



FACIAL FOCUS

COSMETIC SURGERY

LPR (laryngopharyngeal reflux) Stomach Acid in the Throat

LPR is a recently described condition of acid reflux from the stomach into the throat. LPR can cause symptoms that mimic or worsen allergy or sinus drainage, asthma, bronchitis or voice problems. Up to **80% of people with LPR are unaware of the acid** and don't feel heartburn or indigestion. LPR is sometimes referred to as "silent reflux". LPR occurs in children and adults and may not be recognized because of the absence of the usual stomach symptoms.

Some of the common symptoms of LPR are:

- Post nasal drip
- Sensation of something in the throat
- Frequent throat clearing
- Cough-usually dry, sometimes severe spasms causing gagging
- Hoarseness or voice problems
- Allergy or asthma or persistent cough that **doesn't respond to usual treatments**

Unlike typical acid reflux (GERD or heartburn), LPR occurs due to a weakness in the muscle at the top of the esophagus (swallowing tube) that prevents reflux into the throat. LPR may occur in the upright position but often happens during the night. Stomach acid and digestive juices may squirt up into the throat without any taste or perception. This irritates and damages the tender tissues of the vocal cords (voice box), larynx, and pharynx (back of the nose). This may trigger mucus formation for protection or cause mucus from the lungs to stick in the vocal cords, giving the sensation of drainage and triggering cough and throat clearing. Over time the vocal cords can become damaged resulting in hoarseness and the cough and throat clearing can become chronic. Then the cough and LPR become self-perpetuating, sometimes for months or years.

LPR is treated with the same medications and lifestyle changes used for typical heartburn.

These can include:

- Proton pump inhibitors-Prescription Aciphex, Nexium, Prevacid, Prilosec, Protonix, Zegerid. Four brands are available over the counter
- H2 blockers-over the counter Zantac (ranitidine), 150 mg twice daily
- Antacid liquids like Mylanta and Maalox (Tums and Alkaseltzer aren't usually very helpful), Gaviscon seems to be the best for LPR
- Decreasing intake of caffeine, spicy foods, acidic foods, mints, wine/alcoholic beverages
- No eating for 2 hours before bed

- Stopping smoking
- Losing weight
- **Sleeping on a slanted wedge pillow (not propping up on pillows) or raising the head of the bed 3-6 inches on bricks or blocks to tilt the whole body using gravity to keep the acid in the stomach**

LPR is usually diagnosed by the patient's symptoms and a trial of medications and lifestyle changes. Diagnostic tests can include a barium swallow x-ray, nasopharyngoscopy (looking at the throat through a fiber optic tube passed through the nose) and 24 hour pH probe (leaving a sensor through the nose into the stomach or throat and recording acid readings for 24 hours).

Take _____ 20mg omeprazole _____ or one of the following: generic esomeprazole 40mg, lansoprazole 30mg, omeprazole 40mg, omeprazole/sodium bicarbonate, pantoprazole 40mg, or rabeprazole 20mg

twice daily 30 to 60 minutes *prior* to meals. It is ok to take the medicine after meals but it is more effective prior to meals.

If your insurance company will not cover the above medication there are several over the counter alternatives:

Prilosec (generic omeprazole) - 40mg (two 20mg tablets at one time) twice daily before meals;
Or Prevacid (generic lansoprazole) - 30mg (two 15mg capsules at one time) twice daily before meals;

Or Nexium - 40mg (two 20mg capsules at one time) twice daily before meals.

Note: These doses exceed those recommended on the over the counter package and are necessary for initial treatment of LPR

While improvement may occur in days, it may take 1-2 months or longer for complete resolution of symptoms and healing of the throat and vocal cords. After several months, some patients can reduce the medicine to once daily prior to breakfast or discontinue. If you lower the dosage or discontinue and have recurrence of symptoms you should resume the medicine or increase the dosage back to twice daily.