Diverticulitis

Diverticulitis occurs when a small pouch called a diverticulum forms in the colon wall and becomes infected and/or inflamed. Symptoms include pain (usually in the lower left abdomen), fever and chills. Left untreated, it can worsen and may lead to abscesses, or bowel obstruction. It can also create a hole in your colon (called a perforation) that may link to other structures in your pelvis including your bladder or small bowel. This link is called a fistula.

Diverticulitis is often diagnosed using a computed tomography (CT) scan of your abdomen and pelvis. This usually requires intravenous contrast and, depending on where you get your test, may also require drinking a liquid solution called oral contrast, both of which make the intestinal tract easier to see. Mild cases of diverticulitis may be treated with rest, antibiotics and a liquid diet, while more severe cases may require intravenous antibiotics or surgery if a complication occurs.

What is diverticulitis?

Diverticulitis occurs when a small pouch, called a diverticulum, forms in the wall of the colon and becomes inflamed and/or infected, usually due to the presence of bacteria. Diverticula (more than one diverticulum) are most common in the sigmoid colon. When diverticula are present with no symptoms of inflammation, the condition is known as diverticulosis. Diverticula can sometimes cause bleeding into your large bowel when the pouch irritates a nearby blood vessel.

When a diverticulum becomes inflamed, it usually causes pain and tenderness in the lower left abdomen.
Left untreated, it can worsen and may lead to abscesses, or bowel obstruction. It can also create a hole in your colon (called a perforation) that may link to other structures in your pelvis including your bladder or small bowel. This link is called a fistula.

The exact cause of diverticulitis is unknown, although research has linked it with obesity, lack of exercise, smoking, and certain medications, including nonsteroidal anti-inflammatory drugs (NSAIDs) such as aspirin and steroids. Diverticulitis is more common in men than in women, and risk increases in people older than age 50.

How is diverticulitis diagnosed and evaluated?

Since symptoms of diverticulitis are similar to those of other gastrointestinal (GI) conditions such as appendicitis, and colitis (long segment of colon inflammation), timely, accurate diagnosis is important. Diverticulitis can be diagnosed and evaluated through a number of tests and procedures, including:

- **Computed tomography of the abdomen and pelvis**: A CT scan can show inflamed, infected diverticula, help determine the severity of the condition and guide treatment. You may receive an IV injection of contrast material so that the GI tract and abdominal organs show up more clearly. You may also be asked to drink an oral contrast material one hour before your scan to help the radiologist better see your intestines. See the Abdominal and Pelvic CT page for more information.
- **Colonoscopy**
- **Ultrasound Pelvis**: Ultrasound offers a view of the abdominal organs without exposing the patient to ionizing radiation, although the images it provides are not as detailed as those of CT.
- **X-ray (Radiography) - Lower GI tract**: Though not used to diagnose suspected acute diverticulitis, it may be used to assess complications.
- **Blood and urine tests**: Blood tests may be used to look for signs of infection/inflammation (diagnosed by higher white blood cell counts) that may be associated with diverticulitis.
- **Pregnancy test**: Women of childbearing age may receive a pregnancy test to rule out pregnancy as a cause of abdominal pain.

How is diverticulitis treated?

Treatment for diverticulitis varies depending on the symptoms and complications. Rest, oral antibiotics and a liquid diet are often prescribed for mild cases. Solid food is gradually added back to the diet in a few days if symptoms ease.

For more severe cases, intravenous antibiotics and fasting for a few days is usually recommended with a gradual reintroduction of diet.

Abdominal surgery with colon resection may be necessary if your diverticulitis develops a complication such as bowel perforation, abscess or fistula. Often, if an abscess has formed, an interventional radiologist may perform a procedure to drain the abscess in addition to prescribing intravenous antibiotics. Colon resection may be needed in patients whose diverticulitis returns or those who experience a narrowing of the large bowel from repeated episodes of inflammation.
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