



# Laryngopharyngeal Reflux

## “The Silent Reflux”

### ***What is Laryngopharyngeal Reflux?***

Also called Reflux laryngitis, laryngopharyngeal reflux is a condition where the acid from the stomach reaches the voicebox (larynx) through the food pipe, causing pain and hoarseness of voice. It is seen in the setting of GERD (gastroesophageal reflux disease), however, a good number of people do not suffer from any other symptoms of GERD like heartburn, regurgitation of food in the throat. Hence, LPR is sometimes also referred to as the "silent reflux", making it difficult to diagnose.

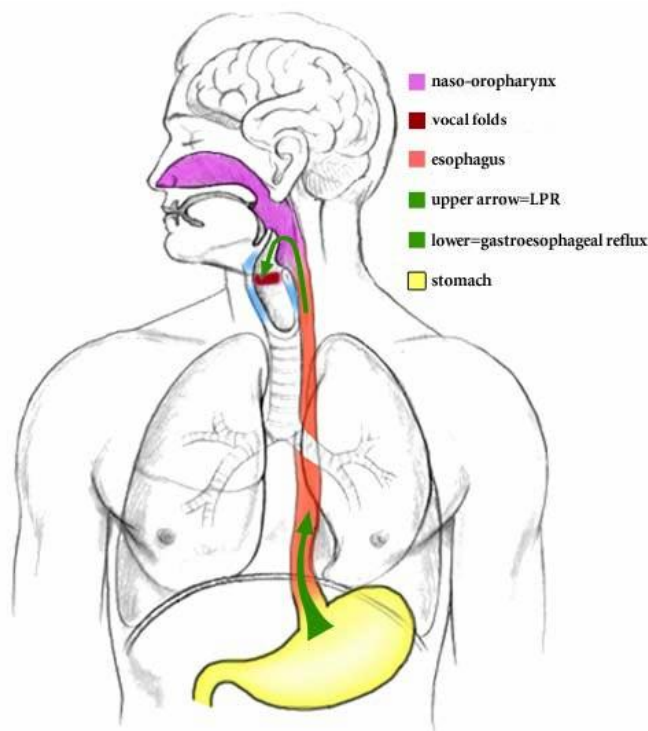


Fig. 1 Laryngopharyngeal Reflux

### ***How does acid reflux cause LPR?***

The esophagus (food pipe) has muscular sphincters on each end, that allow the movement of food only in one direction- towards the stomach, and prevent any backflow. If either or both of these sphincters start malfunctioning, they result in

regurgitation of stomach contents up through the food pipe and into the throat. The larynx is affected easily because of its closeness to the opening of the esophagus.

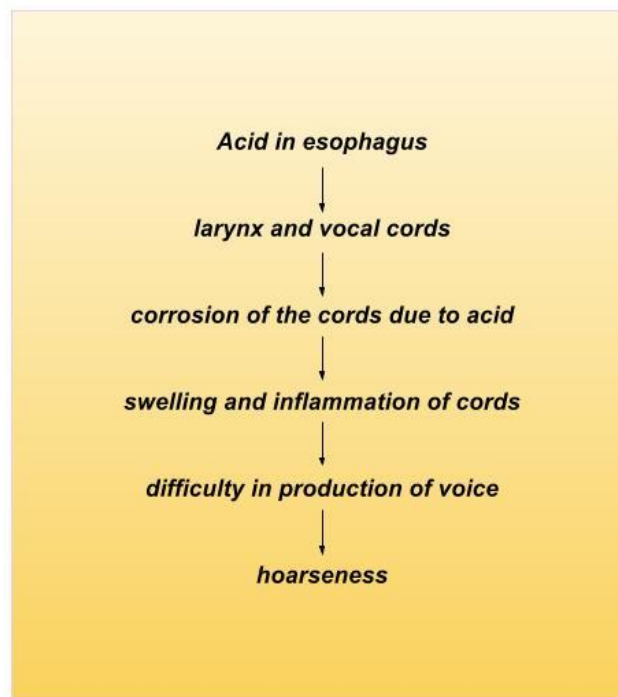


Fig. 2 Pathology of LPR

### ***Who is at risk of getting LPR?***

LPR is a disorder related to a certain type lifestyle. It may affect anyone, but it is usually seen most commonly in older people. Also, there are a few characteristics traits that put people at risk of having LPR.

- Dietary habits like eating late at night, or lying down immediately after eating
- Wearing tightly fitted clothes that increase the pressure on stomach
- Being stressed or overworked, and anxious
- Being overweight with limited physical activity

### ***What are the symptoms?***

The most common manifestations of LPR are-

- Hoarseness of voice, with difficulty in speaking (dysphonia)
- Dry chronic cough, with increased trouble when sleeping or lying down
- Need to clear the throat frequently
- Feeling of having a lump in the throat
- Mild pain in throat
- Difficulty in swallowing
- Sensation of something sticky in the throat
- Difficulty in breathing (in rare cases)

Although LPR is uncommon in children, but when it occurs, it has different symptoms compared to adults, like recurring tonsillitis and sore throat.

***Are there any tests to diagnose?***

Diagnosis of LPR is usually made based on the patient's complaints and physical examination of the larynx by the doctor using *indirect laryngoscopy* (a mirror and a small light) to see the changes at the back of the throat. In LPR, the vocal cords show

redness and swelling, with increased number of small capillaries. There is also increased the amount of mucus seen in the larynx.

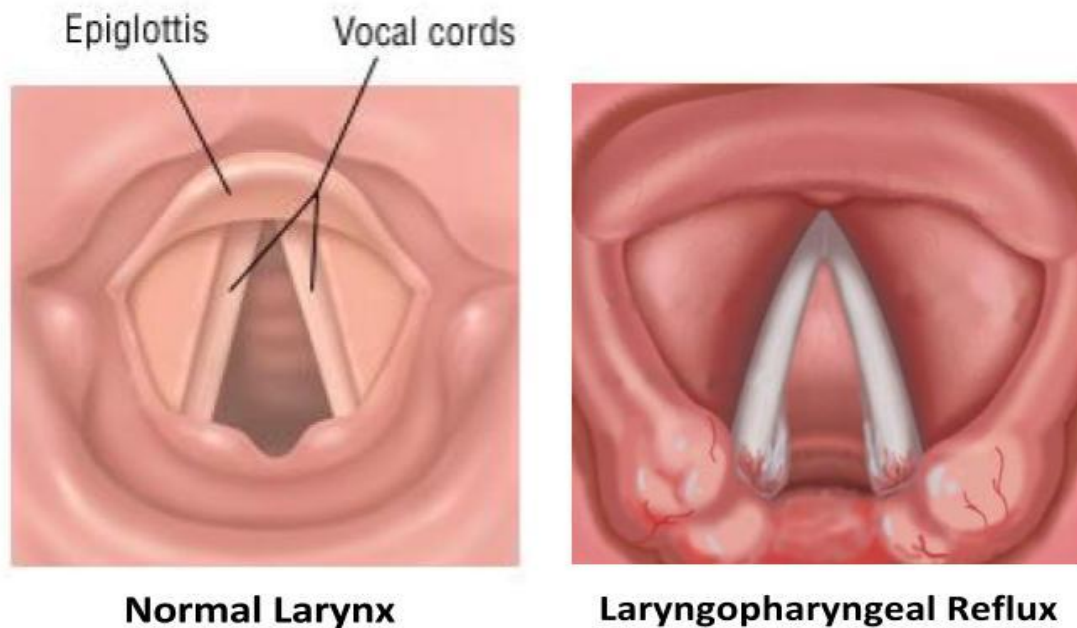


Fig. 3 Changes seen in LPR

Ordinarily, there is no need for extensive diagnostic evaluation to reach the diagnosis. However, the doctor may advise certain imaging tests to rule out other diseases like cancer (rare), nodules or polyps on vocal cords.

In a few obscure cases, a more detailed examination is needed to reach the diagnosis. The tests used are-

- *A throat ph test*- to check the presence of acid in throat
- *Barium swallow radiography*- where you swallow a medium that helps the doctor study the lining of your food pipe and stomach, for signs of GERD
- *Endoscopy*- to directly view the lining of esophagus and stomach using a flexible scope

### ***Are there any complications?***

If LPR is left untreated, it can be responsible for causing-

- A chronic cough and sore throat
- Masses or granuloma in the voicebox
- Swelling or nodules on the vocal cords
- Aggravation of underlying asthma or bronchitis

Though not enough evidence is available, but some researchers claim that LPR may play a role in causing laryngeal cancer.

### ***How is it treated?***

Being a lifestyle related disorder, LPR can be managed by making a few modifications to one's routine habits, in addition to a few acidity regulating medications. Measures that can be taken to treat LPR are-

- Medications like **Proton pump inhibitors (PPIs)** are available over the counter for management of acidity. These are the preferred drugs for managing LPR. For example, omeprazole, pantoprazole and rabeprazole. Other drugs include antacids like Gelusil, and acidity regulators like ranitidine (RANTAC). All

medication should be taken only after consultation with a doctor and as directed

- Raise the head side of your bed before sleeping, to prop up your head. This prevents regurgitation of stomach contents when you are sleeping.
- Do not clear your throat frequently to avoid damage to the inner lining of the throat.

### ***What precautions can be taken to prevent LPR?***

LPR is an outcome of adverse dietary and sleeping habits most of the times. Giving oneself a push in the healthy direction may reduce the risk of developing LPR profoundly.

#### **=What to do=**

- Go for small, frequent meals instead of eating in one time
- Consume food with low acid levels, low fat and less spices
- Maintain a healthy weight as per your height
- Incorporate physical exercise in your daily routine
- Use meditation and other relaxation exercises

#### **=What NOT to do=**

- Eating less than 2 hours before sleep
- Consuming tobacco or alcohol or caffeine, especially near bedtime
- Eating chocolate in excess
- Eating mint or mint-flavoured items
- Wearing tightly fitted attire
- Being stressed or over-worked

### ***What is the outlook for people with LPR?***

Laryngopharyngeal reflux is one of the outcomes of esophageal reflux diseases and it is considered fairly benign, as adopting a healthy lifestyle can completely reverse the disorder, with complete recovery from the symptoms. However, it is not to be taken

lightly or ignored, for once the complications set in, the quality of life of the affected person may go downhill.

Image references-

- Fig. 1- [image adopted from: <https://s-media-cache-ak0.pinimg.com/originals/b4/ee/b9/b4eeb986ceee270dd685665432018dc4.jpg>]
- Fig. 3- [images adopted from: <http://www.larianmd.com/voice-swallowing-disorders/>, <https://www.drugs.com/health-guide/images/205316.jpg>]
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