CONDITION

Diverticulitis

Diverticulitis is inflammation of small pouches that form in the wall of the colon.

WHAT IT IS
Inflamed small pouches in the wall of the colon

BODY SYSTEM
Digestive system

MAIN SYMPTOMS
Lower-left abdominal pain, fever, nausea, bowel habit changes

WHAT CAUSES IT
Inflammation after a colon pouch becomes injured

HOW IT IS DIAGNOSED
Examination, blood tests, and usually CT imaging

MAIN TREATMENT
Fluids, pain relief, selective antibiotics, or procedures

CAN IT BE CURED?
Sometimes - inflammation resolves; pouches remain

IS IT AN EMERGENCY?
Sometimes - severe pain with a hard, swollen abdomen

LONG-TERM OUTLOOK
Most recover; some have recurrences or ongoing symptoms

Overview

Diverticulitis happens when one or more small pouches in the wall of the colon become inflamed. The colon is the main part of the large intestine. The pouches are called diverticula.

Having these pouches is known as diverticulosis. Diverticulosis often causes no symptoms and is not the same as diverticulitis. Diverticulitis means that a pouch has become inflamed, sometimes after a tiny injury or hole develops in its wall.

An episode may be uncomplicated, meaning the inflammation remains limited to the colon. Complicated diverticulitis can cause an abscess, blockage, abnormal connection to another organ, or a larger hole in the colon.

Most uncomplicated episodes improve with non-surgical care. However, abdominal pain and fever have many possible causes, so new or persistent symptoms need medical assessment

rather than self-diagnosis.

Symptoms

Pain is usually felt in the lower-left side of the abdomen. It may begin suddenly or build over several days. Some people, particularly those with right-sided diverticula, have pain on the lower-right side instead.

Other possible symptoms include:

Symptoms may be mild, but severe inflammation can make movement, coughing, or touching the abdomen painful.

Heavy rectal bleeding is not a usual feature of diverticulitis. Diverticula can bleed for a different reason, sometimes without pain. Any significant or ongoing rectal bleeding needs prompt assessment.

- Constant or worsening abdominal tenderness
- Fever or chills
- Nausea or vomiting
- Constipation or diarrhoea
- Bloating or reduced appetite

Causes and risk factors

The exact process that starts diverticulitis is not always clear. A pouch may become irritated or injured, allowing inflammation to develop. Bacteria normally living in the colon may contribute, especially when there is a small perforation, but diverticulitis is not always a simple bacterial infection.

Risk increases with age, although younger adults can also develop it. Genes appear to influence who develops diverticula and who later has diverticulitis.

Factors linked with a higher risk include smoking, low physical activity, obesity, and a diet high in red meat and low in fibre-rich foods. Regular use of non-steroidal anti-inflammatory drugs like ibuprofen or naproxen , or NSAIDs, is also associated with complications. Examples include ibuprofen and naproxen. Do not stop a medically necessary medicine without discussing it with a healthcare professional.

Nuts, seeds, corn, and popcorn have not been shown to lodge in diverticula or cause attacks.

Routine avoidance is not recommended solely because someone has diverticulosis.

Diagnosis

A clinician will ask where the pain is, when it started, and whether you have fever, vomiting, bowel changes, urinary symptoms, or previous episodes. They will gently examine the abdomen.

Blood tests can look for inflammation, infection, dehydration, or anaemia. A urine test may help rule out urinary tract or kidney problems. A pregnancy test may be appropriate because pregnancy-related conditions can also cause abdominal pain.

A CT scan of the abdomen and pelvis is often used to confirm diverticulitis, especially during a first episode, when symptoms are severe, or when a complication is possible. It can show inflamed diverticula, an abscess, a blockage, or a perforation. Ultrasound or MRI may be considered when CT is unsuitable.

A colonoscopy is not usually performed during active diverticulitis because the colon is inflamed. After recovery, one may be recommended to examine the colon and rule out conditions that can look similar, including colorectal cancer. Whether it is needed depends on the severity of the episode, previous colonoscopy results, and other risk factors.

Treatment and management

Treatment depends on whether the episode is uncomplicated or complicated, how unwell you are, and whether you can drink and manage safely at home.

For mild, uncomplicated diverticulitis, treatment may include rest, fluids, and pain relief. Some people find clear liquids more comfortable for a short time, followed by a gradual return to ordinary food as pain and nausea improve. Prolonged restriction is not usually helpful and can lead to poor nutrition.

Antibiotics like amoxicillin or doxycycline are not automatically needed for every uncomplicated episode. They may be used when symptoms are more severe or persistent, or when a person is frail, has important medical conditions, or has a weakened immune system. Complicated diverticulitis usually requires antibiotics.

A healthcare professional can advise which pain reliever is suitable. NSAIDs such as ibuprofen may increase the risk of bleeding or complications in some people. Opioid pain medicines can also cause problems, including constipation, and are not routinely preferred.

Hospital care may be needed if you cannot keep fluids down, have severe pain, appear seriously unwell, have significant complications, or cannot be safely monitored at home. Hospital treatment can include fluids through a vein, antibiotics, pain control, and observation.

An abscess may need to be drained through the skin using imaging to guide a small tube. Emergency surgery may be necessary for a large perforation, widespread infection in the abdomen, uncontrolled sepsis, or a blockage that does not improve.

Planned surgery to remove the affected section of colon may be considered after recovery when episodes are severe or frequent, complications have occurred, or ongoing symptoms strongly affect daily life. The decision is individual; it is not based only on the number of previous episodes.

Complications

Complications are more likely with severe inflammation, delayed treatment, or a weakened immune system. They include:

A fistula between the colon and bladder can cause repeated urinary infections, air in the urine, or urine with an unusual smell. A stricture may cause increasing bloating, constipation, vomiting, or difficulty passing stool.

Some people continue to have abdominal discomfort or altered bowel habits after the visible inflammation has healed. These symptoms need review because they can have several causes, including bowel sensitivity, scarring, ongoing inflammation, or another digestive condition.

- Abscess: a collection of infected fluid near the colon
- Perforation: a hole that allows bowel contents to leak
- Peritonitis: inflammation or infection of the abdominal lining
- Fistula: an abnormal passage between the colon and another organ
- Stricture or obstruction: narrowing that blocks movement through the colon
- Sepsis: a dangerous whole-body response to infection

Prevention

There is no certain way to prevent diverticula from forming or to guarantee that diverticulitis will not return. Age and inherited factors cannot be changed.

After recovery, habits associated with better bowel and general health may lower the chance

of another episode:

During an acute episode, temporarily eating less fibre may be more comfortable. A higher-fibre pattern is generally considered after symptoms have settled, not while pain and nausea are active.

You do not usually need to avoid nuts, seeds, or popcorn. Fibre supplements may help some people meet their fibre needs, but they do not guarantee prevention. Medicines such as probiotics or anti-inflammatory drugs have not been shown consistently to prevent recurrent diverticulitis.

- Eat a varied diet with vegetables, fruit, whole grains, and other fibre sources
- Increase fibre gradually if it causes bloating
- Stay physically active within your abilities
- Avoid smoking
- Work toward a weight that supports your overall health
- Avoid frequent NSAID use unless it is medically necessary

Living with it and what to expect

Pain and fever from an uncomplicated episode often begin improving over several days, but energy, appetite, and bowel habits may take longer to return to normal. Follow the review plan you have been given, especially if symptoms stop improving.

The pouches themselves usually remain after the inflammation settles. Some people never have another episode. Others have recurrences months or years later. A recurrence is not automatically more dangerous than the first episode, but each new episode should be assessed based on its symptoms and severity.

Ongoing bowel sensitivity can cause intermittent discomfort, bloating, constipation, or diarrhoea after recovery. Persistent symptoms do not always mean that diverticulitis is still active. Further assessment may be needed to look for inflammation, narrowing, irritable bowel syndrome, or another cause.

Most people can return to their usual work, exercise, travel, and diet after recovery. The timing depends on pain, energy, complications, and the physical demands of daily activities. Surgery is not inevitable, and even when it is considered, its likely benefits and possible effects on bowel function should be discussed carefully.

Routine follow-up may include reviewing your recovery, medicines, diet, and need for a later

colonoscopy. Keep planned follow-up even if you feel better, particularly after complicated diverticulitis or a first episode that was not recently evaluated by colonoscopy.

When to get medical help

Arrange prompt medical assessment for new, persistent lower abdominal pain, especially when it occurs with fever, nausea, bowel changes, or marked tenderness. Contact a healthcare professional again if diagnosed symptoms are not beginning to improve, return after improving, or make it difficult to drink.

People with a weakened immune system may have less obvious fever or inflammation despite serious illness. A lower threshold for urgent assessment is appropriate if you take immune-suppressing medicine, are receiving cancer treatment, or have had an organ transplant.

Seek emergency care for:

These symptoms can indicate a perforation, obstruction, major bleeding, dehydration, or widespread infection. Do not drive yourself if you feel faint, confused, or seriously unwell.

- Severe or rapidly worsening abdominal pain
- A hard, swollen, or extremely tender abdomen
- Fainting, confusion, severe weakness, or difficulty breathing
- Repeated vomiting or inability to keep fluids down
- Heavy or continuing rectal bleeding
- Severe pain with fever and shaking chills
- Inability to pass stool or gas with increasing swelling or vomiting

Common questions

How long does diverticulitis last?

An uncomplicated episode often starts to improve within several days of treatment, although tenderness, tiredness, and bowel changes can last longer. Symptoms that worsen or do not begin improving need another assessment.

What can I eat during a diverticulitis episode?

Fluids and simple, low-fibre foods may be easier to tolerate briefly when pain or nausea is active. Food can usually be reintroduced as symptoms improve. Seek advice if you cannot

drink, are vomiting, or are unable to return to a balanced diet.

Can diverticulitis heal without antibiotics?

Some mild, uncomplicated episodes can improve without antibiotics when the person can drink, has reliable follow-up, and does not have major risk factors. Antibiotics remain important for complicated illness and for some higher-risk people. This decision requires medical assessment.

Do nuts, seeds, or popcorn cause diverticulitis?

Current evidence does not show that these foods cause attacks by becoming trapped in diverticula. There is usually no need to avoid them unless they cause symptoms for another reason.

Will I need surgery?

Most uncomplicated episodes do not require surgery. Surgery may be needed urgently for certain complications or considered later when complications, recurrences, or continuing symptoms have a major effect on health and daily life.

Is diverticulitis a sign of colon cancer?

Diverticulitis is not cancer. However, colorectal cancer can occasionally produce similar symptoms or scan findings. A clinician may recommend colonoscopy after recovery, particularly if you have not had a recent high-quality examination or the episode was complicated.

Sources

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