

# Dealing with diverticular disease

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Between one-third and one-half of the population of western Europe will develop diverticular disease during their lives. The disease is most common in Western societies and the incidence increased during the second part of the 20th century. It is more likely to occur as you get older.

Less than 5% of 40 year olds are affected, rising to 25% of people aged 60, and 60% of people aged 85. Men and women are equally affected.<sup>1</sup> According to the Digestive Disorders Foundation, the condition is under-researched, possibly because it is most common in older people and is generally accepted as part of the aging process.<sup>1</sup>

## What is diverticular disease?

Diverticular disease (or diverticulosis) is a condition of the large intestine (colon) which causes small sacs or pouches called diverticulae to form within the lining of the large intestine. The pouches usually form in the narrowest part of the sigmoid colon, in the lower left side of the abdomen, though they can also occur elsewhere.

The condition is often associated with constipation and a diet with too little fibre. This is because increased muscle contraction involved in the passage of hard, dry stools increases pressure in the colon, which eventually causes diverticulae to form at the weakest points in the colonic wall. Once they have formed, they do not go away. The goal of treatment is to prevent infection and to limit the formation of more diverticulae.

## The symptoms

Although diverticulae often cause no symptoms, they can become inflamed and infected. Symptoms include pain in the left lower part of the abdomen,



Eating a high-fibre diet can help in the management of diverticular disease

bloated stomach and an irregular bowel habit with pellet-like stools. The passage of small amounts of blood is not usually due to diverticular disease, but the condition can occasionally result in massive haemorrhage. Seven out of ten people who have diverticulae experience no symptoms at all.

Patients with rectal bleeding or changed bowel habits should be investigated to confirm the diagnosis and to rule out other problems, such as colorectal cancer. The usual investigations carried out are barium enema, sigmoidoscopy and colonoscopy.

Table 1. The fibre content of foods (g=grams)

1 medium apple = 4 g
1 medium orange = 4 g
1 baked potato with skin = 5 g
1 cup of cooked frozen peas = 4 g
2 slices of wholewheat bread = 4 g
1 cup of bran cereal = 10 g
1 cup of cooked brown rice = 2 g

## How it is treated

Diet management is the mainstay of treatment for uncomplicated diverticular disease.

No particular food must be avoided, but it is advisable to eat a well-balanced diet that includes a mix of all fibre sources, including vegetables, fruit, wholemeal bread, whole-grain cereals, nuts and pulses. The Department of Health recommends that we eat 18 grams of fibre daily. Examples of how much fibre foods contain are given in Table 1.

It is also important to drink plenty of fluids. Occasionally, bulk-forming laxatives (such as bran) are prescribed for people who are unable to take enough dietary fibre, but other types of laxatives may worsen the situation by causing abdominal pain. Anti-spasmodic medicines can reduce the severity of crampy pain.

## Infection and diverticulitis

Diverticulitis occurs when diverticulae become infected. The main cause of infection is stool or food particles that

become trapped in the pouches. Symptoms of diverticulitis include fever, pain in the left lower abdomen, diarrhoea or constipation, tenderness and fatigue. The pain may come on suddenly or build up slowly over a couple of days.

Diverticulitis can be serious and lead to complications including abscess formation, bowel obstruction, peritonitis and the development of a connection into the bladder or vagina. These complications may be life-threatening. Mild diverticulitis is usually treated at home with oral antibiotics, but some people require hospital admission for intravenous fluids, antibiotics, rest and strong painkillers. If antibiotics and a controlled diet are not successful, surgery may be necessary.

### Persistent symptoms

Although surgery is not usually required, it may be necessary if symptoms do not improve with diet management or if there are complications. If the surgery is non-urgent and planned, then the diseased segment of bowel is removed and in most cases the surgeon can join the two ends of the intestine together, avoiding a stoma. Occasionally, it may be necessary to form a colostomy, which can usually be reversed at a later date.

An emergency operation may be needed for some complications, for example a perforated diverticulum. In these circumstances, when healing is slow due to infection, a temporary colostomy is often needed after the affected part of the colon has been removed. The colostomy is most commonly an end sigmoid colostomy on the left side of the abdomen, which is formed using a technique known as Hartmann's procedure (see Figure 1).

As the majority of patients have this surgery in an emergency, they will often not have been given appropriate preoperative information, education and counselling by the stoma care nurse. Patients may experience various emotions when trying to adjust themselves to stoma formation and it

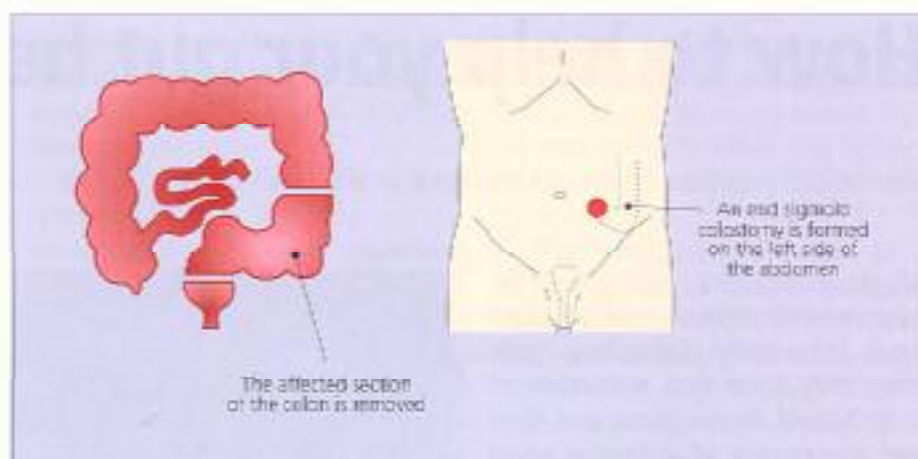


Figure 1. Hartmann's procedure may be needed if diet management does not help

is helpful to know that this is normal in the recovery process.

Due to the position of the stoma in the bowel, the bowel movement (faeces) is likely to become fairly well formed. The colostomy may get into a routine and function once or sometimes twice a day. A fear of many ostomists is that they will smell and that others will be aware that they have a stoma. However, stoma appliance manufacturers now produce bags that are small, discreet and contain smells.

### Can the stoma be reversed?

The colostomy may be either temporary or permanent, and the surgeon should talk to the patient before stoma formation about the possibility of reversing the procedure and the best time to carry out the reversal. Before the colostomy can be closed, the surgeon must be satisfied that the wounds inside and outside are fully healed and that the bowel is fit to resume normal activity.

Reversing the colostomy involves another major operation, so patients need to have a full explanation of what the surgery will involve before they can make an informed choice. It is thought that between one-third and one-half of all patients undergoing stoma formation for diverticular disease never have the colostomy reversed.<sup>1</sup>

### Looking after yourself

The symptoms of diverticular disease can usually be limited by good self-

care and a healthy diet and lifestyle. Many of these measures involve taking steps to prevent constipation.

- Drink two litres of water per day.
- Eat a high-fibre, low-fat diet.
- Eat regular meals.
- Take regular daily exercise.
- Avoid foods that might plug diverticulae, such as sesame seeds.

### Reference

1. Digestive Disorders Foundation. *Diverticular Disease: A Matter of Diet*. Digestive Disorders Foundation Meeting Report. London: BDA, 2003.

## Key points

- Diverticular disease occurs when small pouches called diverticulae form in the large intestine.
- The usual treatment of the condition involves changing the patient's diet to include higher levels of fibre and more fluids.
- Diverticular disease is a common condition in the elderly population.
- Diverticulitis can occur when some of the diverticulae become infected.
- Surgery is not usually needed, but part of the bowel may have to be removed if complications develop.