Patient information
Laryngopharyngeal Reflux (LPR)
Ear Nose and Throat Directorate

PIF 1423/V4
You have been diagnosed with laryngopharyngeal reflux (LPR), otherwise known as extra-oesophageal reflux (EOR) or silent reflux. Reflux is the regurgitation of stomach contents back into your gullet (oesophagus). Reflux itself is made up of a number of components, one of these is stomach acid, but there is also pepsin (which helps digest protein in your diet), bile acids and enzymes from your pancreas gland. All of these can cause damage to your gullet, throat and voice box.

Typical gastro-oesophageal reflux (reflux into the lower gullet) often causes the classical heartburn symptoms, but by the time the reflux reaches the back of your throat and voice box most of the acid has gone. This means that heartburn is not very common in people with LPR.

The symptoms of LPR are:

- Hoarseness.
- Difficulty swallowing (especially tablets or small pieces of food).
- Too much mucus/phlegm in your throat.
- A feeling of a lump in your throat (globus pharyngeus).
- A dry/tickly/irritating cough.
- Throat clearing.
- A sore or dry throat.
- Night time choking episodes.

How is LPR treated?

There are various treatments available and these are tailored to each individual patient. Broadly speaking the treatments are:-

- Self help.
- Medical treatment.
- Surgical treatment.
Self help

There are a number of things you can do to help reduce the amount and frequency of the reflux.

- Stop smoking. Tobacco smoke causes reflux. For help stopping smoking please contact Fag Ends Tel: 0800 195 2131.
- Make sure you take your anti-reflux and anti-acid medication exactly as prescribed. Failing to take the medicines even for one day can result in further damage to your throat and voice box.
- Avoid caffeine, alcohol, spicy foods and fatty foods (such as cheese, chocolates, fried foods and pastries) as these all increase reflux.
- Avoid fizzy drinks especially cola and citrus fruit drinks. One glass of cola contains more acid than your stomach produces in one day.
- Don’t wear clothing that is too tight around your waist as this increases pressure on your stomach and increases reflux.
- Don’t eat within three hours of bedtime. Do not lie down just after eating.
- Raise the head of your bed by three inches. Do this by putting some thick books or house bricks under the legs at the head of your bed. This helps to keep the stomach contents in the stomach by gravity.
- If you are overweight this will make reflux worse. Your family doctor (GP) can put you in touch with a dietician if needed.
- Chewing “teeth whitening” chewing gum will help as this contains bicarbonate of soda which will help to neutralise the acid.
Medical treatment (See also the last page)

Medical treatments consist of anti acid medications and anti reflux medications. Occasionally you may also be given a motility stimulant, which helps your stomach to empty more quickly.

Gaviscon Advance is the only proven anti reflux medication currently available in the UK. This medicine has anti acid properties as well as anti reflux properties and is perhaps the most useful medical treatment available. It can be bought over the counter in the chemist. It should be noted that Gaviscon Advance is different to Gaviscon. It is only the Advance which is anti reflux. Gaviscon Advance can rarely cause a bloating sensation.

The best anti acid medications are called Proton Pump Inhibitors (PPIs) and include Rabeprazole (Pariet), Pantoprazole (Protium), Lansoprazole (Zoton), Omeprazole (Losec) and Esomeprazole (Nexium). These act by blocking the acid production in your stomach. They should be taken half an hour before breakfast and the evening meal for maximum effect. They often need to be used for several months to work.

All PPIs have a potential for side effects. Although rare they include nausea and vomiting, abdominal pain, bloating, diarrhoea or constipation. If you experience any of these effects then stop taking your PPI as there are alternatives.

You must not take PPIs if you are also taking clopidogrel (a blood thinning medicine) if you are unsure speak to your GP or specialist.

Other anti acids such as Ranitidine (Zantac) or Cimetidine (Tagamet) are occasionally used, especially for patients who cannot take the more powerful PPIs.
These medicines can also cause nausea and vomiting, abdominal pain, bloating, diarrhoea or constipation, but once again these side effects are rare.

These medical treatments may be prescribed in varying combinations depending upon your symptoms. It is important to take the medicines exactly as prescribed for maximum benefit. It is also important to realise that medical treatment can often take a few months to work, so please be patient.

**Surgical treatment**

Surgical treatment can be used to help repair the leaky valve between your gullet and your stomach. This treatment is usually only done in people who do not respond well to medication. This is usually performed through a keyhole surgery and is called a fundoplication.

**Further information**

For more information on LPR please speak to your GP or hospital specialist.

**ENT Department**
Royal Liverpool University Hospital
Tel: 0151 706 2597
Textphone Number: 18001 0151 706 2597
Medication dosing schedule

PPI = Proton Pump Inhibitor.

High dose PPI ½ hour before breakfast and evening meal. Gaviscon advance 10ml after meals and at night.

2 Months

Low dose PPI ½ hour before breakfast and evening meal. Gaviscon advance 10ml after meals and at night.

2 Months

Low dose PPI ½ hour before evening meal. Gaviscon advance 10ml after meals and at night.

2 Months

Stop regular PPI. Use it when required. Continue regular Gaviscon advance.
Gaviscon advance and dietary advice are more suitable long term measures in the treatment of LPR

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<tr>
<th>Drug</th>
<th>Low Dose</th>
<th>High Dose</th>
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<tbody>
<tr>
<td>Rabeprazole</td>
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Author: Ear Nose and Throat Directorate  
Review Date: April 2019
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