

DIVERTICULOSIS

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Definitions

Diverticulosis refers to the presence of diverticula. Diverticula is the plural of diverticulum, and a diverticulum is a pocket.

Diverticulosis usually refers to the presence of pockets on the colon or large bowel. These changes are common after the age of 40, and are often found at the time of colonoscopy. They may also show up on CT scan, and were most frequently seen during the era of the barium enema, an x-ray of the colon which is rarely performed nowadays.

Diverticulosis is usually asymptomatic. However, diverticulosis can be associated with symptoms or serious disease, and in those cases, we use the term "diverticular disease". It is not always completely clear that symptoms, which are common, and could be caused by other conditions, are directly linked to the diverticula, which are also common.

Diverticulosis is a very common finding at the time of colonoscopy over age 50, and often of no serious relevance at all.

Complications

The 2 serious complications of diverticulosis are diverticulitis and diverticular bleeding. Many patients, and some doctors, are confused easily between diverticulosis and diverticulitis.

Diverticulitis is infection in and around a single pocket, and causes pain, usually associated with a change in bowel function towards constipation, as well as fever, chills, and general malaise. Investigations can support the diagnosis, usually an increased white blood count, and imaging such as ultrasound, or more commonly a CT scan performed in the emergency department, can be very accurate in identifying diverticulitis.

Diverticulitis requires antibiotics, and usually settles down with a 10-14 day course of antibiotics such as ciprofloxacin and Flagyl. These antibiotics can be given orally, as an outpatient, but some patients are quite seriously ill, and would be treated with intravenous antibiotics as an inpatient. There has been research regarding whether diverticulitis always requires antibiotics, especially as we begin to realize that antibiotics have risks as well as benefits.

Diverticulitis can be complicated by rupture (perforation), in which case there can be a localized abscess, or a more serious situation of peritonitis. These complications can be treated either by drainage by a radiologist, or surgery, and can be fatal.

Diverticular bleeding is usually a significant event (ie not trivial), with the passage of a large amount of dark or bright red blood, usually associated with no pain, and no other features of diverticulitis, but often associated with feeling faint or dizzy, weak, possibly being incontinent, and can lead to collapse. The patient may think they are having diarrhea, but on looking, they will see a large amount of blood. This complication is more common, or more serious, or both, in patients who are taking blood thinners, and may also be more common in patients who are using NSAIDs (anti-inflammatory agents such as Advil, Motrin, ibuprofen, Aleve, naproxen and aspirin).

While at least 25% of adults over age 50 have some diverticulosis, only approximately 1-5% of those adults with diverticulosis will develop a complication. After recovery from such a complication, most patients over the age of 50 should have a colonoscopy, if not recently (in the past 3-5 years) done.

Previously it was recommended that after one complication, or especially after a second proven complication, patients should have surgery to remove the affected segment of bowel. This is now highly controversial, and each case should be assessed on an individual basis considering possible surgery.

Some patients with diverticulosis have symptoms suggestive of bowel spasm, most commonly discomfort in the left lower quadrant, and this can be a dull ache or a sharp pain, and often a change in the formation of bowel movements, with thinning of the stool. Sometimes the symptoms associated with diverticulosis are very similar to the symptoms of irritable bowel syndrome, and there is controversy about whether or not patients with irritable bowel syndrome often at a younger age, are more likely to develop diverticulosis, at an older age. These symptoms are usually treated by fiber supplementation, eg psyllium, and sometimes by drugs to relax bowel spasm, similar to those drugs used for irritable bowel syndrome.

Management

The most important thing with diverticulosis is to be reassured that this is often an asymptomatic condition and a "chance finding". It is not thought to associate with any increased risk for bowel cancer, and as mentioned previously, the risks of complications are fairly small.

If there is chronic constipation, or inadequate dietary fiber, this may lead to increasing problems with diverticulosis. We therefore recommend a diet that is generous in fiber, especially fruits, vegetables and cereals.

Over many years, it was thought that nuts, seeds and popcorn needed to be avoided, for fear that small pieces of residue would get stuck inside the pockets and lead to complications. In the past 10-15 years, a very strong study showed effectively that this was no longer true. This well-done study showed that nuts and seeds were in fact associated with a reduced risk of complication.

My advice to patients with diverticulosis is to keep up with generous amounts of fiber in the diet, avoid constipation, use Metamucil/psyllium if the stool is narrow or there is left-sided abdominal pain despite

attention to diet, (and a negative colonoscopy) and if possible, they should avoid NSAID therapy, and at least try simple analgesics like Tylenol (acetaminophen) before using NSAIDs if necessary.

There is no reason to be concerned about the usual low-dose aspirin therapy which is given to many patients after age 50, for prevention or reduction of risk for stroke and heart attack.