

Gastro-oesophageal and Laryngopharyngeal Reflux – Patient Information sheet

Gastroesophageal reflux disease (GORD) is a digestive disorder that affects the lower oesophageal sphincter (LES)- the muscle connecting the oesophagus with the stomach. Many people, including pregnant women and patients with hiatal hernia, suffer from heartburn or acid indigestion caused by GORD.

In most cases, heartburn can be relieved through diet and lifestyle changes; however, some people may require medication or surgery.

WHAT IS GASTRO-OESOPHAGEAL REFLUX?

Gastro-oesophageal reflux is the return of the stomach's contents back up into the oesophagus.

In normal digestion, the LES opens to allow food to pass into the stomach and closes to prevent food and acidic stomach juices from flowing back into the oesophagus. Gastro-oesophageal reflux occurs when the LES is weak or relaxes inappropriately allowing the stomach's contents to flow up into the oesophagus.

The severity of GORD depends on LES dysfunction as well as the tube and amount of fluid brought up from the stomach and the neutralizing effect of saliva.

WHAT IS LARYNGOPHARYNGEAL REFLUX?

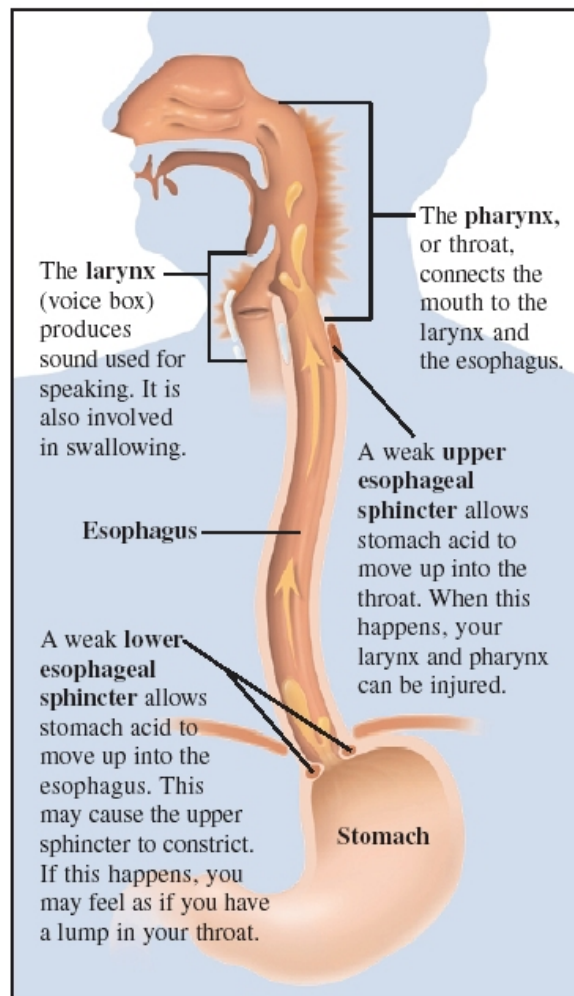
Laryngopharyngeal reflux (LPR) is a distinct entity to gastro-oesophageal reflux disease (GORD). It is the retrograde passage of gastric contents beyond the **upper oesophageal sphincter**, with contamination of the larynx (voicebox), pharynx (throat) and lungs. In susceptible patients, this exposure causes injury to the lining of these areas, resulting in hoarseness, globus (sensation of lump in the throat), cough, thick mucous, post nasal drip and throat pain. Less commonly, halitosis, recurrent pharyngitis and nose and ear infections may be associated with LPR.

These symptoms often cause compensatory manouvers, called 'secondary symptoms' of habitual cough, throat clearing and repetitive swallowing which worsen the trauma already occurring in the larynx.

WHAT FACTORS CONTRIBUTE TO GORD?

Dietary and lifestyle choices may contribute to GORD/LPR. Certain foods and beverages, including chocolate, peppermint, fried or fatty foods, coffee, tomato sauce, citrus juices (like orange juice) or alcoholic beverages, may weaken the LES causing reflux and heartburn. Tight clothing should be avoided. Studies show that cigarette smoking relaxes the LES. Obesity and pregnancy can also cause GORD. Also, certain medication can weaken the LES pressure.

How Reflux Affects Your Throat



WHAT DOES HEARTBURN/GORD FEEL LIKE?

Heartburn, or indigestion, is the most common symptom of GORD and usually feels like a burning chest pain beginning behind the breastbone and moving upward to the neck and throat. Many people say it feels like food is coming back into the mouth leaving an acid or bitter taste.

The burning, pressure, or pain of heartburn can last as long as 2 hours and is often worse after eating. Lying down or bending over can also result in heartburn. Many people obtain relief by standing upright or by taking an antacid that clears acid out of the oesophagus.

Occasionally, GORD may present only with nausea or frequent belching with the classic burning pain. LPR, in contrast, may not present with heartburn or belching, but rather with symptoms affecting the throat and voice.

WHAT IS THE TREATMENT FOR GORD/LPR?

Doctors recommend lifestyle and dietary changes for most people with GORD. Treatment aims at decreasing the amount of reflux or reducing damage to the lining of the oesophagus from refluxed materials.

- 1. Avoiding certain foods and beverages:** These foods include chocolate, peppermint, fatty foods, coffee, all carbonated drinks and alcohol. Foods and beverages that can irritate a damaged oesophageal lining, such as citrus fruits and juices, tomato products, spicy food and pepper, should also be avoided.
- 2. Anti-inflammatories like aspirin, ibuprofen and naprosyn should also be avoided.**
- 3. Meals:** Decreasing the size of portions at mealtime may also help control symptoms. Eating meals at least 2 to 3 hours before bedtime may lessen reflux by allowing the acid in the stomach to decrease and the stomach to empty partially. In addition, **being overweight worsens symptoms.**
- 4. Stop Smoking.**

5. **Elevating the head of the bed:** Elevate your bedhead by 6-inches reduces heartburn by allowing gravity to minimize reflux of stomach contents into the oesophagus. Propping yourself up with extra pillows may not be effective as 'kinking' of the oesophagus can occur.

MEDICATIONS

Medications include histamine H2 receptor antagonists, proton pump inhibitors, prokinetics (for patients with known oesophageal dyskinesia), mucosal cytoprotectants and tricyclic antidepressants (for those in whom laryngeal neuropathy is suspected).

Proton pump inhibitors omeprazole, rabeprazole and pantoprazole offer once-daily dosing and have shown excellent symptom reduction, in conjunction with strict lifestyle modifications, continued for 8 weeks. While proton pump inhibitors are safe and well tolerated, common side effects, including headache, abdominal pain and bloating, diarrhoea, and nausea, affect up to 2% of patients.

H2 Receptor blockers (Zantac) work in a slightly different way to reduce acid reflux, and may be helpful in addition to proton pump inhibitors.

Antacids taken regularly can neutralize acid in the oesophagus and stomach and stop heartburn. Many people find that non-prescription antacids provide temporary or partial relief. These compounds form a barrier that prevents acid reflux from occurring. Long-term use of antacids, however, can result in side-effects, including diarrhoea, altered calcium metabolism (a change in the way the body breaks down and uses calcium), and build-up of magnesium in the body. Too much magnesium can be serious for patients with kidney disease.

WHAT IF SYMPTOMS PERSIST?

Doctors use a variety of tests and procedures to examine a patient with chronic heartburn.

Endoscopy is an important procedure for individuals with chronic GORD. By placing a tiny video camera into the oesophagus, the doctor may see inflammation or irritation of the tissues lining the oesophagus. If the findings of the endoscopy are abnormal or questionable, *biopsy* (removing a small sample of tissue) from the lining of the oesophagus may be helpful.

Barium Swallow studies use ingestion of barium and a series of xrays of the oesophagus and stomach to find both movement and structural problems such as scars, strictures and pouches. It may also be helpful in diagnosing a hiatus hernia. Early esophagitis is not well demonstrated and decreases the overall sensitivity of barium swallows, especially compared to tests such as 24-hour pH monitoring. This is why many clinicians reserve barium swallow for the evaluation of patients with GORD and symptoms that include dysphagia (difficulty swallowing) or regurgitation.

Other imaging studies include **nuclear medicine tests**, which are of particular use in children. These tests may be able to quantify the amount of reflux occurring, however these results are often combined with other testing modalities (such as endoscopy) to confirm the diagnosis of GORD.

Oesophageal manometric studies - pressure measurements of the oesophagus- occasionally help identify critically low pressure in the LES or abnormalities in oesophageal muscle contraction.

For patients in whom diagnosis is difficult, doctors may measure the acid levels inside the oesophagus through pH testing. Testing pH monitors the acidity level of the oesophagus and symptoms during meals, activity and sleep.

DOES GORD REQUIRE SURGERY?

A small number of people with GORD may need surgery because of severe reflux and poor response to medical treatment. Fundoplication is a surgical procedure that increases pressure in the lower oesophagus. However, surgery should not be considered until all other measures have been tried and have failed.

WHAT ARE THE COMPLICATIONS OF LONG-TERM GORD/LPR?

Sometimes GORD/LPR results in serious complications.

Oesophagitis may cause oesophageal bleeding or ulcers. In addition, a narrowing or stricture of the oesophagus may occur from chronic scarring. Some people develop a condition known as Barrett's oesophagitis which is severe damage to the skin-like lining of the oesophagus, and may be a precursor to oesophageal cancer.

LPR is one of the most common and important disorders of upper airway inflammation and predicts oesophageal adenocarcinoma, laryngeal granuloma, polyps, Reinke's oedema, stenosis and chronic laryngitis. LPR is correlated with laryngeal cancer, although causation is unconfirmed, therefore appropriate treatment is aimed at patient education, minimising symptoms and reducing these risks associated with chronic mucosal trauma.

References

Fraser-Kirk, K 2017. Laryngo[haryngeal Reflux: A confounding cause of aerodigestive dysfunction. Australian Family Physician. Volume 46, No.1, January/February 2017 Pages 34-39

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