

# Laryngopharyngeal Reflux (LPR) / Reflujo Laringofaríngeo (RLF)

Under normal physiological conditions, during the act of swallowing, ingested food and liquids pass through the esophagus (the alimentary canal) and enter the stomach via the lower esophageal sphincter (LES), a valve that transiently relaxes to permit gastric entry, where the contents are subjected to chemical digestion by gastric acid.

Tongue Pharynx (throat) vocal folds Larynx "False" vocal folds (voicebox) "True" vocal folds Trachea (windpipe) Occasionally, inappropriate or

Nasal cavity

transient relaxation of the LES allows

gastric contents, particularly hydrochloric acid, to reflux back into the esophagus — a phenomenon commonly referred to as gastroesophageal reflux. This can manifest as the typical symptom of pyrosis (heartburn).

However, in some cases, small quantities of gastric acid may ascend beyond the upper esophageal sphincter (UES) into the laryngopharyngeal region, affecting the larynx (voice box) and pharynx (throat). These structures are significantly more susceptible to mucosal injury from acid exposure compared to the esophageal lining.

Although gastroesophageal reflux disease (GERD) and laryngopharyngeal reflux (LPR) may coexist, they are pathophysiologically distinct entities. Notably, the majority of patients with LPR do not report classic heartburn symptoms.

# Symptoms of Laryngopharyngeal Reflux (LPR)



LPR may present with a variety of symptoms, many of which are extraesophageal and not associated with typical heartburn. Common clinical signs and symptoms include:

- Hoarseness or dysphonia (chronic or intermittent)
- Otalgia (ear pain), often referred
- Postnasal drip
- Frequent throat clearing
- Globus sensation (a feeling of a lump or tightness in the throat)
- Thick mucus in the throat
- Chronic cough, often non-productive
- Bitter or sour taste in the mouth (acid regurgitation)
- Odynophagia or dysphagia (pain or difficulty when swallowing)

### **Strategies for Symptom Management and Relief**

Management of LPR typically involves a multifaceted approach, including dietary modifications, lifestyle changes, and—when indicated—pharmacologic therapy prescribed by a healthcare professional.

## 1. Dietary Modifications:

- **Increase water intake:** Consider drinking alkaline water with meals to help neutralize acid and reduce mucosal irritation.
- **Limit caffeine intake:** Caffeine may have a drying effect on the gastric mucosa and can contribute to LES relaxation, promoting reflux.
- **Reduce alcohol consumption:** Alcohol, like caffeine, can irritate the stomach lining and lower LES tone.
- **Lower fat intake:** High-fat and fried foods slow gastric emptying, increasing the risk of acid reflux.
- Avoid or minimize the following reflux-triggering foods:



- Chocolate
- o Citrus fruits and pineapple
- Mint
- Spicy foods
- o Tomatoes and tomato-based products
- **Eat smaller meals:** Large meals increase intra-abdominal pressure and gastric acid production, promoting reflux episodes.

#### 2. Lifestyle and Behavioral Modifications:

- Avoid lying down immediately after eating; wait at least 2–3 hours.
- Elevate the head of the bed by 6–8 inches to reduce nighttime reflux.
- Maintain a healthy body weight, as excess weight increases intra-abdominal pressure.
- Avoid tight-fitting clothing around the abdomen.

#### 3. Pharmacological Treatment:

If your healthcare provider has prescribed medication, please take it exactly as directed. There are two main types of medications used to treat reflux: **proton pump inhibitors (PPIs)** and **H2 receptor blockers**. It may take several weeks or even months to notice significant improvement in symptoms with these medications.

Proton pump inhibitors work best when taken 30 to 60 minutes before main meals, as they help reduce acid production in anticipation of food intake.

Do **not stop reflux medications abruptly** once you've started them, as doing so may lead to a worsening of symptoms such as throat irritation or heartburn. This is known as the **"rebound effect."** 





