LAPAROSCOPIC ANTI-REFLUX (GORD) SURGERY

If you suffer from heartburn, your surgeon may have recommended Laparoscopic Anti-reflux Surgery to treat this condition, technically referred to as Gastro-oesophageal Reflux Disease (GORD).

This leaflet will explain:

- what GORD is
- medical and surgical treatment options for GORD
- how this surgery is performed
- expected outcomes
- what to expect if you choose to have laparoscopic anti-reflux surgery.

What is GORD?

Although heartburn is often used to describe a variety of digestive problems, in medical terms it is actually a symptom of gastro-oesophageal reflux disease. In this condition, stomach acids reflux or back up from the stomach into the oesophagus or gullet. Heartburn is described as a harsh, burning sensation in the area in between your ribs or just below your neck. The feeling may radiate through the chest and into the throat and neck. Many adults in the UK experience this uncomfortable, burning sensation at least once a month. Other symptoms may also include vomiting, difficulty swallowing, and chronic coughing or wheezing.

What causes GORD?

When you eat, food travels from your mouth to your stomach through a tube called the oesophagus. At the lower end of the oesophagus is a small ring of muscle called the lower oesophageal sphincter (LOS). The LOS acts like a one-way valve, allowing food to pass through into the stomach. Normally, the LOS closes immediately after swallowing to prevent stomach juices, which have a high acid content, flowing back up into the oesophagus. GORD occurs when the LOS does not function properly allowing acid to flow back and burn the lower oesophagus. This irritates and inflames the oesophagus, causing heartburn and eventually may damage the oesophagus.

What contributes to GORD?

Some people are born with a naturally weak sphincter (LOS). For others, however,

fatty and spicy foods, certain types of medication, tight clothing, smoking, drinking alcohol, vigorous exercise or changes in body position (bending over or lying down) may cause the LOS to relax, causing reflux. A hiatal hernia (a common term for GORD) may be present in many patients who suffer from GORD, but may not cause symptoms of heartburn.

How is GORD treated?
GORD is generally treated in three progressive steps:

Life-style changes
In many cases, changing diet and taking over-the-counter antacids can reduce how often and how harsh your symptoms are. Losing weight, reducing or cutting out smoking and alcohol consumption, and altering eating and sleeping patterns can also help.

Drug therapy
If symptoms persist after these life-style changes, drug therapy may be required. Antacids neutralise stomach acids and over-the-counter medications reduce the amount of stomach acid produced. Both may be effective in relieving symptoms. Prescription drugs may be more effective in healing irritation of the oesophagus and relieving symptoms. This therapy needs to be discussed with your surgeon.

Surgery
Patients who do not respond well to lifestyle changes or medications, or those who continually require medications to control their symptoms, will have to live with their condition or may undergo a surgical procedure. Surgery is very effective in treating GORD.

Nowadays, surgery is minimally invasive, in other words keyhole surgery. The advantages of the laparoscopic approach is that it usually provides:

- reduced postoperative pain
- shorter hospital stay
- faster return to work
- improved cosmetic result.

Although laparoscopic anti-reflux surgery has many benefits, it may not be appropriate for some patients. Your GP has referred you to a surgeon qualified in laparoscopic surgery to find out if the technique is appropriate for you.

SURGERY

What to expect before laparoscopic anti-reflux surgery:

Here is a summary of what to expect before laparoscopic anti-reflux surgery:

- after your surgeon reviews with you the potential risks and benefits of the operation, you will need to give written consent for surgery
- pre-operative preparation includes blood tests, medical evaluation, possibly a chest X-ray, and an ECG depending on your age and medical condition
- it is recommended that you shower the night before or morning of the operation
- after midnight the night before the operation, you should not eat or drink anything except medications that your surgeon has told you it is alright to take, with a sip of water on the morning of surgery
- drugs such as aspirin, blood thinners, anti-inflammatory medications (arthritis medications), and Vitamin E will need to be stopped temporarily for several days to a week before surgery
- diet medication or St John's Wort should not be used for the two weeks before surgery
- quit smoking and arrange for any help you may need at home.

What to expect on the day of surgery

On the day of surgery:

- you usually arrive at the hospital on the morning of the operation
- you will be under general anaesthesia - asleep - during the operation, which may last several hours
- following the operation, you will be sent to the recovery room until you are fully awake
- most patients stay in the hospital for two days after surgery (but may require additional days in the hospital).

How is laparoscopic anti-reflux surgery performed?

Laparoscopic anti-reflux surgery (also known as Laparoscopic Nissen Fundoplication) involves reinforcing the valve between the oesophagus and the stomach by wrapping the upper portion of the stomach around the lowest portion of the oesophagus. In a laparoscopic procedure, surgeons use small incisions (1/4 to 1/2 inch) to enter the abdomen through ports (narrow tube-like instruments). The laparoscope, which is connected to a tiny video camera, is inserted through the small incision, giving the surgeon a magnified view

of the patient's internal organs on a television screen. The entire operation is performed inside after the abdomen is expanded by inflating gas into it.

What happens if the operation cannot be performed or completed by the laparoscopic method?

In a small number of patients the laparoscopic method is not feasible because of the inability to see or handle the organs effectively. Factors that may increase the possibility of converting to the 'open' surgical procedure may include obesity, previous abdominal surgery causing dense scar tissue, or bleeding problems during the operation. The decision to perform the open procedure is a judgment made by your surgeon either before or during the actual operation. When the surgeon feels that it is safest to convert the laparoscopic procedure to an open one, this is not a complication, but rather sound surgical judgment. The decision to convert to an open procedure is strictly based on patient safety.

What should I expect after surgery?

After surgery you should expect:

- to engage in light activity while at home after surgery
- mild post-operative pain, but some patients may require prescription pain medication
- anti-reflux medication to continue for four weeks after surgery, although most patients will not have symptoms
- some changes to diet, beginning with liquids followed by gradual advance to solid foods. This usually takes 3-4 weeks. You should ask your surgeon about dietary restrictions immediately after the operation
- to be able to get back to your normal activities within a short time. These activities include showering, driving, walking up stairs, lifting, working, and engaging in sexual intercourse
- to be reviewed in clinic six to eight weeks after your operation.

Are there side effects to this operation?

Studies have shown that the vast majority of patients who undergo the procedure are either symptom-free or have significant improvement in their GORD symptoms.

Long-term side effects to this procedure are generally uncommon:

- some patients develop temporary difficulty swallowing immediately after the operation. This usually resolves within one to three months after surgery
- occasionally, patients may require a procedure to stretch the oesophagus (endoscopic dilation) or, rarely, repeat surgery

- the ability to belch and or vomit may be limited following this procedure. Some patients report stomach bloating
- rarely, some patients report no improvement in their symptoms.

What complications can occur?

Although the operation is considered safe, complications may occur as they can with any operation.

Complications may include but are not limited to:

- adverse reaction to general anaesthesia
- bleeding
- injury to the oesophagus, spleen, stomach or internal organs
- infection of the wound, abdomen, or blood
- other less common complications may also occur.

Your surgeon may wish to discuss these with you and will also help you decide if the risks of laparoscopic anti-reflux surgery are less than not having the operation.

When to call your doctor

Be sure to call your physician or surgeon if you develop any of the following:

- persistent fever over 39°C
- bleeding
- increasing abdominal swelling
- pain that is not relieved by your medications
- persistent nausea or vomiting
- chills
- persistent cough or shortness of breath
- purulent drainage (pus) from any incision
- redness surrounding any of your incisions that is worsening or getting bigger
- you are unable to eat or drink liquids.

This leaflet is intended to provide a general overview of GORD and laparoscopic anti-reflux surgery. It is not intended to serve as a substitute for professional medical care or a discussion between you and your surgeon about the need for laparoscopic anti-reflux surgery.

Specific recommendations may vary among healthcare professionals. If you have a question about your need for a laparoscopic anti-reflux surgery, the alternatives, or your surgeon's training and experience, do not hesitate to ask your surgeon. If you have questions about the operation or subsequent follow up, discuss them with your surgeon before or after the operation.

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