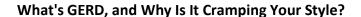


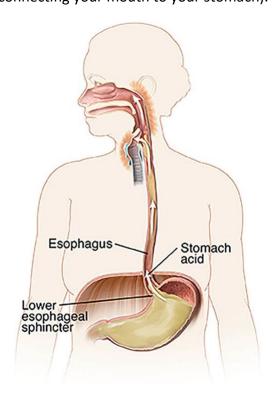
Understanding Acid Reflux (GERD)

Everything looks great when you serve your famous game-day chili. But after the first few

swallows, that bowl of chili starts to seem less like your preferred recipe and more like a bowl full of broken glass and battery acid. You notice a burning sensation in your chest, maybe minor nausea and pain. Sounds familiar? Though occasional heartburn is common, if this is something you experience frequently, you may have that dreadful four-letter word GERD. Gastroesophageal reflux disease, or GERD, is a disorder in which stomach acid routinely backflows into your esophagus. Whether you're a longtime sufferer or just starting to wonder why your chest feels on fire after that spicy burrito, read on...



GERD might sound like a scary medical term, but it's just a fancy way of saying that the acid from your stomach is taking an unwanted trip back up into your esophagus (that's the food tube connecting your mouth to your stomach).



Here's the deal: a clever little muscle called the lower esophageal sphincter (LES) usually acts like a one-way door between your esophagus and stomach. It opens to let food in, then closes to keep everything (including acid) down where it belongs. But sometimes, this door gets lazy or confused and fails to close correctly. That's when you start feeling the burn!

How Do You Know If You've Got GERD?

GERD can be sneaky and show up in different ways. Here are some signs that you might be dealing with this troublemaker:



- 1. Heartburn: This is the superstar of GERD symptoms. That burning feeling in your chest can creep up to your throat. It often shows up after meals or when you're lying down. Fun fact: it has nothing to do with your heart!
- 2. Acid Burps: Ever get a sour taste in the back of your throat? That's probably stomach acid making a surprise appearance.
- 3. Chest pain: Sometimes, GERD can cause intense chest pain. It might even make you wonder if it's your heart. While it's probably just GERD, it's always better to be safe than sorry and get any unexplained chest pain checked out.
- 4. Trouble Swallowing (Dysphagia): If food feels stuck on its way down, that could be GERD, causing irritation and narrowing in the esophagus.
- 5. Coughing and hoarseness: GERD can also be sneaky and affect your throat. If you're constantly clearing your throat or sound like you've got a frog in there, acid might be the culprit.
- 6. Asthma Acting Up: GERD can trigger or worsen asthma symptoms for some folks, especially at night.
- 7. Feeling Like There's a Lump in Your Throat: This sensation is called Globus, and while it can be annoying, it's usually harmless.
- 8. Nausea: Sometimes, GERD can make you feel a bit queasy, especially in the morning.
- 9. Bad Breath: If your breath is less than fresh, acid reflux might be to blame. It's not you; it's the GERD!

Why is this happening to me?

Good question! There could be a few reasons why you're experiencing GERD:

- Extra Weight: Carrying a few extra pounds, especially around your midsection, can pressure your stomach and make acid more likely to splash up.
- Pregnancy: If you're expecting, congratulations! But also, sorry about the reflux. Hormones and that growing baby can lead to more frequent heartburn.
- <u>Hiatal Hernia</u>: A hiatal hernia occurs when part of your stomach pokes through your diaphragm. It's like your stomach is trying to sneak upstairs where it doesn't belong. This often affects the function of the lower esophageal sphincter (LES).
- Certain Foods: Some foods are just troublemakers. Common culprits include:
 - Spicy foods (sorry, hot sauce lovers!)
 - Citrus fruits and tomatoes (they're acidic on their own)
 - Chocolate (I know, it's sad)
 - Fatty or fried foods (goodbye, late-night pizza?)
 - o Coffee and alcohol (they can relax that LES a bit too much)
- Smoking: Here's another reason to quit—it can weaken that important LES door.

- Certain Medications: Some medications, like aspirin or blood pressure drugs, can contribute to reflux.
- Eating Habits: Large meals or eating close to bedtime can increase your chances of reflux.
- Stress: Your whole body, including your digestion, can get out of whack.

Diagnosing GERD

It's important to talk with your doctor if you think you might have GERD. Here's a preview of what you can expect:

- 1. Symptom Review: Your doctor will ask many questions about what you feel when it happens and what makes it better or worse. It's like a friendly interrogation, but don't worry—you're not in trouble!
- 2. Upper Endoscopy is when the doctor uses a tiny camera to examine your esophagus and stomach. It sounds scary, but with modern sedation, it's usually quick and painless. Think of it as giving your insides their photoshoot!
- 3. pH Monitoring: This test measures the acid levels in your esophagus. You might have to wear a small device for a day or two.
- 4. Esophageal Manometry: This test checks how well your esophagus is working. It measures the pressure in your esophagus when you swallow. It's like a strength test for your food tube!
- 5. Barium Swallow: For this test, you'll drink a chalky liquid and then get X-rays taken. The barium lights up on X-rays, showing the shape of your esophagus and stomach.

Your doctor will decide which tests you need based on your symptoms. You might not need all of these, so don't worry! Remember, stress is bad!

How Can We Fix This?

Now for the good news: how to feel better! There are lots of ways to tackle GERD, from simple lifestyle changes to medications and even surgery in some cases. Let's break it down:

1. Lifestyle Tweaks

These are your first lines of defense against GERD:

• Eat Smaller Meals: Try five or six smaller meals instead of three big meals. It's like portion control for your reflux!

- Don't Lie Down Right After Eating: Give yourself at least three hours between dinner and bedtime. Late-night snacking? Try to resist!
- Lose a Little Weight: Even a small amount of weight loss can make a big difference.
- Quit smoking. Your lungs, your heart, and your esophagus will all thank you.
- Wear loose-fitting clothes. Tight clothes around your waist can put pressure on your stomach. It's a great excuse to rock those comfy pants!
- Elevate the Head of Your Bed: Prop it up by 6–8 inches.
 Gravity becomes your new best friend when fighting reflux at night. Several wedge pillows that work well are available on Amazon.

2. Diet Changes

You don't have to overhaul your diet completely, but a few tweaks can help:

- Identify your trigger foods: Keep a food diary to figure out what sets off your reflux.
 Everyone's different!
- Limit alcohol and caffeine. They can relax your LES, letting acid sneak through.
- Cut Back on Fatty Foods: They take longer to digest, meaning more time for reflux.
- Try Alkaline Foods: Foods like bananas, melons, and oatmeal might help neutralize stomach acid.

3. Medications

If lifestyle changes aren't enough, several types of medications can help:

- Antacids: These provide quick relief by neutralizing stomach acid. Think Tums or Rolaids. They're like fire extinguishers for your heartburn!
- H2 blockers: These reduce acid production. Famotidine (Pepcid) is a common one. They work a bit slower than antacids, but they provide more extended relief.
- Proton Pump Inhibitors (PPIs): These are the heavy hitters in acid reducers. They include
 medications like omeprazole (Prilosec) and esomeprazole (Nexium). They're great for
 healing the esophagus if it's been irritated by acid.

| Brand Name | Generic Name |
|------------|-------------------------------|
| Prilosec | Omeprazole |
| Nexium | Esomeprazole |
| Prevacid | Lansoprazole |
| Protonix | Pantoprazole |
| Aciphex | Rabeprazole |
| Dexilant | Dexlansoprazole |
| Zegerid | Omeprazole/Sodium Bicarbonate |

4. The New Kid on the Block: VOQUENZA (Vonoprazan)

An exciting new medication called VOQUENZA has been making waves in treating GERD. It's a potassium-competitive acid blocker (P-CAB), which is a fancy way of saying it works differently from traditional acid reducers.

Here's what makes VOQUENZA cool:

- It starts working faster than traditional PPIs.
- It provides more consistent acid control throughout the day.
- It might be effective for people who don't respond well to other medications.

While it has yet to be widely available everywhere and will be more expensive, it's something to monitor and ask your doctor about if other treatments aren't working.

5. Surgery: The Last Resort

For most people, lifestyle changes and medications do the trick. But if you're still struggling, surgery might be an option. In the past, the most common type was Nissen fundoplication, where the surgeon wraps the top of your stomach around your esophagus to reinforce that leaky door. The primary risk of Nissen fundoplication surgery is that symptom relief does not always last. Some patients need another surgery after two to three years. Common late postoperative complications include gas-bloat syndrome (up to 85%), trouble swallowing (10%-50%), diarrhea (18%-33%), and recurrent heartburn (10%-62%).

There's also a newer, less invasive option called the LINX procedure. It involves placing a ring of tiny magnetic beads around the junction of the stomach and esophagus. These beads help keep the acid where it belongs, but they still let food pass through. It's like giving your LES a tiny, high-tech assistant! This can be done with minimally invasive techniques using "Band-Aid" surgery. The beneficial effect is longlasting, has fewer complications, and, if necessary, is a reversible process. More info is available at www.linxforlife.com.

Long-term use of proton pump inhibitors (PPIs)

Some patients, after consulting Dr. Google, have expressed concerns about the safety of taking proton pump inhibitors like Prilosec long-term. Fortunately, the news is good. Proton pump inhibitors (PPIs) are highly effective for managing GERD and other acid-related disorders. Recent research, including the 2019 COMPASS trial, supports the safety of long-term PPI use.

The COMPASS Trial

The COMPASS (Cardiovascular Outcomes for People Using Anticoagulation Strategies) trial assessed the long-term safety of PPIs, focusing on patients with cardiovascular disease and those taking PPIs for gastrointestinal protection while on anticoagulant therapy.

- Study Design: The trial was a randomized, double-blind, placebo-controlled study involving over 17,000 participants. Patients were randomized to receive either pantoprazole (a PPI) or a placebo in addition to their standard cardiovascular medications.
- Key Finding: There was no significant increase in the risk of adverse events, including cardiovascular events, pneumonia, Clostridium difficile infection, bone fractures, chronic kidney disease, or dementia, among those taking PPIs compared to the placebo group.

Other studies have corroborated the COMPASS trial findings, showing the low risk of severe side effects associated with long-term PPI use. Major clinical guidelines recommend long-term PPI use for conditions requiring sustained acid suppression, emphasizing that the benefits outweigh potential risks when used appropriately.

I do see a tendency of a low B12 level in my patients on long-term PPIs, especially the older individuals and usually recommend a daily OTC vitamin B12 supplement 1000 mcg which takes care of this problem.

Complications of Chronic GERD

Acid reflux, also known as gastroesophageal reflux disease (GERD), occurs when stomach acid frequently flows back into the tube connecting your mouth and stomach (esophagus). Over time, this backwash of acid can lead to significant complications. Here are some of the potential issues associated with long-term acid reflux:

1. Esophagitis

Esophagitis is the inflammation of the esophagus. Repeated exposure to stomach acid can irritate the lining of the esophagus, leading to swelling, redness, and even bleeding. Symptoms of esophagitis include difficulty swallowing, painful swallowing, chest pain, and food getting stuck in the esophagus. Chronic esophagitis can cause scarring and narrowing of the esophagus, known as a stricture.

2. Esophageal Ulcers

Constant acid exposure can erode the esophagus's lining, forming ulcers. These sores can be painful and may cause bleeding. Symptoms of esophageal ulcers include severe chest pain, difficulty swallowing, and the sensation of food sticking in the throat. If left untreated, ulcers can lead to significant blood loss and anemia.

3. Esophageal Stricture

A stricture is the narrowing of the esophagus due to scar tissue formation from repeated acid exposure. This condition makes it difficult to swallow and can lead to the sensation of food being stuck in the chest. Strictures can significantly impact a person's quality of life, often requiring medical procedures to widen the esophagus. The most common procedure is balloon dilation. During an upper GI Endoscopy exam (EGD), a deflated "cigar-shaped" balloon is positioned within the stricture and then slowly inflated to open the narrowed segment. The scope and balloon are then removed.

4. Barrett's Esophagus

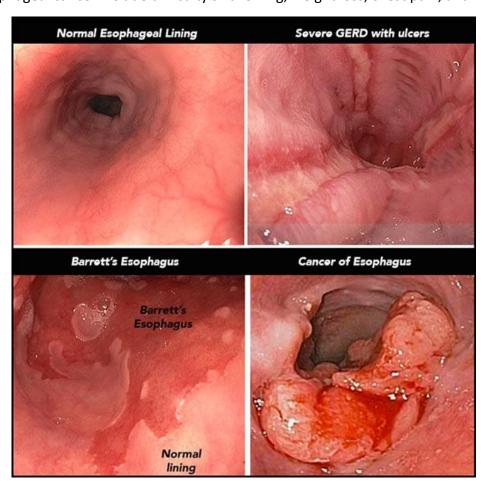
Barrett's Esophagus, named after the pioneering Australian-born British surgeon **Dr. Norman Barrett**, has profound historical significance. In 1957, Barrett was the first to describe GERD, emphasizing its potential to evolve into a premalignant condition.

Barrett's esophagus is a condition where the normal squamous cells lining the esophagus are replaced with abnormal epithelial cells, similar to those lining the stomach or intestines. This change is thought to be the body's response to continuous acid exposure. Barrett's esophagus itself doesn't cause symptoms but increases the risk of developing esophageal cancer. Patients with Barrett's esophagus require regular monitoring to detect precancerous changes early.

5. Esophageal Cancer

One of the most severe complications of long-term acid reflux is esophageal cancer, particularly adenocarcinoma. Barrett's esophagus is a significant risk factor for this type of cancer. Symptoms of esophageal cancer include difficulty swallowing, weight loss, chest pain, and

chronic cough. The prognosis for esophageal cancer can be poor if not detected early.



Living Your Best Life with GERD

Remember, having GERD doesn't mean you can't enjoy life! With a few adjustments and the proper treatment, you can keep that acid where it belongs and return to feeling great. Here are some tips for day-to-day living:

- Stay Upright After Meals: Take a walk after dinner instead of flopping on the couch.
- Chew gum: It can increase saliva production, which helps neutralize acid. Just make sure it's sugar-free!
- Sleep on Your Left Side: This position can help reduce nighttime reflux.
- Manage stress: Try yoga, meditation, or whatever helps you chill out.
- Stay Hydrated: Sip water throughout the day to dilute stomach acid.
- Eat Slowly: Take your time and enjoy your meals. It's not a race!
- Keep a symptom journal. This can help you and your doctor track what's working and what's not.

When to See Your Doctor

While it's normal to have occasional heartburn, there are some signs that it's time to check in with a healthcare professional:

- Your symptoms are interfering with your daily life.
- You're experiencing significant heartburn more than three times a week.
- You're having trouble swallowing.
- You're losing weight without trying.
- You have persistent nausea or vomiting.
- Over-the-counter medications aren't helping.

Don't hesitate to contact your doctor if you're concerned. They're there to help, and it's always best to catch problems early!

Summary

Living with GERD can be challenging, but with the right approach, you can manage your symptoms and live a whole, enjoyable life. Stay positive, work with your healthcare team, and don't let GERD keep you from doing what you love

Have you got questions? Need clarification? That's normal! Don't hesitate to reach out to your healthcare provider. Stay healthy, stay happy, and keep that acid in check!

Robert Fusco MD June 2024