Laryngopharyngeal Reflux (LPR)

What is LPR?

LPR is a condition that occurs in a person who has gastroesophageal reflux disease (GERD). Acid made in the stomach travels up the esophagus (swallowing tube). When that stomach acid gets to the throat, it is called laryngopharyngeal reflux (LPR).

What are the symptoms of LPR?

There are many symptoms of LPR, all of which relate to sensations in the throat. Fifty percent of people with LPR do not have symptoms of heartburn or an upset stomach. When there are symptoms, they include:

- Mild hoarseness
- Sensation of a lump in the throat
- Need to clear the throat
- Sensation of mucous sticking in the throat and/or post-nasal drip
- Chronic cough
- Difficulty swallowing
- Sore throat
- Red, swollen, or irritated voice box

What causes LPR?

LPR is caused by stomach acid that bubbles up into the throat as a result of GERD. Fortunately, most causes do not require medical care. They can be managed with lifestyle changes. To decrease your chance of LPR:

Do NOT:

- Eat acidic, spicy, and fatty foods
- Drink alcohol
- Smoke tobacco
- Drink caffeine-containing beverages (tea, coffee, soda, etc.)
- Eat chocolate
- Eat mint or mint-flavored foods
- Wear tight or binding clothing
- Become overly stressed – learn tools to help manage or reduce stress levels

DO:

- Maintain a healthy weight
- Avoid eating less than 2 hours before bedtime

Who gets LPR?

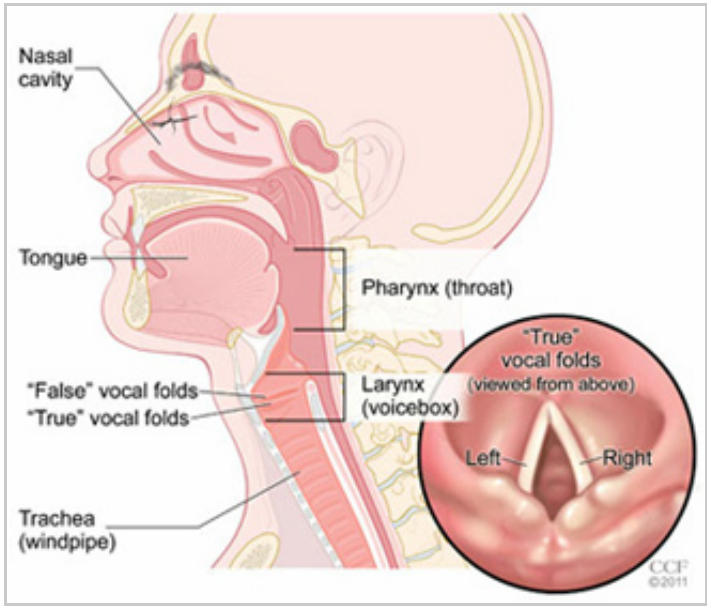
Anyone can get LPR, but it shows up more often as people age. People who have certain dietary habits, people who consistently wear tighter fitting or binding clothing, people who are overweight, and people who are overstressed are more likely to have laryngopharyngeal reflux.

How is LPR diagnosed?

Diagnosis is usually made based on the findings of irritation or swelling in the throat, more specifically in the back part of the voice box (see illustration). Most of the time, no further testing is needed to make the diagnosis. If testing is needed, three commonly used tests are a swallowing study, a direct look at the stomach and esophagus through a scope, and a pH test.

In the swallowing study, a special liquid called barium is swallowed. It coats the esophagus, stomach, and intestine so they are

outlined on an x-ray. This allows the movement of food – as it passes from the mouth to the esophagus – to be viewed. Another method used to diagnosis LPR is to pass a specific type of scope through the mouth, down the esophagus and into the stomach. The scope allows the doctor to directly view the inside of the stomach and esophagus. A third test determines the level of acid in the throat. Although cancer is rare, tests may be ordered to rule out cancer.



How is LPR treated and how can it be prevented?

There are treatment options for people who have LPR. Most of the treatments can also be used as prevention measures.

- Follow a bland diet (low acid levels, low in fat, not spicy)
- Eat frequent, small meals
- Lose weight
- Avoid the use of alcohol, tobacco, and caffeine
- Do not eat food less than 2 hours before bedtime
- Raise the head of the bed before sleeping. Place a strong, solid object (like a board) under the top portion of the mattress. This will help prop up your head and the upper portion of your body, which will help keep stomach acid from backing up into the throat.
- Avoid clearing of the throat
- Take over-the-counter medications, including antacids, such as Tums®, Maalox®, or Mylanta; stomach acid reducers, such as ranitidine (Tagamet® or Zantac®); or proton pump inhibitors, such as omeprazole (Prilosec®), pantoprazole (Protonix®), and esomeprazole (Nexium®). Only take medications, both prescribed and over-the-counter, as directed.
- In very severe cases, surgery may be recommended as treatment

What can happen if LPR is not treated?

Untreated LPR can lead to: sore throat; chronic cough; swelling of the vocal folds (see illustration); ulcers (open sores) on the vocal folds; formation of granulomas (masses) in the throat; and worsening of asthma, emphysema and bronchitis. Untreated LPR also may play a role in the development of cancer of the voice box.

What is the prognosis/outlook for LPR?

The prognosis for LPR is very good because most of the causes can be controlled if a healthy lifestyle is followed. However, if LPR goes undiagnosed, the person affected can experience the medical conditions mentioned above as well as delayed healing.

References

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The Dangers of Eating Late at Night

By JAMIE A. KOUFMAN OCT. 25, 2014

ACID REFLUX is an epidemic affecting as many as 40 percent of Americans. In addition to heartburn and indigestion, reflux symptoms may include postnasal drip, hoarseness, difficulty swallowing, chronic throat clearing, coughing and asthma. Taken together, sales of prescribed and over-the-counter anti-reflux medications exceed $13 billion per year.

The number of people with acid reflux has grown significantly in recent decades. Reflux can lead to esophageal cancer, which has increased by about 500 percent since the 1970s. And anti-reflux medication alone does not appear to control reflux disease. A Danish study published this year concluded that there were no cancer-protective effects from using the common anti-reflux medications, called proton pump inhibitors, and that regular long-term use was actually associated with an increased risk of developing esophageal cancer.

What is responsible for these disturbing developments? The answer is our poor diet, with its huge increases in the consumption of sugar, soft drinks, fat and processed foods. But there is another important variable that has been underappreciated and overlooked: our dinnertime.

I specialize in the diagnosis and management of acid reflux, especially airway reflux, which affects the throat, sinuses and lungs. Airway reflux is often “silent,” occurring without telltale digestive symptoms, like heartburn and indigestion. Most of the tens of thousands of reflux patients that I have seen over the last 35 years are well today because I treat reflux by modifying my patients’ diets and lifestyles.

Over the past two decades, I’ve noticed that the time of the evening meal

has been trending later and later among my patients. The after-work meal — already later because of longer work hours — is often further delayed by activities such as shopping and exercise.

Typical was the restaurateur who came to see me with symptoms of postnasal drip, sinus disease, hoarseness, heartburn and a chronic cough. He reported that he always left his restaurant at 11 p.m., and after arriving home would eat dinner and then go to bed. There was no medical treatment for this patient, no pills or even surgery to fix his condition. The drugs we are using to treat reflux don't always work, and even when they do, they can have dangerous side effects. My patient's reflux was a lifestyle problem. I told him he had to eat dinner before 7 p.m., and not eat at all after work. Within six weeks, his reflux was gone.

In my experience, the single most important intervention is to eliminate late eating, which in the United States is often combined with portions of large, over-processed, fatty food. Europeans have fewer cases of reflux than we do, even though many of them eat late. That's most likely from portion control. In France, for example, a serving of ice cream is typically a single modest scoop, while in America, it's often three gargantuan scoops.

For my patients, eating late is often accompanied by overeating, because many skip breakfast and eat only a sandwich at lunch. Thus the evening meal becomes the largest meal of the day. After that heavy meal, it's off to the sofa to watch television. After eating, it's important to stay upright because gravity helps keep the contents in the stomach. Reflux is the result of acid spilling out of the stomach, and lying down with a full stomach makes reflux much more likely.

And if you add an after-dinner dessert or bedtime snack? Again, reflux is a natural consequence. In a healthy young person, the stomach normally takes a few hours to empty after a moderate-size meal. In older people or those who have reflux, gastric emptying is often delayed. Further, those dessert calories tend to be high in carbohydrates and fat, and high-fat foods often create reflux by slowing digestion and relaxing the stomach valve that normally prevents reflux. Other popular but notoriously bad-for-nighttime-reflux foods and

beverages are mints, chocolate, soft drinks and alcohol.

Many of my patients find that eating earlier alleviates their allergies, sinusitis, asthma, sleep apnea and diabetes symptoms. Although these conditions may not seem linked, postnasal drip and a cough are typical reflux symptoms that can easily be mistaken for something else.

Some of my patients who arrive complaining of reflux already eat healthfully. For them, dining too late is often the sole cause of their problem. And yet, hearing that they need to change the timing of their meals is sometimes a challenge they cannot meet.

A New Yorker with reflux came to see me because both her father and uncle died of esophageal cancer and she was afraid of getting it, too. This patient was a prominent businesswoman and her nightly routine included a 9 p.m. dinner at an elegant restaurant with at least two bottles of good red wine for the table. Her reflux was serious, and I explained that changes were needed.

She listened, then left and did not come back to see me for a year. When I saw her again, she explained what had happened. “For the first two months I just hated you,” she told me, “and then for the next two months — I was having some trouble swallowing — I figured I was going to die of esophageal cancer.” Then she nudged me and added, “You know, we’re the reason that it’s not so easy to get 6 p.m. reservations at the good restaurants anymore.”

To stop the remarkable increase in reflux disease, we have to stop eating by 8 p.m., or whatever time falls at least three hours before bed. For many people, eating dinner early represents a significant lifestyle shift. It will require eating well-planned breakfasts, lunches and snacks, with healthy food and beverage choices.

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