
Diverticulosis and diverticulitis facts

- Most patients with diverticulosis (diverticular disease) have few or no symptoms.
- [Abdominal pain](#), [constipation](#), and [diarrhea](#), can occur with diverticulosis.
- Diverticulosis can be diagnosed with barium X-rays or with [sigmoidoscopy](#) or [colonoscopy](#).
- Treatment of diverticulosis can include high fiber diet, and anti-spasmodic drugs.
- When diverticulosis is associated with inflammation and infection the condition is called diverticulitis. Together, diverticulosis and its complications, including diverticulitis, sometimes are referred to as diverticular disease.
- Complications of diverticulosis and diverticulitis include [rectal bleeding](#), abdominal infections, and colon obstruction.

What is diverticulosis?

The colon (large intestine) is a long tube-like structure that stores and then eliminates waste material left over after digestion of food in the small intestine takes place. Pressure within the colon causes bulging pockets of tissue (sacs) that push out from the colonic walls as a person ages. A small bulging sac pushing outward from the colon wall is called a diverticulum. More than one bulging sac is referred to in the plural as diverticula. Diverticula can occur throughout the colon but are most common near the end of the left colon, referred to as the sigmoid colon, in Western countries. In Asia, the diverticula occur mostly on the right side of the colon. The condition of having these diverticula in the colon is called diverticulosis.

Diverticula are common in the Western world but are rare in areas such as Asia and Africa. Diverticula increase with age. They are uncommon before the age of 40, and are seen in more than 40% of people over the age of 60 years in the U.S. A person with diverticulosis usually has few or no symptoms. The most common symptoms associated with diverticulosis are abdominal pain, constipation, and diarrhea. In some of these patients the symptoms may be due to the concomitant presence of [irritable bowel syndrome](#) or abnormalities in the function of the muscles of the sigmoid colon; simple diverticula should cause no symptoms. Occasionally, bleeding originates from a diverticulum, and it is referred to as diverticular bleeding.

What is diverticulitis?

When a diverticulum ruptures and infection sets in around the diverticulum, the condition is called diverticulitis. An individual suffering from diverticulitis often has abdominal pain, abdominal tenderness, colonic obstruction and [fever](#).

What are the more serious complications of diverticulitis?

More serious complications of diverticulitis include:

- Collections of pus (abscess) in the pelvis where the diverticulum has ruptured
- Colonic obstruction
- Generalized infection of the abdominal cavity (bacterial peritonitis)
- Bleeding into the colon

A diverticulum can rupture, and the bacteria within the colon can spread into the tissues surrounding the colon (diverticulitis). Constipation or diarrhea also may occur. A collection of pus can develop around the ruptured diverticulum, leading to formation of an abscess, usually in the pelvis. Inflammation surrounding the colon also can lead to colonic obstruction. Infrequently, a diverticulum ruptures freely into the abdominal cavity causing a life threatening infection called peritonitis. On rare occasions, the inflamed diverticula can erode into the urinary bladder, causing [bladder infection](#) and [passing of intestinal gas](#) in the urine. Diverticular bleeding occurs when the expanding diverticulum erodes into a blood vessel within the diverticulum. Rectal passage of red, dark or maroon-colored blood and clots occur without any associated abdominal pain if there is no diverticulitis, but

bleeding into the colon also may occur during an episode of diverticulitis. Blood from a diverticulum of the right colon may be black in color. Bleeding may be continuous or intermittent, lasting several days.

Patients with [active bleeding](#) usually are hospitalized for observation. Intravenous fluids are given to support the blood pressure. [Blood transfusions](#) are necessary for those with moderate to severe blood loss. In a rare individual with brisk and severe bleeding, the blood pressure may drop, causing [dizziness](#), [shock](#), and [loss of consciousness](#). In most patients, bleeding stops spontaneously and they are sent home after several days in the hospital. Patients with persistent, severe bleeding require surgical removal of the bleeding diverticula.

What are diverticulitis symptoms?

Most patients with diverticulosis have few or no symptoms. The diverticulosis in these individuals is found incidentally during tests for other intestinal problems. Twenty percent of patients with diverticulosis will develop symptoms related to diverticulosis, primarily diverticulitis.

The most common signs and symptoms of diverticulitis include:

- Abdominal pain (left lower abdomen)
- Abdominal tenderness (left lower abdomen)
- Fever
- [Constipation](#) or, sometimes, [diarrhea](#).

What causes diverticula, and how do diverticula form?

The muscular wall of the colon grows thicker with age, although the cause of this thickening is unclear. It may reflect the increasing pressures required by the colon to eliminate [feces](#). For example, a diet low in [fiber](#) can lead to small, hard stools which are difficult to pass and which require increased pressure to pass. The lack of fiber and small stools also may allow segments of the colon to close off from the rest of the colon when the colonic muscle in the segment contracts. The pressure in these closed-off segments may become high since the increased pressure cannot dissipate to the rest of the colon. Over time, high pressures in the colon push the inner intestinal lining outward (herniation) through weak areas in the muscular walls. These pouches or sacs that develop are called diverticula.

Lack of fiber in the diet is considered the most likely cause of diverticula, and there is a good correlation among societies around the world between the amount of fiber in the diet and the prevalence of diverticula. Many patients with diverticular disease have excessive thickening of the muscular wall of the colon where the diverticula form. The muscle also contracts more strongly. These abnormalities of the muscle may be contributing factors in the formation of diverticula. Microscopic examination of the edges of the diverticula show signs of inflammation, and it has been suggested that there may be an inflammatory component to the formation of the diverticula.