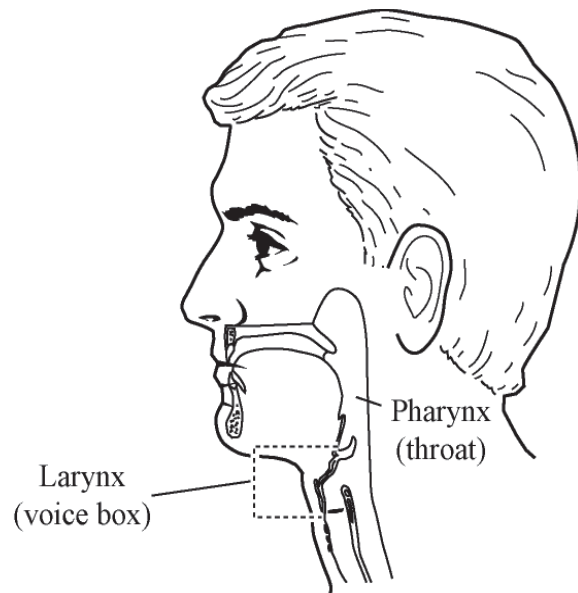


Laryngopharyngeal Reflux (LPR)

What is LPR?

LPR, also known as “silent reflux”, is when stomach acid backs up into your throat (pharynx) or voice box (larynx). If the backflow of acid happens often, it can damage tissues in your throat and voice box.

LPR is similar to Gastroesophageal Reflux (GERD), but it is not the same condition. People with GERD usually have heartburn as their main symptom. Some people with LPR may or may not have heartburn or indigestion.



Signs of LPR may include:

- Voice changes (a hoarse or raspy voice)
- Problems swallowing or choking
- Chronic cough
- A feeling of “something in my throat”
- Extra throat mucus or postnasal drip
- Bad or bitter taste in the mouth
- Heartburn or indigestion
- Feeling like you cannot take a deep breath

This handout is for informational purposes only. Talk with your doctor or health care team if you have any questions about your care.

Risk Factors of LPR include:

- Tobacco use
- Alcohol use
- Being overweight
- Stress
- Eating close to bedtime
- Eating large meals
- Lying down or exercising after eating
- Wearing tight clothes
- Drinking carbonated, caffeinated and or citrus based beverages
- Eating fried, fatty or spicy foods
- Certain foods such tomato-based products, citrus fruit, chocolate, licorice and mint

Diagnosis

Your doctor will talk to you about your symptoms and do an exam of your throat and voice box. To do the exam, the doctor will use a mirror and light and a special camera called laryngoscope. This may be a rigid laryngoscope or a flexible laryngoscope. A special test called a PH probe may also be done. The tissue in your throat and voice box may look red, irritated and swollen from the acid reflux damage. This should go away in a few months with medicine and diet and lifestyle changes.

Treatment for LPR

Medicines

Your doctor may suggest one or more medicines to help lower your stomach acid. **Always take your medicine as directed by your doctor.**

Histamine blockers are medicines that lower stomach acid by blocking the signals that tell the stomach to make the acid:

- Pepcid (famotidine)
- Tagamet (cimetidine)
- Zantac (ranitidine)

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Proton pump inhibitors are medicines that stop stomach acid from forming:

- Aciphex (rabeprazole)
- Nexium (esomeprazole)
- Prevacid (lansoprazole)
- Prilosec (omeprazole)
- Dexilant (dexlansoprazole)
- Protonix (pantatoprazole)

Take your medicine on an empty stomach about 30 to 60 minutes before eating a meal. Always eat something within an hour after taking your medicine.

Review all of your medicines including over-the-counter and dietary supplements with your doctor. Some medicines can increase the acid levels in your stomach and cause more symptoms of LPR. **Do not stop any medicines without talking to the doctor that prescribed them.**

Medicines that may increase stomach acid include:

- Non-steroidal anti-inflammatory drugs (NSAIDS) such as aspirin, ibuprofen (Advil, Motrin) and naproxen (Aleve)
- Vitamin C
- Alpha blockers
- Asthma medicines (Theophylline)
- Anticholinergic medicines
- Blood pressure medicines (Beta Blockers or Calcium Channel Blockers)
- Progesterone: Provera; Birth control pills

Diet and Lifestyle Changes

In addition to taking medicine, you may need to make diet and lifestyle changes to help lower stomach acid.

These changes include:

- Eat small more frequent meals during the day.
- Drink eight, 8-ounce glasses of water each day.

- Limit these foods and drinks:
 - Alcoholic beverages (wine, beer)
 - Caffeinated beverages
 - Carbonated beverages
 - Citrus based beverages
 - Citrus fruits
 - Nuts
 - Garlic
 - Chocolate, licorice and mint
 - Onions
 - Fatty foods
 - Spicy foods
 - Tomato-based foods (red pasta sauce, pizza or tomato soup)

Other Helpful Tips:

- Quit smoking.
- Maintain a normal body weight.
- Wear loose-fitting clothes.
- Do not bend over after a meal.
- Wait 2 to 3 hours to exercise or sing after a meal.
- Stay upright after eating. Do not lie down for 2 to 3 hours after eating.
- Raise the head of the bed 4 to 6 inches on bed blocks. Adding extra pillows or a wedge will not work.
- Eat meals 2 to 3 hours before going to bed.

The LPR should go away in a few months after taking your medicine and making changes to your diet and lifestyle.