PEPTIC ULCER DISEASE

Peptic ulcer disease is a very common ailment, affecting one out of eight persons in the United States. Peptic ulcers are open sores in the upper part of the digestive tract that can cause stomach pain or stomach upset, and that can lead to internal bleeding. There are two types of peptic ulcers:

- Gastric ulcers, which form on the lining of the stomach.
- Duodenal ulcers, which form on the lining of the upper part of the small intestine (called the "duodenum").

Ulcers that have not been treated tend to recur. Many people with ulcers need treatment to relieve symptoms and prevent complications.

CAUSES

Peptic ulcers form when acid erodes the lining of the digestive tract. This can happen when there is excess acid in the system, or when the protective layer of mucus on the lining is broken down (making it more susceptible to damage).

There are two major causes of peptic ulcers, *Helicobacter pylori* bacterial infection and the use of pain relievers called nonsteroidal anti-inflammatory medications (NSAIDs).

Helicobacter pylori infection — Helicobacter pylori is a type of bacteria that lives in the digestive tract. Helicobacter pylori is very common; some data suggest that it is present in approximately 50 percent of people. Helicobacter pylori can lead to the development of ulcer because the bacteria can cause the following, all of which can contribute to peptic ulcer formation:

- An increase in the amount of acid in the stomach and small intestine
- Inflammation of the lining of the digestive tract
- A breakdown of the protective mucous layer

NSAIDs — The use of NSAIDs can also cause peptic ulcers in some people. They are commonly used to relieve pain and reduce inflammation. Many people also take low-dose aspirin daily to prevent heart attack or stroke.

NSAIDs can cause changes in the protective mucous layer of the digestive tract, leading to ulcers in some people. The risk of ulcer formation depends on multiple factors, including the NSAID type, dose, and duration of use.

Other risk factors —

- Genetics likely play a role, as studies have shown that having a family member with peptic ulcers makes a person more likely to develop ulcers as well.
- People who smoke cigarettes are more likely than nonsmokers to develop peptic ulcers.

• While drinking alcohol does not appear to be a cause of ulcers, alcohol abuse can interfere with ulcer healing.

SYMPTOMS

Some people with peptic ulcers do not have any symptoms. People who do have symptoms may experience any of the following: abdominal pain, feeling full quickly when eating, feeling bloated after eating, nausea, vomiting, and/or blood in the stool

DIAGNOSIS

Upper endoscopy — An upper endoscopy is a procedure in which a thin, flexible tube is inserted into the mouth and down the throat. The tube has a light and a tiny camera on the end that projects images from within the digestive tract onto a monitor.

Ulcers can often be diagnosed through upper endoscopy. A small sample of tissue, called a biopsy, can also be taken to check for abnormal cells, cancer, or an infection with *Helicobacter pylori*.

Helicobacter pylori testing — Anyone with a confirmed peptic ulcer should be tested for Helicobacter pylori so that the infection, if present, can be treated. In people who have had a biopsy, the sample can be tested for infection. People who have not had a biopsy can instead have a breath test to check for Helicobacter pylori. Blood tests are also available, but may be less reliable.

TREATMENT

When peptic ulcer is found, patients are typically prescribed acid-suppressing drugs to help relieve symptoms and allow the ulcer to heal. If an ulcer has been caused by aspirin or NSAIDS, then at least a temporary avoidance is typically recommended. If *Helicobacter pylori* infection is found, it will need to be treated with antibiotics.

Prompt diagnosis, management, and treatment of peptic ulcer disease by an expert doctor is recommended as untreated peptic ulcer can lead to serious complications such as bleeding, perforation, or obstruction (blockage).