



GASTRIC ULCERS

A peptic ulcer is an area of damage to the lining of either the stomach or the duodenum (the part of the digestive tract that immediately follows the stomach). Peptic ulcers can cause symptoms of indigestion, including pain, which may be severe. They can usually be treated with medicines but left untreated can lead to serious complications.

An ulcer in the stomach is called a gastric or stomach ulcer. In the duodenum it's called a duodenal ulcer. Peptic ulcers are usually raw patches that are 1-2cm in diameter. When viewed with a gastroscope (a telescope that doctors use to examine the stomach) they look a little like mouth ulcers. Duodenal ulcers affect up to 1 in 10 people at some point in their lives, and tend to affect especially younger men. Stomach ulcers are less common. They are rare in people before middle age and are most common in elderly people. Peptic ulcers may be acute (symptoms appear and improve quite quickly) or chronic (go on for a long time). Often, several acute ulcers happen together, and these may produce no symptoms. They often heal without any long term consequences. Chronic ulcers are deeper, usually occur individually and cause symptoms. They leave a scar when they heal.

The contents of the stomach are acidic. The acid helps to protect the body from infection and helps break down the food that is eaten. The lining of the stomach and duodenum is covered in mucus (a thick, smooth fluid), which protects it from this acid. An ulcer can result when the stomach produces excess acid or there is insufficient mucus to protect the lining from damage.

There are several factors that increase a person's risk of getting a peptic ulcer:

Infection with bacteria called *Helicobacter pylori* (*H. pylori*) - this is almost always present in people with ulcers, although it's also found in the stomachs of many people without ulcers or indigestion symptoms

- regularly taking certain medicines, particularly aspirin and other non-steroidal anti-inflammatory drugs (NSAIDs) such as ibuprofen, naproxen and diclofenac
- smoking
- drinking alcohol in excess

Occasionally, a gastric ulcer may develop within a cancer in the lining of the stomach.

Some people with peptic ulcers have no symptoms. However, many people have abdominal pain, usually just below the chestbone. A gastric ulcer typically causes a sharp pain in the stomach soon after eating, whereas the pain of a duodenal ulcer is typically relieved by eating, or by drinking milk. Other symptoms may include:

- belching
- general discomfort in the stomach
- loss of appetite or, rarely, increased appetite
- nausea
- vomiting
- loss of weight

Tests are carried out to see if there is infection with *H. pylori*, to diagnose gastric or duodenal ulcers, and to rule out other conditions such as stomach cancer.

H. pylori tests - someone with suspected peptic ulcer is likely to be tested for *H. pylori*. This is done with either a breath or blood test. For the breath test, you are given a harmless substance to swallow. The substance is broken down if *H. pylori* is present, to produce a gas that is detected in the breath. This test is also used to check whether treatment has eradicated *H. pylori*.

Barium swallow - this involves swallowing a drink containing barium, which shows up white on X-rays. The barium coats the lining of the stomach and duodenum, and X-rays are taken to show an outline. These may show an ulcer.

Gastrosocopy - a tube (endoscope) containing a fibre-optic cable is passed through the mouth and into the stomach. The doctor can see the lining of the stomach through the tube, and can take a sample of the

stomach lining with an instrument that is passed down through the tube. This sample is tested for *H. pylori* and examined under a microscope (biopsy) to check whether cancer is present.

A number of lifestyle changes may reduce the symptoms of a peptic ulcer, and speed up healing.

- avoid food and drink that seems to cause more severe symptoms such as spicy foods, coffee and possibly alcohol,
- stop smoking,
- lose excess weight if overweight,
- stop taking NSAIDs and use paracetamol instead.

If this is not possible, contact your GP for advice. For people with ulcers, a type of NSAID called a cyclo-oxygenase-2 selective inhibitor (cox-2-inhibitor, eg rofecoxib) may cause less stomach irritation.

Two main groups of medicine are available to do this. The first of these are called H2-antagonists.

Examples include ranitidine (eg Zantac) and cimetidine (eg Tagamet). The second group are known as proton pump inhibitors, and tend to have a more powerful effect in reducing the production of stomach acid. Examples include omeprazole (eg Losec) and lansoprazole (Zoton).

Eradication of *H.pylori*

If tests confirm the presence of an ulcer, and *H. pylori* is also found, you are likely to need a course of tablets to get rid of the *H. pylori*. This usually consists of a combination of three drugs - a proton pump inhibitor plus two antibiotics - taken daily for one week. In most cases, treating the *H. pylori* infection allows the ulcer, or ulcers, to heal and prevents them from recurring. If you have persistent ulcer symptoms and *H. pylori* is not found, or *H. pylori* is found but treatment fails to clear up the symptoms, your GP may send you to have further tests, such as gastroscopy or barium swallow, at hospital (see Diagnosis, above).

Sometimes a peptic ulcer can lead to more serious problems, including perforation (a hole in the wall) of the stomach or duodenum. This causes severe pain and needs emergency treatment.

However, the most common complication is bleeding from the ulcer. Symptoms include:

- vomiting fresh, red blood, or vomit containing dark brown bits of older blood (with an appearance like coffee grounds)
- blood (usually dark red) in the faeces
- black, tarry faeces.

A slowly bleeding ulcer can also cause anaemia, where there are not enough red blood cells to transport oxygen around the body. Scars left by healed ulcers sometimes cause narrowing (stenosis) in the duodenum. This can lead to severe vomiting and may need surgery.
