Doctor, Please Explain Gastroesophageal Reflux Disease and Laryngopharyngeal Reflux

What is GERD?
Gastroesophageal reflux, often referred to as GERD, occurs when acid from the stomach backs up into the esophagus. Normally, food travels from the mouth, down through the esophagus and into the stomach. A ring of muscle at the bottom of the esophagus, the lower esophageal sphincter (LES), contracts to keep the acidic contents of the stomach from "refluxing" or coming back up into the esophagus. In those who have GERD, the LES does not close properly, allowing acid to move up the esophagus. When stomach acid touches the sensitive tissue lining the esophagus and throat, it causes a reaction similar to squirting lemon juice in your eye. This is why GERD is often characterized by the burning sensation known as heartburn.

In some cases, reflux can be SILENT, with no symptoms until a problem arises. Almost all individuals have experienced reflux (GER), but the disease (GERD) occurs when reflux happens on a frequent basis often over a long period of time.

What is LPR?
During gastroesophageal reflux, the acidic stomach contents may reflux all the way up the esophagus, beyond the upper esophageal sphincter (a ring of muscle at the top of the esophagus), and into the back of the throat and possibly the back of the nasal airway. This is known as laryngopharyngeal reflux (LPR), which can affect anyone. Adults with LPR often complain that the back of their throat has a bitter taste, a sensation of burning, or something "stuck." Some may have difficulty breathing if the voice box is affected.
In infants and children, LPR may cause breathing problems such as: cough, hoarseness, stridor (noisy breathing), croup, asthma, sleep disordered breathing, feeding difficulty (spitting up), turning blue (cyanosis), aspiration, pauses in breathing (apnea), apparent life threatening event (ALTE), and even a severe deficiency in growth. Proper treatment of LPR, especially in children, is critical.

What are the symptoms of GERD and LPR?
The symptoms of GERD may include persistent heartburn, acid regurgitation, nausea, hoarseness in the morning, or trouble swallowing. Some people have GERD without heartburn. Instead, they experience pain in the chest that can be severe enough to mimic the pain of a heart attack. GERD can also cause a dry cough and bad breath. Some people with LPR may feel as if they have food stuck in their throat, a bitter taste in the mouth on waking, or difficulty breathing, although uncommon.

If you experience any of the following symptoms on a regular basis (twice a week or more) then you may have GERD or LPR. For proper diagnosis and treatment, you should be evaluated by your primary care doctor for GERD or an otolaryngologist—head and neck surgeon (ENT doctor).

Who gets GERD or LPR?

Women, men, infants, and children can all have GERD. This disorder may result from physical causes or lifestyle factors. Physical causes can include a malfunctioning or abnormal lower esophageal sphincter muscle (LES), hiatal hernia, abnormal esophageal contractions, and slow emptying of the stomach. Lifestyle factors include diet (chocolate, citrus, fatty foods, spices), destructive habits (overeating, alcohol and tobacco abuse) and even pregnancy. Young children experience GERD and LPR due to the developmental immaturity of both the upper and lower esophageal sphincters.

Unfortunately, GERD and LPR are often overlooked in infants and children leading to repeated vomiting, coughing in GER and airway and respiratory problems in LPR such as sore throat and ear infections. Most infants grow out of GERD or LPR by the end of their first year; however, the problems that resulted from the GERD or LPR may persist.

What role does an ear, nose, and throat specialist have in treating GERD and LPR?
A gastroenterologist, a specialist in treating gastrointestinal orders, will often provide initial treatment for GERD. But there are ear, nose, and throat problems that are either caused by or associated with GERD, such as hoarseness, laryngeal (singers) nodules, croup, airway stenosis (narrowing), swallowing difficulties, throat pain, and sinus infections. These problems require an otolaryngologist—head and neck surgeon, or a specialist who has extensive experience with the tools that diagnose GERD and LPR. They treat many of the complications of GERD, including: sinus and ear infections, throat and laryngeal inflammation and lesions, as well as a change in the esophageal lining called Barrett's esophagus, which is a serious complication that can lead to cancer. Your primary care physician or pediatrician will often refer a case of LPR to an otolaryngologist—head and neck surgeon for evaluation, diagnosis, and treatment.

Diagnosing and Treating GERD and LPR
In adults, GERD can be diagnosed or evaluated by a physical examination and the patient's response to a trial of treatment with medication. Other tests that may be needed include an endoscopic examination (a long tube with a camera inserted into the nose, throat, windpipe, or esophagus), biopsy, x-ray, examination of the throat and larynx, 24 hour pH probe, acid reflux testing, esophageal motility testing (manometry), emptying studies of the stomach, and esophageal acid perfusion (Bernstein test). Endoscopic examination, biopsy, and x-ray may be performed as an outpatient or in a hospital setting. Endoscopic examinations can often be performed in your ENT's office, or may require some form of sedation and occasionally anesthesia.

Symptoms of GERD or LPR in children should be discussed with your pediatrician for a possible referral to a specialist.

Most people with GERD respond favorably to a combination of lifestyle changes and medication. On occasion, surgery is recommended. Medications that could be prescribed include antacids, histamine antagonists, proton pump inhibitors, pro-motility drugs, and foam barrier medications. Some of these products are now available over-the-counter and do not require a prescription.

Children and adults who fail medical treatment or have anatomical abnormalities may require surgical intervention. Such treatment includes fundoplication, a procedure where a part of the stomach is wrapped around the lower esophagus to tighten the LES, and endoscopy, where hand stitches or a laser is used to make the LES tighter.

(BOX)
Adult lifestyle changes to prevent GERD and LPR

- Avoid eating and drinking within two to three hours prior to bedtime
- Do not drink alcohol
- Eat small meals and slowly
- Limit problem foods
    - Caffeine
    - Carbonated drinks
    - Chocolate
    - Peppermint
    - Tomato and citrus foods
    - Fatty and fried foods
- Lose weight
- Quit smoking
- Wear loose clothing