

Diverticular Disease

What is diverticular disease?

Diverticular disease is a common condition in which small pouches or “pockets” (known as diverticula) form in the lining of the large bowel or colon. When there are multiple diverticula, this is known as diverticulosis. Diverticulitis is when the diverticula become inflamed or infected.

Who develops diverticulosis?

Diverticulosis is very common. Although it is rare in people younger than 35 years old, it becomes more common with age. A third of Australians aged over 45 years, and two-thirds over 85 years, have diverticulosis. Most people don't have symptoms and don't know they have diverticulosis.

Causes and risk factors

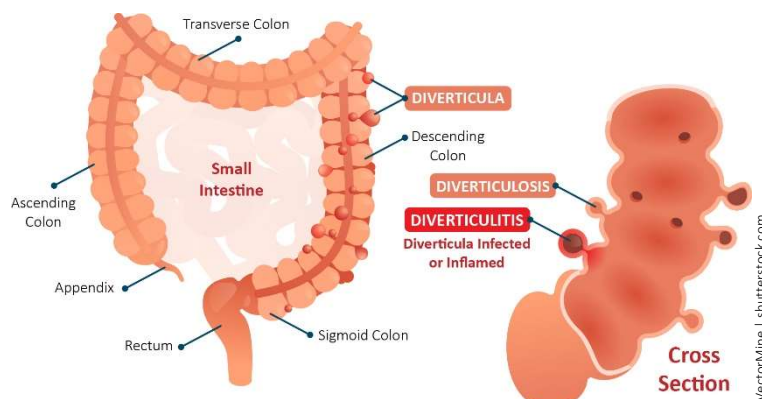
The exact cause of diverticulosis is not known, and it might be due to a combination of factors in a lot of people. A diet low in fibre is the main risk factor. When stool (poo) is small and hard, more pressure is needed to push it along the colon. This higher pressure may make the bowel wall thicker over time, leading to “blow-outs” and formation of diverticula. People who eat a diet high in fibre are much less likely to get diverticular disease. Eating a lot of red meat or fats, smoking cigarettes, drinking too much alcohol and being overweight also increase the chance of forming diverticula. Genetic factors may also be important.

Most people develop diverticula in the left side of the colon, known as the sigmoid colon. In people with inherited conditions associated with diverticulosis, the diverticula tend to form on the right side of the colon. Diverticulosis can also affect the small intestine, but this is much less common.

Common symptoms

Diverticulosis

Most people with diverticulosis don't have any symptoms. If they do, these may be mild, crampy abdominal (belly) discomfort, bloating, constipation or diarrhoea. Other bowel conditions, like irritable bowel syndrome or bowel cancer, can also have these symptoms.



Diverticulitis

The most common symptom of diverticulitis is constant pain in the lower left side of the abdomen (belly), which might come with fever, nausea, vomiting or a loss of appetite. People with diverticulitis might also have changed bowel habits, such as constipation or diarrhoea. These symptoms are usually temporary and will go away once the infection and inflammation settle.

Most patients will only have one episode of diverticulitis in their life. About one in seven people who have an attack of diverticulitis will have another one. People who have more than one episode of diverticulitis are very likely to keep having more.

Diagnosing diverticulosis and diverticulitis

Diverticula can be seen during a colonoscopy or on imaging tests, such as a CT scan, that you are having for other unrelated symptoms.

Diverticulitis is usually diagnosed by CT scan during an acute attack. The CT scan may also show whether there are any complications. Your blood test results may be abnormal and show a higher white blood cell count or higher levels of inflammatory markers, like C-reactive protein (CRP).

Possible complications of diverticulitis

Although rare, serious complications may be life-threatening. Possible complications include:

- an abscess (a collection of pus) that forms in the abdomen
- a perforation (hole) in the wall of the bowel that can lead to infection inside the abdomen (this is known as peritonitis)

- severe, and usually painless, bleeding from the bowel
- narrowing or blockage of the large bowel
- a fistula (channel) that may form between the bowel and other organs, such as the bladder.

Treatment of diverticulitis

Treatment focuses on clearing up the infection and inflammation, relieving pain and preventing or reducing the risk of complications.

For many people, an episode of diverticulitis without complications will settle within a few days and doesn't need antibiotic treatment. Your doctor might recommend a course of oral antibiotics if you have a weakened immune system, if you have more severe symptoms or if your symptoms last longer than 3 days. A low-fibre or fluid-only diet is usually recommended until symptoms get better. This lets the bowel rest while it is inflamed. Mild pain relief, with paracetamol, may be needed.

Patients with severe diverticulitis or who have complications often need to be admitted to hospital and given antibiotics and fluids directly into a vein through a "drip". They may also need stronger pain relief medicine until the pain settles.

A small number of people with complications of diverticulitis need surgery to remove the diseased part of the colon. Some people may need non-urgent (elective) surgery for repeated attacks or for other complications of diverticular disease. Some people will need an emergency operation to make a temporary stoma. A stoma (or colostomy) is where the bowel is connected to the skin of the belly, so faeces (poo) can drain into a bag outside the body. This allows the bowel to heal. In most cases, the stoma can be reversed, and the bowel joined back together, later on. Many Australian hospitals now offer laparoscopic (keyhole) surgery to help speed up recovery. Bowel function and general health usually return to normal after the operation, and it is uncommon to have more problems from diverticular disease in the future.

Prevention of diverticulitis

A high-fibre diet containing at least 30 grams of fibre each day is recommended to make stools softer and help prevent constipation, which might also stop diverticula from forming. Your diet should include good amounts of "roughage", like fibrous fruits (e.g. apples and pears), vegetables and wholegrain cereals. Baked beans and legumes (e.g. lentils) are also high in fibre. There is no evidence that nuts, seeds and corn cause a flare of diverticular disease. You can include these as part of a balanced high fibre diet. Taking a fibre supplement or having unprocessed wheat bran can give you an extra 4 to 6 grams of fibre each day. It is also recommended to drink 8 cups of water a day and to do regular exercise.

Obesity increases the risk of diverticulitis, as well as diverticular bleeding. Patients with diverticulosis who smoke also have a higher risk of diverticulitis and complications of diverticular disease. So it's advisable for people who have diverticular disease to quit smoking, lose weight, improve their diet and exercise regularly.

Summary

Diverticular disease is common. Most people with diverticulosis never have any symptoms. Diverticulitis is when the diverticula get inflamed or infected. Common symptoms include abdominal pain, fever, nausea and a noticeable change in bowel habits. Mild attacks of diverticulitis can be treated with rest and a fluid-only or low-fibre diet and usually do not need antibiotics. Severe and potentially life-threatening complications can occur and may require emergency surgery, including a temporary stoma.

Acknowledgements

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