Patient Information

Digesting the Facts About Peptic Ulcers

In order to help break down your food during digestion, your stomach produces a strong acid. Normally, the stomach and the beginning of the small intestine—called the *duodenum* (dyew-**ah**-deh-num)—are protected from this acid by the thick mucous layer that covers their lining. But if too much acid is produced or if this protective layer is weakened, the lining of the stomach or duodenum may become irritated and form an open wound, or ulcer. An ulcer in the stomach is called a *gastric* (**gas**-trick) ulcer, and an ulcer in the duodenum is called a *duodenal* (dyew-**ah**-deh-nuhl) ulcer. As a group, these ulcers are called peptic ulcers.

Peptic ulcers are common: One in 10 Americans develop one at some point in their lives. If they go untreated, peptic ulcers can cause serious problems, such as bleeding or blockage of the stomach and intestines. Luckily, we know more today than ever before about how ulcers develop and how to treat them successfully.

How do I know if I'm at risk?

For years, doctors thought that peptic ulcers were caused by such factors as stress, eating spicy food, and drinking alcohol. But more recent research has shown that most peptic ulcers are caused by infection with a common type of bacteria, called *helicobacter pylori* (**hell**-uh-koh-back-tur pie-**loh**-ree), or *H. pylori* for short, or by long-term use of a type of medication known as *nonsteroidal anti-inflammatory* (non-steh-**roy**-dal an-tie-in-**flam**-ma-toh-ree) drugs, or NSAIDs. In rare cases, other diseases (such as stomach cancer) may cause peptic ulcers.

H. pylori infection is believed to contribute to peptic ulcer formation by causing inflammation in the protective lining of the stomach and duodenum, thereby weakening its defenses. It's estimated that one of every six people infected with *H. pylori* will develop a peptic ulcer. In the United States, 20% of people under the age of 40 and 50% of those over age 60 are infected.

NSAIDs are used to relieve pain and reduce inflammation, especially in people with arthritis. Unfortunately, they also increase the acid content of the stomach and weaken the stomach's mucous lining. These drugs include many well known over-the-counter products (such as aspirin, Advil, Motrin IB, Nuprin, and Aleve) as well as others that are available only by prescription. Some NSAIDs may be less harmful to the stomach than others, but all carry some degree of risk.

The more NSAIDs you take, the more often you take them, and the higher doses you use, the more likely you are to develop a peptic ulcer. Your risk also is increased if you are over age 60, drink alcohol, smoke cigarettes, take prescription steroids or blood thinners along with your NSAID, have had a peptic ulcer in the past, or have a close relative who's had one.

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What are the warning signs?

Peptic ulcers may cause only very mild symptoms—or none at all. The most common sign is a dull, gnawing or burning ache between the belly button and breastbone that comes and goes, occurs two to three hours after a meal or in the middle of the night, and is relieved by eating or by taking an antacid medication. Other signs of a peptic ulcer include: loss of appetite, weight loss, bloating or burping, nausea, and vomiting. Call your doctor right away if you have sharp, sudden, and persistent stomach pain; bloody or black stools; or vomit that is bloody or looks like coffee grounds.

What tests do I need?

To check for a peptic ulcer, your doctor may take a series of X-rays of your *esophagus* (ih-**sahf**-uh-guhs), stomach, and duodenum. Right before these X-rays are taken, you'll be asked to drink a chalky liquid called barium, which helps to show ulcers more clearly on the X-ray. Your doctor also might want you to have an *endoscopy* (en-**dahs**-kah-pee)—a test in which a thin, lighted tube with a camera on the end is placed down your throat.

To determine whether a peptic ulcer is caused by *H. pylori* infection, your doctor may test a sample of your blood or stool or perform a special breath test. Another way to detect *H. pylori* is to take a sample of tissue from the stomach using the endoscopy procedure and then test it for any bacteria.

How can I avoid the problem?

Research hasn't yet revealed a reliable way to avoid *H. pylori* infection, but studies are ongoing and investigators are working on developing a vaccine.

When taking NSAIDs, follow your doctor's instructions or the directions on the medication bottle regarding when and how much to take. If you're taking a prescription NSAID, don't take an over-the-counter NSAID at the same time. Ask your doctor about other nonprescription pain medications you can use to relieve occasional problems, such as headaches.

How is it treated?

Treatment for *H. pylori* infection involves taking a combination of antibiotics and medications that reduce stomach acid. Your doctor also may recommend that you take *bismuth subsalicylate* (**biz**-muth sub-sah-**liss**-uh-late)—the main ingredient in Pepto-Bismol—to protect your stomach lining and help kill the bacteria. In most cases, a few weeks of this treatment will relieve symptoms, get rid of the infection, and allow the ulcer to heal.

If your ulcer was caused by NSAID use, your doctor will either stop your medication or reduce your dosage. While the ulcer is healing, your doctor may prescribe additional medication to reduce your symptoms.

Peptic ulcers that don't heal, come back, or cause complications (such as severe bleeding, tearing of the stomach or duodenal lining, or blockage of the stomach or intestines) may require surgery.

For more information on peptic ulcers, visit the National Digestive Diseases Information Clearinghouse web site (digestive.niddk.nih.gov/ddiseases/topics/ulcers.asp) or call the toll free number (800-891-5389). ●