

## *Laryngopharyngeal Reflux Disease and Recommendations to Prevent Acid Reflux*

### **What is Reflux?**

When we eat something, the food reaches the stomach by traveling down a muscular tube called the esophagus. Once food reaches the stomach, the stomach adds acid and pepsin (a digestive enzyme) so that the food can be digested. The esophagus has two sphincters (bands of muscle fibers that close off the tube) that help keep the contents of the stomach where they belong. One sphincter is at the top of the esophagus (at the junction with the upper throat) and one is at the bottom of the esophagus (at the junction with the stomach). The term REFLUX means “a backward or return flow,” and it usually refers to the backward flow of stomach contents up through the sphincters and into the esophagus or throat.

### **What is GERD and What is LPRD?**

Some people have an abnormal amount of reflux of stomach acid up through the lower sphincter and into the esophagus. This is referred to as GERD or Gastroesophageal Reflux Disease. If the reflux makes it all the way up the upper sphincter and into the back of the throat, it is called LPRD or Laryngopharyngeal Reflux Disease. The structures in the throat (pharynx and larynx) are much more sensitive to stomach acid and digestive enzymes, so smaller amounts of reflux into this area can result in more damage.

### **Why Don't I Have Heartburn or Stomach Problems?**

This is a question that is often asked by patients with LPRD. The fact is that very few patients with LPRD experience significant heartburn. Heartburn occurs when the tissue in the esophagus becomes irritated. Most of the reflux events that can damage the throat happen without the patient ever knowing that they are occurring. We have learned from pH probe testing that most LPRD occurs during the day. Singers may be at increased risk for reflux merely by using improper diaphragmatic breathing support.

### **Symptoms of LPRD:**

- Hoarseness - especially hoarseness that occurs only in the morning or evening
- Chronic (ongoing) cough
- Frequent throat clearing
- Pain or sensation in throat
- Feeling of lump in throat
- Problems while swallowing
- Bad / bitter taste in mouth (especially in morning)
- Asthma-like symptoms
- Referred ear pain
- Post-nasal drip
- Singing: difficulty with high notes

### **Diagnosis of LPRD:**

The following signs seen by the physician are strong indicators of LPRD:

- Red, irritated arytenoids (structures at the back of the vocal folds)
- Red, irritated larynx
- Small laryngeal ulcers
- Swelling of the vocal folds
- Granulomas in the larynx
- Evidence of hiatal hernia (may or may not be associated with reflux)
- Significant laryngeal pathology of any type

### **Definitive Diagnostic Testing for LPRD:**

We believe that we can be fairly certain of the diagnosis from the history and physical examination. Based on this presumptive diagnosis, we usually begin treatment for a trial period. However, the 24-hour Pharyngo-Esophageal pH monitoring is the gold standard for monitoring reflux events associated with LPRD. A small tube is passed through the

