulcers.** *Helicobacter pylori* (*H. pylori*) infections and long-term use of nonsteroidal anti-inflammatory drugs (NSAIDs), such as aspirin and ibuprofen, are common causes of peptic ulcers.
- **Esophageal varices.** Varices, or enlarged veins, located at the lower end of the esophagus may rupture and bleed massively. Cirrhosis is the most common cause of esophageal varices.
- **Mallory-Weiss tears.** These tears in the lining of the esophagus usually result from vomiting. Increased pressure in the abdomen from coughing, hiatal hernia, or childbirth can also cause tears.
- **Gastritis.** NSAIDs and other drugs, infections, Crohn's disease, illnesses, and injuries can cause gastritis—inflammation and ulcers in the lining of the stomach.
- **Esophagitis.** Gastroesophageal reflux disease (GERD) is the most common cause of esophagitis—inflammation and ulcers in the lining of the esophagus. In GERD, the muscle between the esophagus and stomach fails to close properly, allowing food and stomach juices to flow back into the esophagus.
- **Benign tumors and cancer.** A benign tumor is an abnormal tissue growth that is not cancerous. Benign tumors and cancer in the esophagus, stomach, or duodenum may cause bleeding.

Causes of bleeding in the lower digestive tract include the following:

- **Diverticular disease.** This disease is caused by diverticula—pouches in the colon wall.
- **Colitis.** Infections, diseases such as Crohn’s disease, lack of blood flow to the colon, and radiation can cause colitis—inflammation of the colon.
- **Hemorrhoids or fissures.** Hemorrhoids are enlarged veins in the anus or rectum that can rupture and bleed. Fissures, or ulcers, are cuts or tears in the anal area.
- **Angiodysplasia.** Aging causes angiodysplasia—abnormalities in the blood vessels of the intestine.
- **Polyps or cancer.** Benign growths or polyps in the colon are common and may lead to cancer. Colorectal cancer is the third most common cancer in the United States and often causes occult bleeding.<sup>1</sup>

## How is bleeding in the digestive tract diagnosed?

The first step in diagnosing bleeding in the digestive tract is locating the site of the bleeding. The doctor will take the patient’s complete medical history and perform a physical examination. Symptoms such as changes in bowel habits, black or red stools, and pain or tenderness in the abdomen may tell the doctor which area of the digestive tract is bleeding.

The doctor may need to test the stool for blood. Iron supplements, bismuth subsalicylate (Pepto-Bismol), or certain foods such as beets can give the stool the same appearance as bleeding from the digestive tract. Stool tests can also show bleeding that is not visible to the patient.

A blood test can help determine the extent of the bleeding and whether the patient is anemic.

Nasogastric lavage is a procedure that can be used to determine whether the bleeding is in the upper or lower digestive tract. With nasogastric lavage, a tube is inserted through the nose and into the stomach. The contents of the stomach are removed through the tube. If the stomach contains bile and does not contain blood, the bleeding either has stopped or is likely in the lower digestive tract.

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<sup>1</sup>Common cancer types. National Cancer Institute website. [www.cancer.gov/cancertopics/commoncancers#1](http://www.cancer.gov/cancertopics/commoncancers#1). Updated May 7, 2009. Accessed October 26, 2009.

## Endoscopy

Endoscopy is the most common method for finding the source of bleeding in the digestive tract. An endoscope is a flexible tube with a small camera on the end. The doctor inserts the endoscope through the patient's mouth to view the esophagus, stomach, and duodenum. This examination is called esophago-gastroduodenoscopy (EGD). An endoscope can also be inserted through the rectum to view the colon. This procedure is called colonoscopy. The doctor can use the endoscope to do a biopsy, which involves collecting small samples of tissue for examination with a microscope.

Bleeding that cannot be found with endoscopy is called obscure bleeding. The doctor may repeat the endoscopy or use other procedures to find the cause of obscure bleeding.

## Enteroscopy

Enteroscopy is an examination of the small intestine. Because traditional endoscopes cannot reach the small intestine, special endoscopes are used for enteroscopy.

Enteroscopy procedures include

- **Push enteroscopy.** A long endoscope is used to examine the upper portion of the small intestine.
- **Double-balloon enteroscopy.** Balloons are mounted on the endoscope to help the endoscope move through the entire small intestine.
- **Capsule endoscopy.** The person swallows a capsule containing a tiny camera. The camera transmits images to a video monitor as the capsule passes through the digestive tract. This procedure is designed to examine the small intestine, but it also allows the doctor to examine the rest of the digestive tract.

## Other Procedures

Several other methods can help locate the source of bleeding:

- **Barium x rays.** Barium is a contrast material that makes the digestive tract visible in an x ray. A liquid containing barium is either swallowed or inserted into the rectum. Barium x rays are less accurate than endoscopy and may interfere with other diagnostic techniques.
- **Radionuclide scanning.** The doctor injects small amounts of radioactive material into the person's vein. A special camera, similar to an x-ray machine, can detect this radiation and create images of blood flow in the digestive tract. Radionuclide scanning is sensitive enough to detect very slow bleeding, but it is not as accurate as other procedures.
- **Angiography.** A dye is injected into the person's vein to make blood vessels visible in x-ray or computerized tomography (CT) scans. Dye leaks out of the blood vessels at the bleeding site. In some cases, the doctor can use angiography to inject medicine or other material into blood vessels to try to stop the bleeding.
- **Exploratory laparotomy.** If other methods cannot locate the source of the bleeding, a surgical procedure may be necessary to examine the digestive tract.

## How is bleeding in the digestive tract treated?

Endoscopy can be used to stop bleeding in the digestive tract. A doctor can insert tools through the endoscope to

- inject chemicals into the bleeding site
- treat the bleeding site and surrounding tissue with a heat probe, electric current, or laser
- close affected blood vessels with a band or clip

Endoscopy does not always control bleeding. Angiography can be used to inject medicine or other material into blood vessels to control some types of bleeding. If endoscopy and angiography do not work, the patient may need other treatments or surgery to stop the bleeding.

To prevent bleeding in the future, doctors can treat the conditions that cause bleeding, such as

- *H. pylori* and other infections
- GERD
- ulcers
- hemorrhoids
- polyps
- inflammatory bowel diseases

## Points to Remember

- Bleeding in the digestive tract is a symptom of a disease rather than a disease itself.
- A number of different conditions can cause bleeding in the digestive tract.
- Finding the location and cause of the bleeding is important.
- Most causes of bleeding can be cured or controlled.
- Endoscopy is the most common tool for diagnosing and treating bleeding in the digestive tract.

## Hope through Research

The National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) sponsors research to improve treatment for patients with digestive diseases that cause bleeding in the digestive tract, including diverticular disease, GERD, and inflammatory bowel diseases.

Participants in clinical trials can play a more active role in their own health care, gain access to new research treatments before they are widely available, and help others by contributing to medical research. For information about current studies, visit [www.ClinicalTrials.gov](http://www.ClinicalTrials.gov).

## For More Information

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