



A pain IN THE gut

GERD, ulcers and dyspepsia

by Dr. Richard Ward

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GUT PAIN triggered by digestive trouble is one of the most common reasons people visit their doctor. Some people experience burning pain in the mid chest area and others experience it in the upper abdominal area from the ribcage to the navel. These symptoms are usually caused by one of three conditions: gastroesophageal reflux disease (GERD), ulcer disease or dyspepsia.

Jack's GERD

Jack is a 52-year-old truck driver with a long history of intermittent burning pain in his stomach. Years of long-haul driving, eating at greasy diners and lack of exercise have contributed to Jack being 60 pounds overweight. He noticed his 'heartburn' got worse after overeating, but was usually relieved by a shot of Maalox® (Jack always packed a bottle for the road). One time, after completing a long trip, Jack wolfed down a late dinner at his favourite Mexican diner and went straight to bed. While leaning over to remove his shoes, he felt a sudden burning pain rising up the middle of his chest. Later that night, he woke up with a severe burning sensation in his stomach and an acidic taste in the back of his mouth. He felt better sit-

ting up after another dose of Maalox. Jack spent the rest of the night propped up on the couch.

A recurrent problem

GERD, short for gastroesophageal reflux disease, is a common condition that often recurs. GERD is triggered when acid from the stomach refluxes or spills back up into the esophagus, the tube that carries food from the mouth to the stomach.

The stomach produces and tolerates high-acid conditions but the esophagus doesn't deal with this quite as well. The esophagus is usually protected from acid reflux by a sphincter or valve that separates it from the stomach. The lower esophageal sphincter, or

GUT CONDITIONS

Condition	Signs
GERD	Burning sensation under the ribcage or acid spilling back up towards the throat. Is usually quickly, but temporarily, relieved with food or antacids.
Ulcer disease	Pain in the upper abdomen. Generally occurs between meals. The pain goes away temporarily with eating or taking antacids.
Dyspepsia	Pain or bloating in the upper abdominal area. Feeling full prematurely. Nausea. Often triggered by and more painful after meals.

LES, opens when food is swallowed, allowing it to go into the stomach. When food passes, the LES closes to protect stomach contents from going back up. GERD occurs because of an abnormality in the LES: it opens unexpectedly when no food is being ingested. This causes stomach contents to reflux back up into the esophagus, explaining the burning and the acidic taste in the throat.

Common causes

Overeating, fatty foods, smoking and weight gain can all cause the LES to become loose, allowing acid and stomach contents to reflux into the esophagus. Some medications can trigger or aggravate GERD symptoms, while weakening the LES in the process. GERD attacks are also common in pregnant women due to increased progesterone that relaxes the LES.

While GERD can strike at any time, it's most common after large meals and at night when acid secretion is higher. When someone with GERD lies down, the acid sneaks back up through the LES more easily. So it's fairly common for someone with GERD to wake up with heartburn.

Diagnosis

GERD is usually diagnosed by means of a careful case history of classic symptoms like burning sensations under the ribcage and acid reflux.

In most cases, GERD isn't a life-threatening condition even when chronic, but it can significantly impact quality

of life. Sometimes GERD can lead to the formation of scar tissue at the base of the esophagus that can result in problems with swallowing. In other people, untreated GERD can develop into Barrett's esophagus, a pre-cancerous condition caused by a change in the lining of the esophagus.

Treating GERD

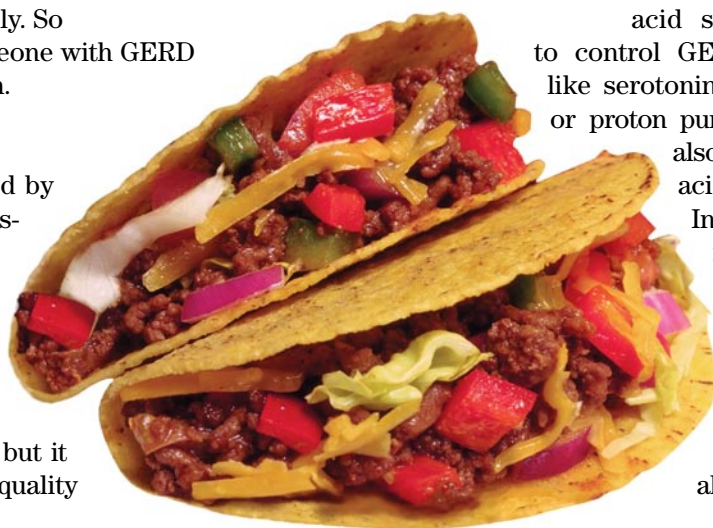
The initial approach to treating people with GERD is lifestyle management. Patients are instructed to eat small frequent meals and avoid large meals or snacking just before going to bed. Quitting smoking is recommended, as is weight reduction, but it's still not clear why weight gain increases the risk of GERD symptoms. As a temporary measure, until a

patient is seen by the doctor, the head of the bed can be raised several centimeters, allowing gravity to help relieve the pressure on the lower esophageal sphincter.

Medications are an important addition to lifestyle changes. Antacids and over-the-counter acid suppressing drugs help to control GERD. Prescription drugs like serotonin receptor 2 antagonists or proton pump inhibitors (PPIs) are also available to suppress acid and relieve symptoms.

In many patients, GERD is a sporadic condition, which means that medication may be used intermittently. Other people, with severe and chronic GERD are on continual therapy indefinitely.

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Beverly's ulcer

Beverly is a 61-year-old woman who often experiences upper abdominal pain. She's been taking care of her dad ever since his heart attack. Concerned about her own heart — especially since she smokes a pack of cigarettes every day — Bev started on an aspirin a day a few months ago. For the last two weeks, she's taken four or five ibuprofen daily for ongoing lower back pain. This triggered her stomach pain, which occurs before meals and is only partially relieved with eating. One morning, she noticed that her bowel movements were black. She's constantly feeling weak and her friends tell her that she's looking pale and they're worried about her.



Ulcers are breaks or holes in the lining of the stomach or small intestine

About ulcers

Ulcers are breaks or holes in the lining of the stomach (gastric ulcers) or small intestine (duodenal ulcers). Ulcer pain is usually deep and burning and can extend to the back. The discomfort can be relieved with eating. Occasionally, someone with ulcers may be pain free and the first sign of a problem is bleeding.

Danger Signs

If treated early, ulcers are generally not very serious. But if they're deep enough, they can eat into a

blood vessel in the digestive tract and cause bleeding. When ulcers bleed, people usually vomit fresh blood or partially digested blood that looks like coffee grinds. Black and foul-smelling stools are also signs of a bleeding stomach. There's always a chance that a slow-bleeding ulcer can go undetected. In that case, the only signs are those of anemia, like fatigue, shortness of breath and perhaps dizziness.

The *H. pylori* connection

Contrary to popular belief, stress and worry don't cause ulcers. Most gastric and duodenal ulcers are associated with the bacterial infection *Helicobacter pylori*, or *H. pylori*. It's diagnosed with a stomach biopsy, breath test or blood test, which detects the presence of antibodies fighting the bacteria. The presence of *H. pylori* does not necessarily lead to an ulcer. But when it does, if left untreated, there's a good chance the ulcer will be chronic and come back regularly.

Another frequent risk factor for ulcer disease is the use of non-steroidal anti-inflammatories (NSAIDs) like ibuprofen or even aspirin. Either medication alone can cause ulcers but the two taken together are especially dangerous. In 1998, it was estimated that more Canadians die every year from stomach ulcer bleeding caused by NSAIDs than from motor vehicle accidents.

What to do?

If you think you've got an ulcer, you must get it checked out by your doctor. Expect a physical examination, questions about your medical history, and blood tests. If the results are positive, confirming the presence of the bacteria, you'll be prescribed a treatment to kill off the bacterial infection. The treatment is two antibiotics and one strong acid suppressing drug (PPI) and it lasts seven days. In some cases, your physician may recommend other tests, like a Barium Swallow, although most doctors today are more likely to suggest an endoscopy if further examination is required. An endoscopy is performed at a hospital or medical facility and involves the insertion of a small camera-equipped fiberoptic tube into the esophagus, stomach or small intestine of the sedated patient.

The knowledge that most ulcers are caused by bacterial infection has radically changed the treatment of ulcer disease. Once the antibiotic and PPI treatment kills off the bacteria, not only has the ulcer healed, the infection is killed off and the ulcer doesn't come back.





Darren's dyspepsia

Darren is a super-stressed, overworked college student. He studies full-time and works nights at a local gas station to pay for his schooling. Because of his hectic schedule, Darren eats lots of fast food while on the run between classes and work. He averages about five hours of sleep a night plus naps between classes and he's been taking over-the-counter ibuprofen for muscle and throat pain. After a particularly stressful night of studying, two slices of pizza and several cups of coffee, he felt a severe burning pain in the centre of his belly, just below his rib cage. He also felt bloated and uncomfortable.

What causes it?

Dyspepsia is a condition where the lining of the stomach becomes inflamed, resulting in a burning pain in the middle of the upper belly. It's usually triggered or worsened by certain types of food and drink. Although the pain may be intense, it's not serious and doesn't lead to more severe illnesses.

Food Heavy meals and foods that contain a lot of fat can trigger

WHEN ENOUGH IS ENOUGH!

Suffering from stomachaches? It's time to visit your doctor if:

- You've got ongoing or very severe symptoms
- Acid stomach wakes you up at night
- You've suddenly got gut pain that's new and unexplained — especially if you're over 50
- You're experiencing weight loss
- You're vomiting blood and your bowel movements are black
- Food is getting 'stuck' when swallowed
- Diet changes and over-the-counter medications don't help your symptoms

dyspepsia. Although commonly known as acid stomach, dyspepsia is not an indication of abnormal secretion of acids. The foods that cause acid stomach can vary from person to person. In Darren's case, the coffee and pizza probably triggered the symptoms. It's important to pin-point what foods might be contributing to your stomach pain and avoid them in the future.

Medication like NSAIDs, bisphosphonates used to treat osteoporosis, and other drugs like antibiotics can all trigger dyspepsia. Ask your pharmacist to help you determine if any of your medications might be contributing to your stomach problems.

Relaxation techniques that help manage stress can often help to improve digestion

Stress plays a role in every illness. Although it may not directly 'cause' dyspepsia, it can trigger or amplify symptoms. Darren's dyspepsia got worse during times of stress or overwork. Relaxation techniques that help manage stress can often help to improve digestion. During an outbreak of symptoms, antacids or acid suppressing medication like Pepcid AC™ and Zantac™ can also offer some relief.

Go with your gut

Upper stomach pain and acid-related problems are very common. A better understanding of what causes these conditions has led to a huge improvement in the way doctors treat them. While over-the-counter medication can help with mild cases, it's important to have any new or persistent symptoms checked out by your physician. 🍌

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