

# Peptic Ulcer Disease

Ulcers of the stomach or duodenum (the upper part of the small intestine) are uncommon in children. They are most often related to major injuries, certain medical conditions, or the use of certain medications. In otherwise healthy children, most ulcers occur when the stomach is infected with a certain type of bacteria. Treatment depends on the cause. Ulcers generally heal after treatment with acid-reducing drugs and other medications.

## What is peptic ulcer?

A peptic ulcer is a deep sore that forms in the stomach (gastric ulcer) or the upper part of the small intestine (duodenal ulcer). In children, ulcers are most often a complication of a severe illness or injury, or medications. Ulcers occurring in otherwise healthy children are usually caused by a stomach infection with bacteria called *Helicobacter pylori*. However, this infection is much more common in adults.

Treatment depends on the cause of the ulcer. After a major injury, your child may receive acid-reducers or other drugs to prevent or treat ulcers. If infection with *Helicobacter pylori* is the cause, antibiotics and acid-reducing drugs will be used. Very few children need surgery for peptic ulcer disease.

## What does it look like?

- *Abdominal pain* is the main symptom of peptic ulcer disease.
    - Your child may feel pain anywhere in the abdomen, most commonly in the upper abdomen or around the navel (belly button).
    - Pain may get better after your child eats or after he or she takes antacids. (This pattern is more common in older children and adults.)
  - Less often, bleeding is the first sign of an ulcer. Your child may vomit blood or may have black, tarry bowel movements (blood in the stool). Even less often, bright red blood may be seen coming from your child's rectum.
- ! ● *If signs of bleeding occur, get medical help as soon as possible.*
- In infants, recurrent vomiting and slow weight gain are the most common symptoms of ulcer.
  - Injured children with ulcers may not have any symptoms.

## What causes peptic ulcer?

- Most children with ulcers have serious disease or illness, such as burn patients in the intensive care unit (ICU).

- Ulcers may also occur in patients taking certain medications, such as ibuprofen. In these situations, the natural barriers that protect the stomach lining are disrupted, allowing stomach acid to injure the inside of the stomach.
- In otherwise healthy children, infection with *Helicobacter pylori* is usually the cause.

## What are some possible complications of peptic ulcer?

- Bleeding may occur.
- The ulcer may penetrate the stomach or intestinal wall (called a perforated ulcer), allowing the stomach contents to leak out. This can result in bleeding and/or infection.

## What puts your child at risk of peptic ulcer disease?

- Major injuries, such as head trauma or serious burns. Ulcers are a frequent complication in critically ill patients.
- Regular use of aspirin, ibuprofen, and related medications (called non-steroidal-anti-inflammatory drugs), which can irritate the stomach. Acetaminophen (Tylenol) does not cause stomach irritation.
- If you or others in your family have had stomach ulcers, your child may be at higher risk.
- Certain diseases increase the risk of ulcers, including inflammatory bowel disease or various types of gastritis (inflammation of the stomach lining).

## Can peptic ulcer disease be prevented?

- In critically ill or injured children, acid-reducing drugs or other medications are commonly given to prevent ulcers.
- If you or others in your family have ulcers related to *Helicobacter pylori* infection, getting effective treatment may prevent the bacteria from spreading to your child.

## How is peptic ulcer diagnosed?

- If gastric or duodenal ulcer is suspected, your doctor may recommend a procedure for your child called endoscopy. An instrument like a telescope is placed through the mouth, down into the stomach and duodenum. This allows the doctor to see if there are any ulcers and to take a sample of the tissue (biopsy). This sample can be checked for infection with *Helicobacter pylori* bacteria. Your child is sedated during the endoscopy procedure.
- Some simple tests (such as a breath test, blood test, or stool test) can help to determine whether your child is infected with *Helicobacter pylori*.

## How is peptic ulcer treated?

Treatment for peptic ulcer depends on the cause:

- If your child has a critical illness or injury, he or she will receive medications to control stomach acid. This may be done either to prevent or to treat peptic ulcer.
- If your child is taking aspirin, ibuprofen, or other medications that irritate the stomach, those medications should be stopped.
- If your child is infected with *Helicobacter pylori*, antibiotics are needed to kill the bacteria. Acid-reducing medications such as Tagamet (generic name: cimetidine) and Prilosec (generic name: omeprazole) work by reducing acid production by the stomach.
- Older antacid drugs (for example, Maalox) are not as effective as drugs that affect acid secretion and may cause side effects.

- It takes a few weeks for ulcers to heal. Your child will receive medical follow-up visits to confirm healing.

## When should I call your office?

During treatment for peptic ulcer, call our office if:

- Your child has any sign of bleeding: vomiting blood, blood in his or her bowel movements (black, tarry stools), or bleeding from the rectum.
- Your child's symptoms of peptic ulcer disease (stomach pain, heartburn) don't seem to be getting better.
- Your child develops new symptoms, such as severe abdominal pain.