Medicine for Managers

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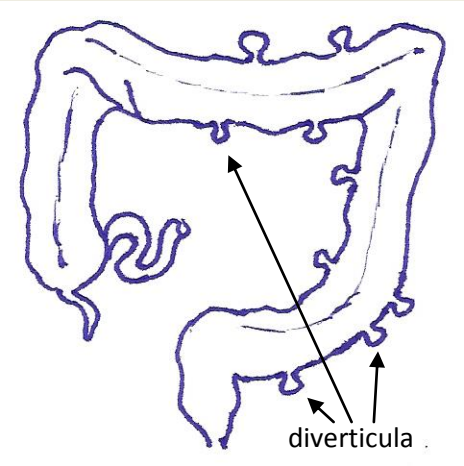
Diverticular Disease and Diverticulitis

I have had a practising lifetime in medicine and I have regarded it as a privilege to treat those people who have consulted me. However, there should be a rule that doctors don't get ill and so, having recently recovered from a severe attack of diverticulitis, I feel that I can write this topic with more than usual passion.



Diverticular disease is a term used to describe the development of small pouches, often with narrow necks, which form in the muscle of the colon and which open into the bowel itself. The disease is very common in Western countries and much rarer in African and Asian countries. Indeed 50% of the population have diverticula by the age of 50 and up to 70% by the age of 75-80. Women seem to be less prone to the disease than men, in whom it tends to develop at a younger age. They are normally confined to the large intestine and may develop in the ascending, transverse or descending colon but most commonly in the rectum.

Diverticula are commonly symptomless provided one of the complications of the disease does not develop. Indeed diverticula are often found during colonoscopy or other intestinal investigations as an incidental finding when a patient is being investigated for something else. Sometimes they may cause colicky abdominal pain and either diarrhoea or constipation which may be accompanied by bloating. In such circumstances the symptoms are similar to

The word diverticulum means pouch (Latin) and is singular. The plural is diverticula. Inflammation of one or more diverticula is called diverticulitis

those of irritable bowel syndrome.

About one in four people with diverticular disease will experience one or more episodes of diverticulitis, which is responsible for more than 80,000 hospital admissions a year. In essence it occurs because faecal material becomes trapped in one of the diverticula where it stagnates and bacteria present set up an acute infection. The symptoms are of an attack of very severe persistent generalised abdominal pain which lasts for some hours and which tends to localise towards the lower left side of the abdomen. It is accompanied by a temperature (which might be 39°C or more) and sometimes by rigors (violent shivering). The attack may be associated with diarrhoea or constipation and there may be some blood mixed with the stools. The patient will also feel nauseated and generally unwell.

Some sufferers develop further complications which, though uncommon, are often serious and may require surgical intervention. The infection in the diverticulum may form a collection or *abscess* which may become large causing worsening of the local and systemic symptoms. Small abscesses may drain into the intestine, or may be treated with antibiotic whereas larger abscesses may require drainage either by withdrawing the pus through a needle guided into place using ultrasound or CT scanner or sometimes may require surgery. Sometimes the diverticular infection will cause the bowel to *perforate* creating an opening between the lumen of the colon and the peritoneal cavity. The result will be the development of *peritonitis* as infection spreads throughout the abdominal cavity. Such a development is a surgical emergency and requires intensive treatment with intravenous antibiotics and may necessitate surgery to close the defect in the bowel wall. If the infection causes a blood vessel in the wall of the diverticulum to burst then the result is *bleeding* into the bowel which may be mild or heavy. If the ruptured vessel is large, the patient may need rapid blood transfusion. Another common complication of diverticulitis is the formation of a *fistula*, which is an abnormal connection between two structures such as the bowel and the bladder. In such circumstances infection can pass down the tube triggering infections such as cystitis. Normally a fistula (plural is fistulae) requires surgery to seal the connection and to remove the involved area of bowel. If the intestine is badly damaged by the infection resulting in marked scarring the consequence may be *obstruction*. This is a surgical emergency which will result in increasing pain and infection with the risk of intestinal rupture. The inevitable management is the removal surgically of the damaged part of the intestine.

So why do we get diverticular disease? It is thought that the soft low fibre Western diet is the cause. The bowel works by gentle alternate contraction and relaxation of the muscles in the wall which results in a squeezing action which moves the bowel contents along. If the diet is lacking in fibre, the faecal material is softer and the muscles have to work harder to push it through the intestine. It is suggested that the increased pressure results in pouches of intestinal lining being pushed into the muscle to form the diverticula.

Diagnosis of diverticular disease is usually made by colonoscopy. The colonoscope is a flexible endoscope with a camera at the end which can be passed into the large intestine through the anus and guided up and round to visualise the lining. The technique is not usually painful but it may be uncomfortable and so sedation may be offered. Before colonoscopy the bowel is prepared for the examination by the use of a laxative to empty the contents. Colonoscopy has largely replaced the barium enema, an X-ray technique which involves inserting radio-opaque barium contrast medium into the rectum. The barium outlines the internal surface of the bowel and any diverticula which may be present.

Mild diverticular symptoms can be managed successfully by the sufferer using simple pain relief. Sometimes it is a good plan to restrict solids intake and stick to fluids only during any episode of symptoms. If the symptoms are more troublesome antibiotic may be prescribed. If the episode of diverticulitis is more severe it may be necessary to admit the patient to hospital. The decision to do so is usually governed by the general condition of the patient, general complications such as dehydration or the more specific complications of the disease. The treatment is usually conservative because the complications of surgery outweigh the benefits unless there is one of the complications which require removal of the affected part of the intestine. These days surgery may be performed by open operation or using a laparoscopic technique.

Diverticular infection can be very unpleasant and debilitating. Take it from someone who knows! Make sure you eat plenty of fibre.

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