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What is peptic ulcer disease?

Peptic ulcer disease is when painful sores form in the lining of the stomach, duodenum (start of the small intestine) or bowels.

An ulcer can cause belly pain and, in some cases, bleeding or even a hole in the stomach or bowel. Ulcers often get better with antibiotics, acid-blocking medicines and not using non-steroidal anti-inflammatory drugs (NSAIDs).

Not treating an ulcer can lead to other health issues.

About 4 million Americans have peptic ulcer disease.

The most common causes of ulcers are:

- An infection of the stomach lining with *Helicobacter pylori* (*H. pylori*), a type of bacteria.
- Overuse of nonsteroidal anti-inflammatory drugs (NSAIDs), such as aspirin or ibuprofen.

Symptoms of peptic ulcers

Most common: pain

The most common symptom of an ulcer is a burning pain in your stomach between your breastbone and your belly button.

You may often feel this pain when your stomach is empty (often between meals), but it can happen at any time — even during the night.

The pain could last from a few minutes to many hours and may sometimes wake you in the middle of the night.

Stomach pain is often reduced by food, fluids or taking antacids.

Other possible symptoms

While not as common as stomach pain, other symptoms could be:

- Upset stomach.
- Throwing up.
- Throwing up blood.
- Blood in the stool (black stool).
- Loss of appetite.
- Anemia (low iron in your blood, which can make you feel weak and tired), when an ulcer bleeds without being treated.

Causes of peptic ulcers

Infection

Experts have found that many ulcers are caused by infection with the *Helicobacter pylori* (*H. pylori*) bacteria — not spicy food or stress.

Pain medication

Another common cause of peptic ulcer disease is the routine use of pain medications called nonsteroidal anti-inflammatory drugs (NSAIDs).

People often take NSAIDs to help with aches, pains and swelling.

Examples of the drugs that can cause peptic ulcer disease are:

- Aspirin.
- Ibuprofen.
- Naproxen.

- Ketoprofen.
- Meloxicam.
- Celecoxib.

You're at risk for peptic ulcer disease if you:

- Are 50 years old or older.
- Drink alcohol in large amounts and/or often.
- Smoke cigarettes or use tobacco.
- Have a family member who has ulcer disease.

You're at risk for NSAID-caused ulcers if you:

- Are age 60 or older (your stomach lining becomes frailer with age).
- Have had past issues with ulcers and internal bleeding.
- Take steroid medications, such as prednisone.
- Take blood thinners, such as warfarin.
- Drink alcohol or use tobacco on a routine basis.
- Have certain side effects after taking NSAIDs, such as upset stomach and heartburn.
- Take NSAIDs in amounts higher than instructed on the drug facts label or by your doctor or pharmacist.
- Take many different medications that have aspirin and other NSAIDs.
- Take NSAIDs for long periods of time.
- Have had weight-reduction surgery (bariatric surgery).

Tests to find ulcers

There are a few tests your doctor can do if you suspect you may have peptic ulcer disease.

+ **Tests for *H. pylori* bacteria**

Your doctor may give you one of many tests to find out if you have *H. pylori*, such as a breath, blood or stool test. In this case, your doctor may send your breath, blood or stool sample to a lab be tested for the bacteria.

+ **Endoscopy**

This is the most accurate test to find active ulcers and treat complications.

An endoscopy is done to look at the lining of your esophagus (tube that links your mouth and stomach), stomach and duodenum (first part of the small intestine).

During the endoscopy a biopsy (taking a small piece of tissue to look at under a microscope) may be taken from your stomach, which can be tested for *H. pylori*.

You will be given medicine to block pain and make you feel relaxed and sleepy during the test.

During the endoscopy, your gastroenterologist will use a long, thin (about the width of your little finger), flexible tube with a tiny camera on the end to look inside your stomach and duodenum.

The tube is passed through the mouth into the small bowel as your gastroenterologist does a careful exam. Your doctor will be able to see if there is an ulcer in the stomach or duodenum and treat it if it is bleeding.

+ **Upper-GI (gastrointestinal) series**

With this X-ray test, you will be given a contrast liquid to drink called barium.

Barium coats the inside lining of the esophagus, stomach and small bowel, and makes them easier to see clearly on X-rays.

The doctor can also see ulcers, scar tissue or areas where something is blocking the normal path of food through the GI tract.

Barium tests should not be used if there is a suspicion of an infection causing your GI issues, until the needed tests have been done.

Treatments for ulcers

Your doctor will work with you to find the best way to help heal your ulcers based on what is causing them.

If your tests show you have *H. pylori* infection you will be prescribed:

- One or two bacteria-killing antibiotics (such as amoxicillin, tetracycline, metronidazole or clarithromycin).
- A medication that has bismuth.
- A medicine to lessen the acid in your stomach.

Antibiotics and acid-blocking medications can usually cure these ulcers if they have not caused too much damage.

- Often, antibiotics are given for 1–2 weeks.
- It is important to take all of this medicine to cure the infection.

You should also stop taking nonsteroidal anti-inflammatory drugs (NSAIDs), such as aspirin, ibuprofen, naproxen, ketoprofen, meloxicam and celecoxib.

During and after your treatment, stay away from alcohol and cigarettes, as smoking inhibits ulcer healing.

Once the medicine has treated the ulcer, there is a 90 percent chance that the disease is fully cured.

With proper care, surgery is usually not needed. Still, you may need surgery if an ulcer fails to heal, if you have bleeding problems or if a perforation (hole) or obstruction (block) in the stomach happens. Luckily, surgical therapy is rarely needed, because medications usually cure ulcers.

Is it possible to prevent ulcers?

Since the source of *H. pylori* infection is not yet known, no final recommendations have been made for preventing peptic ulcer disease. However, it is always wise to wash your hands fully, eat food that has been prepared the right way and drink water from a clean, safe source.

If you have ulcers not caused by *H. pylori*:

- Stop using NSAIDs, such as aspirin, ibuprofen, naproxen, ketoprofen, meloxicam and celecoxib.
- Your doctor will start you on medicine to lessen the acid in your stomach.

Complications of ulcers

Not treating an ulcer can lead to a hole in the stomach or intestinal lining — an issue that needs surgery.

Chronic swelling from an ulcer can cause stomach tissue swelling and scarring. Over time, this scarring may close the outlet of the stomach, stopping food from passing into the small intestine, causing throwing up and weight loss.

In severe cases, ulcer complications can lead to death.

If you have had ulcers before or if you get stomach pain, you may lessen your risk of NSAID-caused ulcers by:

- Knowing your risk factors.
- Trying a different NSAID.

- Reading medication labels and following instructions.
- Changing your dose and frequency.
- Trying a different NSAID.
- Substituting other pain-relief medications for the NSAID.
- Talking with your doctor about ways to protect your stomach while getting pain relief.
- Staying away from alcohol when taking pain medications.
- Talking to your doctor about pain that does not go away.