



***H. pylori* and Peptic Ulcer**

What is a peptic ulcer?

A peptic ulcer is a sore on the lining of the stomach or duodenum. Peptic ulcers are common: One in 10 Americans develops an ulcer at some time in his or her life. One cause of peptic ulcer is bacterial infection, but some ulcers are caused by long-term use of nonsteroidal anti-inflammatory agents (NSAIDs), like aspirin, ibuprofen, BC's and Goody Powders. Peptic ulcers are not caused by stress or eating spicy food, but these can make ulcers worse.

What is *H. pylori*?

Helicobacter pylori (*H. pylori*) is a type of bacteria. *H. pylori* can be responsible your peptic ulcer. *H. pylori* infection is common in the United States.. Most infected people, however, do not develop ulcers. Why *H. pylori* does not cause ulcers in every infected person is not known. Researchers are not certain how people contract *H. pylori*, but they think it may be through food or water.

What are the symptoms of an ulcer?

Abdominal discomfort is the most common symptom. This discomfort usually

- is a dull, gnawing ache
- comes and goes for several days or weeks
- occurs 2 to 3 hours after a meal
- occurs in the middle of the night—when the stomach is empty
- is relieved by eating
- is relieved by antacid medications

Other symptoms include

- weight loss
- poor appetite
- bloating
- burping
- nausea
- vomiting

Some people experience only very mild symptoms, or none at all.

Emergency Symptoms

If you have any of these symptoms, call your doctor right away:

- sharp, sudden, persistent stomach pain
- bloody or black stools
- bloody vomit or vomit that looks like coffee grounds

They could be signs of a serious problem, such as

- perforation—when the ulcer burrows through the stomach or duodenal wall
- bleeding—when acid or the ulcer breaks a blood vessel
- obstruction—when the ulcer blocks the path of food trying to leave the stomach

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How is an *H. pylori*-related ulcer diagnosed?

To see whether symptoms are caused by an ulcer, the doctor may do an upper endoscopy. An upper endoscopy is an exam that uses an endoscope, a thin, lighted tube with a tiny camera on the end. The patient is sedated, and the doctor carefully eases the endoscope into the mouth and down the throat to the stomach and duodenum. This allows the doctor to see the lining of the esophagus, stomach, and duodenum.

Diagnosing *H. pylori*

If an ulcer is found, the doctor will test the patient for *H. pylori*. This test is important because treatment for an ulcer caused by *H. pylori* is different from that for an ulcer caused by NSAIDs.

H. pylori is diagnosed through blood, breath, stool, and tissue tests. Blood tests detect antibodies to *H. pylori* bacteria.

Urea breath tests are an effective diagnostic method for *H. pylori*. They are also used after treatment to see whether it worked. The breath test is 96 percent to 98 percent accurate.

Stool tests may be used to detect *H. pylori* infection in the patient's fecal matter. Studies have shown that this test, called the Helicobacter pylori stool antigen (HpSA) test, is accurate for diagnosing *H. pylori*.

Tissue tests are usually done using the biopsy sample that is removed with the endoscope. There are three types: The rapid urease test detects the enzyme urease, which is produced by *H. pylori*. A histology test allows the doctor to find and examine the actual bacteria. A culture test involves allowing *H. pylori* to grow in the tissue sample.

Blood tests are not used to detect *H. pylori* following treatment because a patient's blood can show positive results even after *H. pylori* has been eliminated.

How are *H. pylori* peptic ulcers treated?

H. pylori peptic ulcers are treated with drugs that kill the bacteria, reduce stomach acid, and protect the stomach lining. Antibiotics are used to kill the bacteria. Two types of acid-suppressing drugs might be used: H2 blockers and proton pump inhibitors.

Treatment usually involves a combination of antibiotics, acid suppressors, and stomach protectors. Antibiotic regimens recommended for patients may differ across regions of the world because different areas have begun to show resistance to particular antibiotics.

Unfortunately, patients may find triple therapy complicated because it involves taking as many as 20 pills a day. Also, the antibiotics used in triple therapy may cause mild side effects such as nausea, vomiting, diarrhea, dark stools, metallic taste in the mouth, dizziness, headache, and yeast infections in women—most side effects can be treated with medication withdrawal.

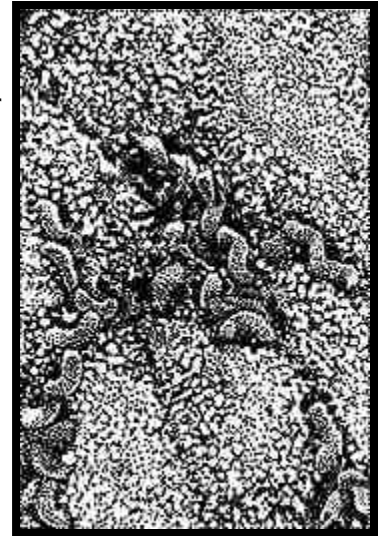
Drugs Used to Treat *H. pylori* Peptic Ulcers

Antibiotics: metronidazole, tetracycline, clarithromycin, amoxicillin

H2 blockers: cimetidine, ranitidine, famotidine, nizatidine

Proton pump inhibitors: omeprazole, lansoprazole, rabeprazole, esomeprazole, pantoprazole

Stomach-lining protector: bismuth subsalicylate



H. pylori bacteria