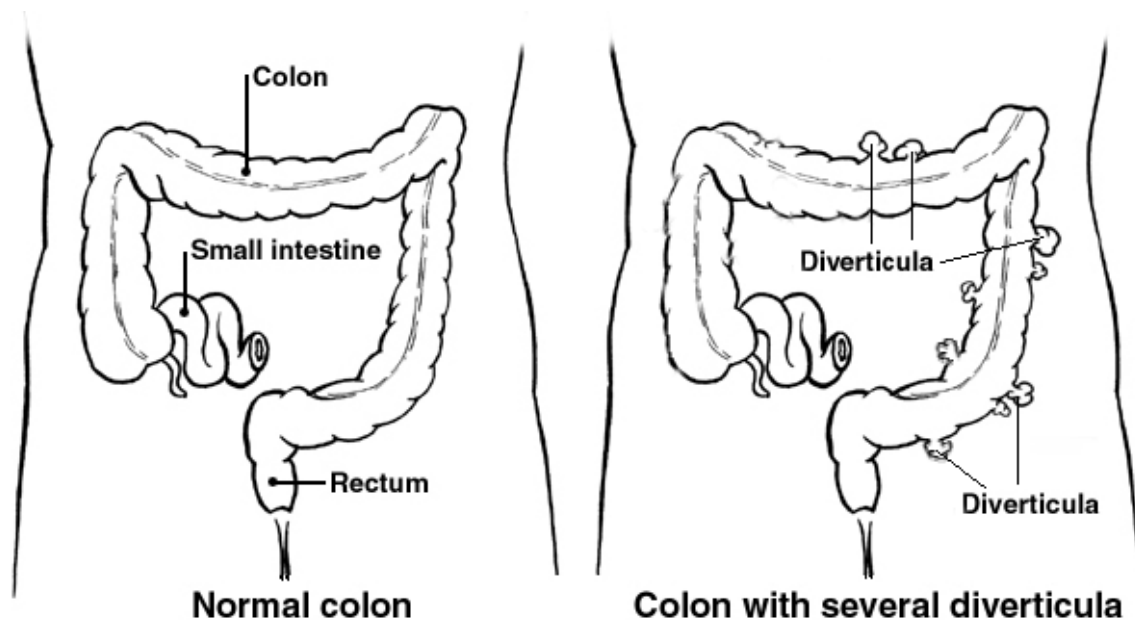


## **Information Leaflet – Diverticula**

### **What are diverticula?**

A diverticulum is a small pouch with a narrow neck that protrudes from (sticks out from) the wall of the gut. Diverticula means more than one diverticulum. They can develop on any part of the gut (intestines), but usually occur in the colon (sometimes called the large bowel or large intestine). They most commonly develop in the section of the colon leading towards the rectum, where the stools (sometimes called faeces or motions) are becoming more solid. This is on the left hand side of the abdomen. Several diverticula may develop over time. Some people eventually develop many diverticula.



### **Who gets diverticula?**

Diverticula are common. They become more common with increasing age. About half of all people in the UK have diverticula by the time they are 50 years old. Nearly 7 in 10 have diverticula by the time they are 80 years old.

### **What causes diverticula?**

The reason why diverticula develop is probably related to not eating enough fibre. Fibre is the part of food that is not digested. Your gut moves stools (faeces) along with gentle squeezes of its muscular wall. The stools tend to be drier, smaller, and more difficult to move along if you don't eat much fibre. Your gut muscles have to work harder if there is too little fibre in your gut. High pressure may develop in parts of your gut when it squeezes hard stools. The increased pressure may push the inner lining of a small area of your gut through the muscle wall to form a small diverticulum.

### **What are the symptoms and problems caused by diverticula?**

It is common for no symptoms to develop (called 'diverticulosis') - In about 3 in 4 people who develop diverticula, the diverticula cause no harm or symptoms. The term 'diverticulosis' means that diverticula are present, but do not cause any symptoms or problems. In most cases the condition will

not be known about as there are no symptoms, but sometimes diverticula are discovered as an incidental finding if you are having tests such as colonoscopy or barium enema for other reasons.

**Diverticular disease** - This term is used when diverticula cause intermittent, lower abdominal pain or bloating (but where there is no inflammation or infection - which is discussed later). The pain is usually crampy and tends to come and go. The pain is most commonly in the lower left part of the abdomen. You may get ease from pain and bloating by going to the toilet to pass stools. Some people develop diarrhoea or constipation, and some people pass mucus with their stools. It is not clear how diverticula cause these symptoms.

Symptoms of diverticular disease can be similar to those that occur with a different condition called irritable bowel syndrome (IBS). However, IBS usually affects younger adults and so symptoms that first develop in a younger adult are more likely to be due to IBS. Likewise, symptoms that first develop in older people are more likely to be due to diverticular disease. However, in some cases it is difficult to tell if symptoms are due to diverticular disease or to IBS.

A diagnosis of 'diverticular disease' is usually made by confirming the presence of diverticula and by ruling out other causes of the symptoms. Note: the symptoms of diverticular disease, especially if they start in an older person, can also be similar to those of early bowel cancer. Therefore, tell a doctor if you get these symptoms as some tests may need to be arranged. For example, a test called colonoscopy may be advised. This is where a doctor uses a special 'telescope' to look into the bowel. This can confirm the presence of diverticula, and rule out bowel cancer.

**Diverticulitis (infection)** - Diverticulitis is a condition where one or more of the diverticula become inflamed and infected. This may occur if some faeces gets trapped and stagnates in a diverticulum. Bacteria (germs) in the trapped faeces may then multiply and cause infection. About 1 in 5 people with diverticula develop a bout of diverticulitis at some stage. Some people have recurring bouts of diverticulitis. Symptoms of diverticulitis include:

- A constant pain in the abdomen. It is most commonly in the lower left side of the abdomen, but can occur in any part of the abdomen;
- Fever (high temperature);
- Constipation or diarrhoea;
- You may have some blood mixed with your stools;
- You may feel sick or vomit.

**Obstruction, abscess, fistula, and peritonitis** - An infected diverticulum (diverticulitis) sometimes gets worse and causes complications. Possible complications include: a blockage (obstruction) of the colon; an abscess (a collection of pus) that may form in the abdomen; a channel (fistula) that may form to other organs such as the bladder; a perforation (hole) in the wall of the bowel that can lead to infection inside the abdomen (peritonitis). Surgery is usually needed to treat these serious but uncommon complications.

**Bleeding** - A diverticulum may occasionally bleed and you may pass some blood via your anus. The bleeding is usually abrupt and painless. The bleeding is due to a burst blood vessel that sometimes occurs in the wall of a diverticulum and so the amount of blood loss can be heavy. A very large bleed requiring an emergency blood transfusion occurs in some cases. However, the bleeding stops on its own in about 3 in 4 cases. Sometimes an operation is needed to stop the bleeding. Sometimes just a slight bleed occurs.

**Note:** *always report any bleeding via your anus to a doctor. You should not assume bleeding is from a diverticulum. Other more serious conditions such as bowel cancer need to be ruled out.*

## What is the treatment for diverticulosis?

As diverticulosis means diverticula with no symptoms, there is no need for any treatment. However, a high fibre diet is usually advised. A high fibre diet is generally considered a good thing for everyone anyway - whether you have diverticula or not. Adults should aim to eat between 18 and 30 grams of fibre per day. Fibre helps to make larger and softer stools and helps to prevent constipation. Also, a high fibre diet may prevent further diverticula forming. This may reduce the risk of developing

problems in the future with diverticula such as diverticulitis. Many foods are high in fibre, and include:

- Fruit, vegetables, and nuts.
- Wholemeal or wholewheat bread, biscuits, and flour (for baking).
- Wholegrain breakfast cereals such as All Bran®, Weetabix®, muesli, etc.
- Brown rice, wholemeal spaghetti, and other wholemeal pasta.

Eating more fibre from fruit and vegetables is probably better than eating more grain based fibre (bread etc).

**Note:** you may have some bloating and extra wind at first when you eat more fibre than you are used to. This is often temporary and tends to settle in a few weeks as your gut becomes used to the extra fibre. However, some people report that a high fibre diet causes some persistent mild symptoms such as mild pains and bloating. So, some people cannot tolerate a high fibre diet. You should have lots to drink when you have a high fibre diet. Aim to drink at least two litres (about 8-10 cups) per day.

A separate leaflet called 'Fibre and Fibre Supplements' gives more details on a high fibre diet

## What is the treatment for diverticular disease?

**High fibre diet, and possibly fibre supplements** - A high fibre diet is usually advised. This may ease pain, bloating, constipation and diarrhoea. It can also help to prevent the formation of further diverticula which may reduce the risk of the condition getting any worse. See the leaflet mentioned above for details of a high fibre diet.

Fibre supplements may be advised if a high fibre diet does not ease symptoms. Several types are available at pharmacies, health food shops, or on prescription. The most common (and cheapest) is bran. Some people find bran unpalatable and try other fibre supplements such as ispaghula. A pharmacist will advise. Although the effects of a high fibre diet to ease symptoms may be seen in a few days, it may take as long as four weeks. See the separate leaflet called 'Fibre and Fibre Supplements' more details on a high fibre diet and fibre supplements.

**Note:** some people find that bran based products cause symptoms to become worse for as long as they take them. If your symptoms do not improve after 3-4 weeks of taking bran, then stop or reduce it. You can continue with other fibre supplements.

**Fluids** - You should have lots to drink when you have a high fibre diet or fibre supplements. Aim to drink at least two litres (about 8-10 cups) per day.

**Paracetamol** - Paracetamol can ease pain if a high fibre diet or fibre supplements do not help so much to ease pain. Other types of painkiller are not usually used for diverticular disease.

## What is the treatment for diverticulitis?

**When symptoms are not too severe** - If you develop diverticulitis you will normally need a course of antibiotics and be encouraged to drink plenty of clear fluids. You may be advised not to eat anything until symptoms settle. You may need some strong painkillers for a while. If the infection is not too severe, then symptoms may well settle with this treatment. Once symptoms go, you can resume a normal diet but a high fibre diet (as described above) is usually best.

**If symptoms are severe or prolonged** - If symptoms are severe then you may need to be admitted to hospital. You may be given antibiotics and fluids directly into a vein via a 'drip'. You may need to have painkiller injections. You may also be admitted to hospital if the symptoms are not too severe, but do not settle after 48 hours or so with antibiotic tablets.

**If complications develop** - As mentioned earlier, some people with diverticulitis develop complications such as bowel obstruction, abscess, fistula, and peritonitis. Surgery is usually needed to treat these serious but uncommon complications. For example, surgery is sometimes needed to drain an abscess or to remove a badly infected part of the colon.

## Treatment of a bleeding diverticula

As mentioned earlier, a large bleed requiring an emergency blood transfusion sometimes occurs in people with diverticula. However, the bleeding stops on its own in about 3 in 4 cases. Sometimes an operation is needed to stop the bleeding.

### **A final note**

See a doctor if you have a **change** in the pattern of your toilet habit. For example, a sudden change from your normal bowel habit to persisting constipation or diarrhoea, passing blood or mucus, or new pains. Even if you are known to have diverticula, a change of symptoms may indicate a new and different gut problem. Call an ambulance urgently if you have a large amount of bleeding from the bowel.

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