

Patient information from BMJ

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Peptic ulcers

If the lining of your stomach or your upper intestine (gut) gets damaged it can cause an ulcer. Peptic ulcers are sometimes called stomach ulcers or duodenal ulcers. They can be very painful but there are treatments that can help.

You can use our information to talk to your doctor and decide which treatments are best for you.

What are peptic ulcers?

Peptic ulcers are sores that can develop on the lining of the digestive tract. There are two kinds of peptic ulcer. One type happens in the stomach (these are called stomach ulcers). The other one happens in part of the intestine next to the stomach (these are called duodenum ulcers). Both can be very painful.

- **Stomach ulcers** happen when the lining of your stomach gets damaged. Acid from your stomach then leaks through the damaged lining to the tissue underneath.
- **Duodenal ulcers** happen when the lining of your duodenum gets damaged. Acid from your stomach leaks through the damaged lining to the tissue underneath.

What causes peptic ulcers?

Many things can cause peptic ulcers. Stomach ulcers and duodenal ulcers normally have two different causes.

- **Stomach ulcers** are mostly caused by taking non-steroidal anti-inflammatory drugs (NSAIDs for short), which can lead to damage of the lining of the stomach.
- **Duodenal ulcers** are mostly caused by one of the bacteria (germs) that can live in your stomach, called *Helicobacter pylori* (*H. pylori* for short).

Other, less common, causes of peptic ulcers include:

- multiple organ failure
- certain medical conditions, including Zollinger-Ellison syndrome or Crohn's disease
- certain medications, including potassium chloride and drugs called bisphosphonates

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- some infections.

You may also have a higher risk of peptic ulcers if you:

- are a smoker
- have a relative with peptic ulcers
- are under a lot of stress.

What are the symptoms of peptic ulcers?

The main symptom of peptic ulcers is pain in the chest or stomach, but this can be different for everyone. Some people say it feels like a burning pain between their breastbone and belly button. The pain is usually worse when your stomach is empty, for example, between meals or overnight. It might get better if you eat or if you take medication that lowers stomach acid.

You might also get heartburn, feel bloated, or have gas.

If you have black stools, or if you are vomiting blood, you should call your doctor or go to the hospital as soon as possible. You could have bleeding in your stomach or your intestine. Bleeding ulcers need emergency treatment.

You should also tell your doctor if you:

- feel that food sticks in your throat when you swallow
- are losing weight without trying
- are feeling tired for no reason.

Your doctor will suggest some tests to find out whether you have an ulcer and how serious it is.

What treatments work?

Treatment involves removing the cause of ulcers, and then helping the ulcers heal. Before starting treatment, your doctor needs to find out where the ulcer is, what's causing it, and how serious it is. This will help them make the best treatment decisions.

To answer these questions, your doctor might want to do a test called an endoscopy. This involves passing a thin tube (called an endoscope) down your throat into your stomach. The endoscope has a hollow channel and a camera on the end. Your doctor can use the camera to see your ulcer, and find out where the ulcer is and how serious it is.

To find out what's causing the ulcer, your doctor might also do a breath test or ask you for a stool sample. Then they will test it for *H. pylori* bacteria. This will tell your doctor if you have *H. pylori* infection.

Emergency treatment for bleeding ulcers

If tests, such as an endoscopy, show that your ulcer is bleeding, you will need to be admitted to the hospital right away.

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Most people don't need surgery to stop the bleeding. Instead, it can be stopped by a procedure using the endoscope. Your doctor will pass special tools down the hollow channel of the endoscope, and use them to stop the bleeding.

If this procedure doesn't stop the bleeding, or if the ulcer has perforated (made a hole in the wall of the stomach) then you may need surgery.

Stopping the bleeding is the first priority. After this, treatment will focus on removing the cause of the ulcer and helping it heal.

Treatment for ulcers in people without *H. pylori* infection

If tests show that you **don't** have an *H. pylori* infection, something else must be causing the ulcer. Most peptic ulcers in the stomach are caused by long-term use of medications called nonsteroidal anti-inflammatory drugs (NSAIDs for short). Ones that you might have heard of include aspirin, ibuprofen, diclofenac, and naproxen.

If you have been taking NSAIDs, and tests show that you don't have an *H. pylori* infection, use of NSAIDs is the most likely cause of an ulcer. So your doctor will advise you to stop taking those drugs right away.

If this is not possible, or if you are taking prescribed low-dose aspirin because you have a heart condition, your doctor might prescribe an additional medication to protect the lining of your stomach. They might also suggest changing your pain medication to something less likely to irritate your ulcer.

The next step is to help the ulcer to heal. The usual treatment is taking pills called proton pump inhibitors. These drugs reduce the amount of acid the stomach produces. Most people need to have this treatment for about 4-8 weeks.

Treatment for ulcers in people with *H. pylori* infection

If tests show that you **do** have an *H. pylori* infection, it's likely this is causing the ulcer. Most peptic ulcers in the duodenum (duodenal ulcers) are caused by *H. pylori* infection. Killing the bacteria can help get rid of your ulcer.

The treatment for people with an ulcer caused by *H. pylori* usually consists of three drugs: two antibiotics to kill the *H. pylori* bacteria, and a proton pump inhibitor to reduce stomach acid while the ulcer is healing.

It's important to carefully follow the instructions on how to take the antibiotics. For example, don't stop taking the antibiotics if your symptoms go away after a few days: finish the course of treatment.

If you don't take all the antibiotics there's a chance that not all the bacteria will be killed and the infection will return, stronger, and harder to kill than before.

If this treatment doesn't work your doctor might suggest different antibiotics, and possibly another drug called bismuth, which can help the ulcer heal.

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Antibiotics can cause side effects in some people, for example diarrhea can be common. It's important to keep taking the antibiotics, even if this happens.

If your treatment causes diarrhea that doesn't stop after a few days, talk to your doctor.

What will happen to me?

Treatment to remove the cause of ulcers, and then to help them heal, usually works well.

If your ulcers were caused by long-term use of NSAIDs, not taking these anymore will make the ulcer less likely to come back. If you need to take NSAIDs for a long-term condition your doctor will prescribe a proton pump inhibitor to take as well. This will help protect your stomach. Your doctor may arrange for you to have an endoscopy 8 weeks after you start treatment, to check that your ulcer is healing.

If your ulcers were caused by *H. pylori* infection, killing the bacteria will make the ulcer less likely to come back. Your doctor should arrange for you to be tested for *H. pylori* again after the end of your treatment, to check that the bacteria has been killed.

If you are a smoker your doctor will advise you to stop, as smoking can irritate the lining of the stomach.

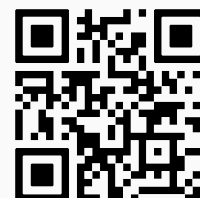
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