

# DIVERTICULITIS

## Patient Information Fact Sheet

### ›What are diverticula?

Diverticula are small sacs or pouches that protrude through the muscular wall of the large intestine (colon). Occasionally, diverticula also occur in the small intestine. Many people have diverticula but they don't cause any problems. Diverticulitis occurs when one or more diverticula become inflamed and infected. The incidence of diverticula increases with age. In the U.S., more than 50% of people over the age of 70 have diverticula, but only a small proportion of people actually develop diverticulitis. Diverticula are more common in women than men and occur mostly in Western cultures.

### ›What are the symptoms of diverticulitis and diverticular disease?

While many people with diverticula do not develop diverticulitis or diverticular disease, as more diverticula form, the colon becomes increasingly narrow and this can cause problems. In addition, in some people with diverticula, the muscle of the colon thickens, making it increasingly narrow. This combination of diverticula and abnormal muscle is referred to as diverticular disease.

The symptoms of diverticular disease include pain along the course of the colon and a change in bowel habits, with the passage of broken pellet-like stools after considerable straining. A bloated feeling is another common symptom. Occasionally, small amounts of blood may be passed with bowel movements. These symptoms are very similar to those experienced in irritable bowel syndrome (IBS).

Acute diverticulitis occurs when one or more diverticula become inflamed as a result of infection. Pain is usually felt in the lower left side of the abdomen but sometimes occurs on the right side. Other symptoms include a fever, a high white blood cell count (indicating an infection is present), loss of appetite and malaise. Peritonitis is a severe complication of diverticulitis that occurs when one of the infected diverticula ruptures and spreads infection into the abdominal cavity.

### ›What causes diverticula to form?

The exact reason why diverticula form is not known, but it is thought to be a result of the increasing amounts of refined flour and sugar in the Western diet. Diverticula rarely occur in less developed countries where the diet has a higher fiber (roughage) content. It is thought that food and gas in the colon may cause increased pressure on soft spots, causing the gradual development of diverticula. Chronic constipation is probably a high risk factor for the development of this condition. Stress, tension, and emotional problems may all cause increased contraction of the intestine, which can also contribute to the formation of diverticula. Infection occurs when bacteria enter the diverticula and cause small abscesses to form. This causes inflammation, which in turn may cause further diverticula to develop. The inflammation may remain in the areas in which it develops or spread through the abdomen.

### ›What tests confirm a diagnosis of diverticulitis and diverticular disease?

A barium enema (a special x-ray of the intestine) may be necessary for diagnosis of diverticulitis. Alternatively, a colonoscopy may be performed. This procedure involves passing a flexible fiber-optic tube into the bowel via the rectum to relay images to a video monitor, allowing the doctor to examine the surface of the colon. If necessary, a biopsy (a small sample of the bowel lining) can also be taken. A blood test will show a high white cell count when infection is present.

### ›How is diverticulitis and diverticular disease treated?

If diverticula are present but diverticulitis has not yet occurred, a change in diet can greatly help to prevent the condition from deteriorating. Eating a **high-fiber diet** and drinking large quantities of water will aid the movement of waste products along the bowel. This will also help to prevent the stools from becoming hard and dry, which can cause constipation and straining when passing stool. Laxatives and enemas should be avoided as these can make the condition worse. Symptoms of pain and bloating in diverticular disease may also be relieved by a high-fiber diet. However, in some people reducing the amount of fiber in the diet helps. Because the symptoms of diverticular disease are caused mainly by the muscle of the colon contracting too much an antispasmodic drug may sometimes be prescribed.

In acute diverticulitis, bed rest may be necessary. **Analgesics** (painkillers) will be given for the pain and antibiotics to cure the infection. While infection is present, a fluid-only diet may be necessary to allow the intestine to rest and heal. Nutritionally fortified drinks may be prescribed to ensure an adequate diet and prevent malnourishment.

Some people may need surgery and other treatments. Surgeons can clean the abdomen after infections and remove bleeding pouches and fistulas. A colon resection may be required if you get diverticulitis many times and want to avoid other infections.

### ›Self-help measures

- Eat a high-fiber diet including bread, fruit, vegetables and whole-grain cereals.
- Drink plenty of fluids, particularly water.
- Try to avoid constipation by always passing stool whenever there is an urge to do so.
- Avoid any foods that make the symptoms worse, such as carbonated drinks and gas-forming foods like beans, cabbage, and cauliflower.

### ›Further information

National Digestive Diseases Information Clearinghouse (NDDIC):  
<http://digestive.niddk.nih.gov/ddiseases/pubs/diverticular/index.aspx>

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