

Questions?

Your questions are important. Call your doctor or health care provider if you have questions or concerns. Clinic staff are also available to help.

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Silent Reflux: Laryngopharyngeal Reflux Disease

Signs, symptoms, and treatments

This booklet explains the signs, symptoms, and treatments for silent reflux disease, also called laryngopharyngeal reflux (LPR).

Reflux occurs when stomach juice flows up into the *esophagus* (swallowing tube) and throat. This stomach juice contains acid and special enzymes to break down food. The stomach has a special lining that can resist the acid and digestive enzymes, but the esophagus and throat do not. Stomach juice can damage the esophagus and throat when reflux occurs.

Laryngopharyngeal reflux (LPR) occurs when stomach juice flows into the voice box or throat. This is different than gastroesophageal reflux disease (GERD), when the refluxed stomach juice flows into the esophagus only.

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The specialist who most often treats people with LPR is an otolaryngologist (ear, nose, and throat doctor). Your health care team – your otolaryngologist, family doctor, gastrointestinal doctor, and surgeons – will work together to diagnose and treat your problem.

Signs and Symptoms of LPR

Not all people with LPR have heartburn, indigestion, or the feeling of *regurgitation* (the return of partly-digested food from your stomach to your mouth). This is why we call it *silent reflux disease*. About 60% of people (60 out of 100) with LPR never have these symptoms. This makes LPR hard to diagnose.

But, the throat and voice box (*larynx*) are very sensitive to stomach acid. Even small amounts of reflux can cause injury and irritation to these body tissues. It can also affect your lungs and breathing.

The symptoms of LPR are:

- Chronic hoarseness
- Throat-clearing
- Chronic cough
- A feeling of a lump in your throat
- Throat pain or difficulty swallowing
- Nose and throat drainage
- Food sticking in your throat
- Choking episodes

Hoarseness may come and go, and it may be worse during the day. You may have a lot of drainage from your nose and throat, or you may have too much mucus or phlegm build up. You may also have feelings of suddenly being unable to breathe, or you may wake up gasping at night. You may also have heartburn.

- A full bed wedge is another option. These should extend the length of your bed. They can be bought at a foam shops. A bed wedge uses gravity to keep your stomach contents in your stomach and prevent reflux to the voice box.
- If you smoke, stop.
- Do not lie down after eating. Do not eat within 3 hours of bedtime.
- Eat a low-fat diet. Limit red meat and butter. Avoid fried foods, chocolate, cheese, and eggs.
- Avoid spicy or acidic foods and drinks.
- Avoid spearmint and peppermint.
- Avoid caffeine, especially coffee, tea, and soda pop (especially cola).
- Avoid alcoholic drinks.
- Do not overeat.
- If you are overweight, lose weight.
- Avoid bending and stooping when you are having an episode of reflux, as this can make it worse. Instead, bend your knees to lower your body. Do not bend from the waist.
- Wear clothing that is loose around your waist.
- Avoid straining and lifting heavy objects.
- Eat at least 90 minutes before you exercise.
- Learn new ways of coping with stress.

- **Surgery:** If you have severe silent reflux disease, or if you cannot take reflux medicine, your doctor may advise you to have surgery on your stomach valve. Most people who have this surgery have relief from silent reflux disease for many years.

Length of Treatment

People with silent reflux disease need some form of treatment most of the time. Other people need treatment all of the time. Some people recover completely for months or years, and then symptoms may return.

Having silent reflux disease is a like having high blood pressure. With treatment, it does not usually cause a serious medical problem. But, without treatment, silent reflux disease can be serious. Some of the long-term problems are:

- Choking episodes
- Breathing problems such as asthma, bronchitis, or narrowing of the windpipe
- Voice changes
- Damage to your esophagus

Tips for Reducing Reflux

- Take your medicines as prescribed by your doctor. Take them 30 to 45 minutes before your morning and evening meals.
- Raise the head of your bed 4 to 6 inches. Do not use pillows, as this will place too much pressure on your stomach area. Using pillows can also cause neck and back pain. Instead, place blocks, bricks, or old books under the head of your bed so that the entire bed is at an angle. Use only 1 pillow for your head.

If you have any of these symptoms, talk with your doctor, especially if you smoke. You should have a throat exam to look at your voice box. If the area looks swollen or red, you may have silent reflux disease.

Tests for Silent Reflux Disease

Your doctor may recommend different tests to confirm that you have silent reflux disease. These tests will assure that you do not have any damage from the reflux. They will also help your doctor choose the best type of treatment for you.

pH/Impedance Monitoring

This is a test that takes 24 hours to complete. A special probe is used to measure the reflux of gastric juice in your throat. It is not painful, but it can be annoying.

You will have a small, soft, flexible tube placed into your esophagus through your nose. This tube will be connected to a small computer box that you wear around your waist for 24 hours to collect data.

Manometry

For this test, a small tube is placed through your nose and into your esophagus. You will then be asked to swallow water. The test will show the strength and timing of your swallowing. This test takes 30 minutes and usually is done before pH/impedance testing.

Esophagoscopy

In an *esophagoscopy*, a scope is placed in your esophagus to look for damage to the lining caused by stomach juice acid.

- If your esophagoscopy is done by your *laryngologist*, it will be done in the doctor's office. You will sit in a chair and the scope will be placed in your nose. You will not need sedation.
- If your esophagoscopy is done by a different doctor, you will be sedated and lying down. The scope will go through your mouth.

Barium Swallow

A barium swallow is an exam that uses X-rays. The technologist will take X-ray images of your esophagus as you swallow a chalky liquid that contains barium. This test will check your swallowing. It will also show if your throat has any narrowing or is abnormal in any other way.

Other Consults

Your laryngologist may talk with other doctors about your test results. These doctors may include a *pulmonologist* (a doctor who specializes in lungs), a *gastroenterologist* (a doctor who specializes in the digestive system), or a surgeon who specializes in surgery of the digestive system.

Treatment for Silent Reflux Disease

Your doctor will talk with you about the best treatment for you. Most people with silent reflux disease need to change what and when they eat. Sometimes medicine is needed, as well.

Treatment for LPR often includes:

- **Lifestyle changes**, such as changing your diet to reduce reflux.

- **Medicines that lower stomach acid** are also usually needed. Diet and lifestyle changes alone are often not enough to control the reflux. Some of these medicines are:

- **Non-prescription antacids:** Maalox, Gelusil, Gaviscon, Mylanta, and Tums. These should be taken 4 times a day, 1 tablespoon or 2 tablets, 1 hour after each meal and before bedtime.
- **Non-prescription h₂ blockers:** Zantac75 , Pepcid AC, Axid AR, and Tagamet HB. These medicines should be taken 2 times a day or when you have symptoms.
- **Prescription h₂ blockers:** Zantac (ranitidine), Pepcid (famotidine), Axid (nizatidine), and Tagamet (cimetidine).

These medicines should be taken on an empty stomach. They are usually taken either 2 times a day or at bedtime. Take them 30 to 45 minutes before meals, or 3 hours after meals.

- **Prescription proton pump inhibitors:** Prilosec (omeprazole), Prevacid (lansoprazole), Protonix (pantoprazole), Nexium (esomeprazole), Aciphex (rabeprazole), and Zegerid (omeprazole plus sodium bicarbonate).

These are the strongest medicines available for reducing stomach acid. They **must** be taken regularly every day, 30 to 45 minutes before your morning and/or evening meal. Your doctor may prescribe them to be taken once or twice a day.