

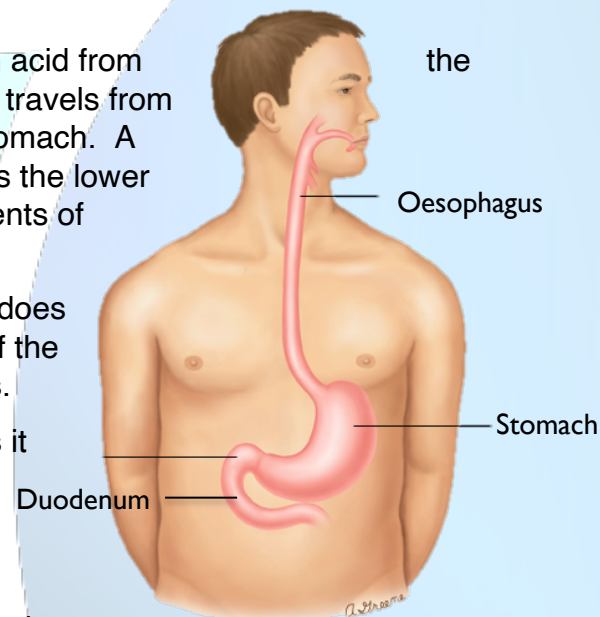
Patient information on Gastro-oesophageal Reflux (GORD) & Laryngopharyngeal Reflux (LPRD) Disease

Who is this information for?

This information is for patients, families and carers following a diagnosis of gastro-oesophageal or laryngopharyngeal reflux.

What is gastro-oesophageal reflux disease?

- Gastro-oesophageal reflux disease (GORD) occurs when acid from stomach travels back up the oesophagus. Normally food travels from the mouth, down through the oesophagus and into the stomach. A ring of muscle at the bottom of the oesophagus, known as the lower oesophageal sphincter, contracts to keep the acidic contents of the stomach from refluxing into the oesophagus.
- In patients with GORD, the lower oesophageal sphincter does not close properly. This allows acid and other contents of the digestive tract to move up and reflux into the oesophagus.
- When stomach acid touches the lining of the oesophagus it can cause a burning sensation known as heartburn.



What is laryngopharyngeal reflux disease?

- Laryngopharyngeal reflux disease (LPRD) occurs when stomach acid refluxes beyond the oesophageal sphincter, into the back of the throat and possibly the back of the nasal airway.
- Adults with LPRD often do not complain of typical heartburn symptoms, which is why it is often known as “silent reflux”. Instead, they may complain of a dry cough, a hoarse voice, or a feeling of a lump in the back of their throat. Sometimes, they may complain of discomfort in their throat or a bitter taste.
- Rarely breathing difficulties can occur if the voice box is affected.

What are the symptoms of reflux disease?

Symptoms of GORD include:

- Heartburn and Acid regurgitation
- Nausea
- Occasional difficulty swallowing

Symptoms of LPRD include:

- Hoarseness
- Sensation of a lump in the throat
- Dry cough
- Sore throat
- Bad breath
- Difficulty swallowing

How are GORD and LPRD diagnosed?

- GORD & LPRD can be diagnosed on history, examination and by the patient's response to treatment with medication.
- Additional tests may be undertaken such as a nasal endoscopic examination, though the findings on examination can often be due to non-reflux related causes, and so, are non-specific.
- Increasingly these days, patients may undergo objective testing such as:
 - 24 hour Oesophageal +/- Pharyngeal pH & impedance probe testing – which tests for the reflux of liquids up the oesophagus and into the pharynx, and also measures the acidity (pH), of those liquids.
 - This test is considered the 'gold standard' test for the diagnosis of GORD and LPRD
 - Oral salivary pepsin testing – which tests a patient's saliva for the presence of pepsin, an enzyme only produced and secreted in the stomach.
 - This test can be considered a useful screening test in patients where a diagnosis of LPRD is considered
 - If the test is positive, the patient is highly likely to have LPRD
 - If the test is negative, there is a chance it is falsely negative, and if symptoms and suspicion of LPRD persist, referral for the gold standard pH impedance testing

What are the treatment options for GORD and LPRD?

- Dietary and lifestyle changes are the mainstay of treatment. Medications are also often used.

What dietary and lifestyle changes can be made to improve GORD and LPRD?

1. Lifestyle Measures:

- Avoid eating or drinking within 2-3 hours of bed time
- Have your main meal at lunch, instead of dinner
- Eat small meals, and eat slowly
- Lose weight
- Wear loose clothing
- Stop smoking – if you smoke
- Elevate the head of your bed by 10-15 cm – ***esp. if experiencing heartburn symptoms***
- If possible, avoid the following drugs:
 - NSAIDs – ***e.g. Nurofen***
 - Corticosteroids – ***e.g. Prednisone***
 - Aspirin
 - Iron supplements
 - Calcium channel blockers.

2. Dietary Measures:

Favour Foods

- Increase the tone of the upper & lower oesophageal sphincter, moderate the secretion of acid & pepsin, and decrease digestion time
 - alkaline foods** – ***e.g. Alkaline water, Apple/Pear/Banana Juice, chamomile tea***
 - proteins** – lean meats, fresh fish, egg whites
 - low-acid** – ***e.g. asparagus, broccoli, mushrooms, cauliflower, green beans, turnip, parsley, tofu.***
 - low-fat** – ***e.g. low fat cheese, skim milk***
 - Steamed or cooked vegetables.

Limit foods which...

- i) relax the upper & lower oesophageal sphincter, increase the secretion of acid & pepsin, and increase digestion time and thus potentially increase reflux.
 - a. Caffeine – ***e.g. coffee, black tea, energy drinks***
 - b. Carbonated Drinks
 - c. Chocolate
 - d. Peppermint
 - e. Tomato
 - f. Fatty and fried foods – ***e.g. preserved meats, pork & lamb chops,***
 - g. Alcohol
 - h. Raw greens, uncooked vegetables – ***as these tend to prolong gastric digestion.***

Limit foods which...

- ii) are directly irritating to the lining of the throat and larynx, and potentially reactivating retained pepsin.
 - a. Spicy foods
 - a. Citrus Fruits
 - b. Acidic foods.



What medication is available to manage GORD and LPRD symptoms?

Medication Type	Medication Name Examples
Antacids	Calcium Carbonate – e.g. Andrews TUMS® Aluminium Hydroxide, Magnesium Hydroxide, Simethicone – e.g. Mylanta®, Gastrogel®
Surface Agents	Sucralfate – e.g. Carafate®, Ulcyte® Sodium Alginate, Potassium Bicarbonate, Calcium – e.g. Gaviscon dual Action®, Reflux Gourmet®, Larri Oral Spray®
Histamine Blockers	Ranitidine – e.g. Zantac®, Rani-2® Nizatidine – e.g. Tazac®, Nizac®, Tacidine® Famotidine – e.g. Famotidine®
Proton Pump Inhibitors	Esomeprazole – e.g. Nexium® Omeprazole – e.g. Losec®, Acimax® Lansoprazole – e.g. Zoton®, Zopral® Pantoprazole – e.g. Somac®, Ozpan®, Gastenz®, Rabeprazole – e.g. Pariet®, Parzol®

Histamine blockers and proton pump inhibitors (see above) remain very effective at treating oesophageal reflux symptoms (GORD), **but** have been shown to be far less effective at treating

- isolated laryngopharyngeal reflux disease (LPRD).
- Increasingly, the main-stay of LPR treatment is a combination of diet, lifestyle and surface agent/antacid such as **Gaviscon® dual action**, or **Reflux Gourmet®**, or **Larri® Oral Spray**.
- Medications targeting specific stomach enzymes, such as **pepsin**, believed to be one of the key causes of LPRD, are currently being trialled and may be a key treatment option in the near future.



Is Surgery an option?

- Rarely, symptoms of GORD/LPRD are so severe, and persistent despite adequate conservative and medical treatment, that surgery is considered.
- Before surgery is considered, **objective testing** is performed to prove the diagnosis
- Such surgery may involve a procedure to physically tighten the lower oesophageal sphincter to prevent reflux of gastric contents – **e.g. Fundoplication**

Concerns or questions?

You can contact your ENT Specialist at the Melbourne ENT Group (MEG):

- Phone: 1300- 952-808
- Email: admin@melbentgroup.com.au
- Website: www.melbentgroup.com.au

A review by a gastro-enterologist may also be recommended

Your GP is also the best contact for ongoing care and concerns.



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