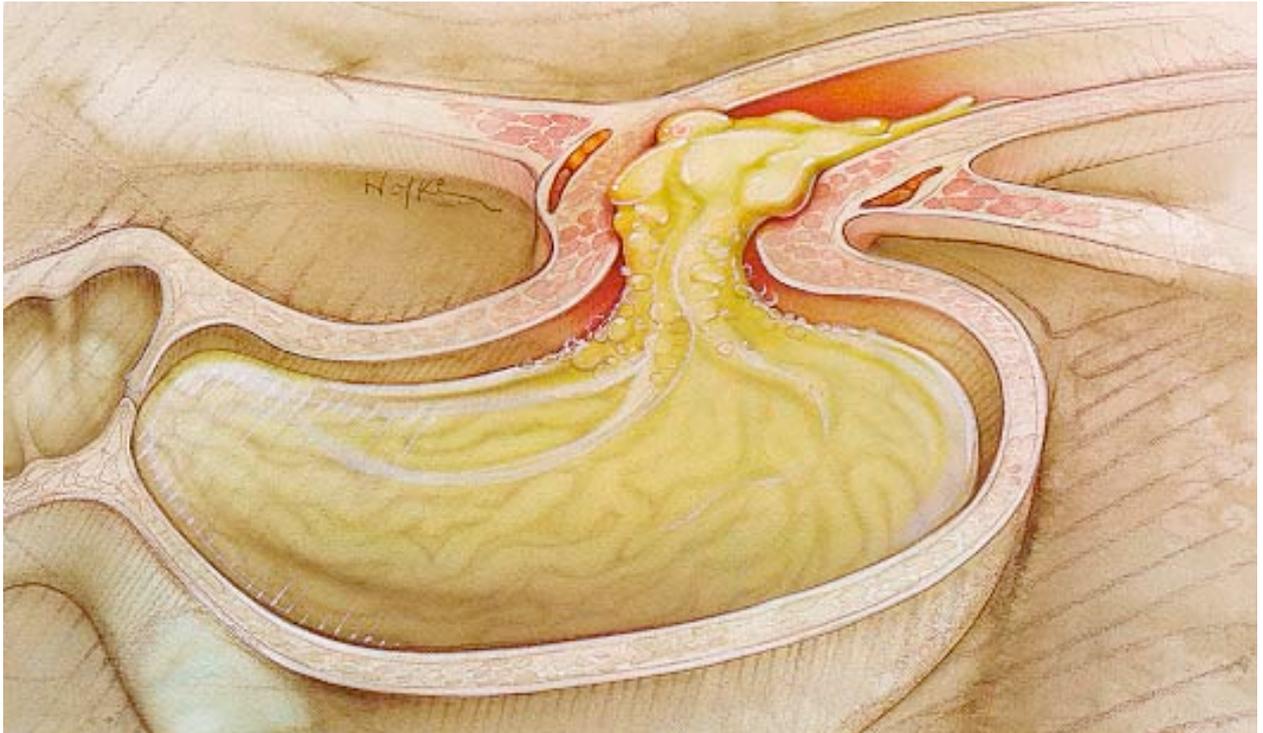


SURGERY FOR REFLUX DISEASE

Should I consider this?

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An information booklet for patients and GPs

Your doctor may have given you this booklet because you suffer from "heartburn", technically referred to as gastro-oesophageal reflux disease (GORD).

One new option to treat this condition is keyhole **LAPAROSCOPIC ANTI-REFLUX SURGERY**. This leaflet will explain to you:

1. What is gastro-oesophageal reflux disease (GORD).
2. Medical and surgical treatment options for GORD.
3. How this surgery is performed.
4. Expected outcomes.
5. What to expect if you choose to have laparoscopic anti-reflux surgery

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 accidentally "back up" from the stomach into the oesophagus. 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 to the stomach. Normally, the LOS closes immediately after swallowing to prevent back-up of stomach juices which have a high acid content. 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, or the accidental back-up of acid. A hiatus hernia, a weakness in diaphragm that allows part of the stomach to enter the chest cavity, 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:

1. 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 smoking and alcohol consumption, and altering eating and sleeping patterns can also help.

2. 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 (eg. H₂-antagonists or proton-pump inhibitors) may be more effective in healing irritation of the oesophagus and relieving symptoms. This therapy needs to be discussed with your doctor or gastro-enterologist.

3. SURGERY

A minority of patients who do not respond well to lifestyle changes or drug therapy, or who continually require medications to control their symptoms, will have to live with their condition or undergo a surgical procedure. Surgery is very effective in treating GORD.

However, until recently, this operation required a large abdominal incision resulting in significant pain after surgery and a recovery period of six weeks or greater. This technique has been modified using keyhole techniques that avoid the necessity of a large abdominal incision.

HOW IS LAPAROSCOPIC ANTI-REFLUX SURGERY PERFORMED?

Laparoscopic anti-reflux surgery involves repairing the hiatus hernia with stitches and reinforcing the "valve" between the oesophagus and the stomach by wrapping the upper portion of the stomach around the lowest portion of the oesophagus – it is best described as 'cuddling' the gullet with the stomach.

In a laparoscopic procedure, we use five 5mm (1/4") incisions 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 pumping carbon dioxide gas into it.

WHAT ARE THE EXPECTED RESULTS AFTER LAPAROSCOPIC ANTI-REFLUX SURGERY?

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. The advantage of the laparoscopic approach is that it usually provides:

- reduced postoperative pain
- shorter hospital stay (1-2 days)
- a faster return to work (one month)
- improved cosmetic result (tiny scars)

WHAT ARE THE RISKS OF LAPAROSCOPIC ANTI-REFLUX SURGERY?

There are risks inherent with any general anaesthetic procedure, but life-threatening complications are very rare (no deaths in Portsmouth and less than 1 in 1000 in one series).

Rare complications during the operation may include:

- adverse reaction to general anaesthesia

- bleeding

- injury to the oesophagus, spleen, stomach, lining of lung (pleura)

- injury to vagus nerve resulting in poor gastric function (may need surgical widening of gastric outlet)

Complications after the operation may include:

- infection of the wound, abdomen, chest or blood.

- rare complications (eg. deep venous thrombosis = clots in leg veins that can spread to the lungs and cause breathing problems)

Your surgeon and his team will review you regularly after surgery and take every step to minimise these risks (for example: administer prophylactic antibiotics and subcutaneous heparin medication to thin the blood & special leg stockings to prevent leg vein clots, chest physiotherapy, and wound care).

WHAT HAPPENS IF THE OPERATION CANNOT BE PERFORMED BY THE LAPAROSCOPIC METHOD?

In a very small % of patients, the laparoscopic method is not feasible or safe because of the inability to visualise or handle the organs effectively. When a surgeon feels that it is safest to convert the laparoscopic procedure to an open one, this is not a complication, it is sound surgical judgement. Factors that may increase the possibility of converting to the "open" procedure may include obesity, a history of prior abdominal surgery causing dense scar tissue, or bleeding problems during the operation.

ARE THERE SIDE EFFECTS TO THIS OPERATION?

Long-term side effects to this procedure are generally uncommon (<4%)

Some patients develop temporary difficulty swallowing immediately after the operation. This usually resolves within one to three months after surgery. A sloppy diet may be required for this period. Occasionally, these patients may require a simple procedure to expand the oesophagus (endoscopic dilatation) or rarely re-operation (<1%).

The ability to belch and or vomit may be limited following this procedure. Some patients complain of stomach bloating. Avoid fizzy drinks.

Rarely, some patients report little improvement in their symptoms (<5%).

WHAT TO EXPECT BEFORE LAPAROSCOPIC ANTI-REFLUX SURGERY

To determine if you are a candidate for laparoscopic anti-reflux surgery, a thorough medical evaluation by your specialist is necessary. Some diagnostic tests like X-rays, pH and manometry study (using a fine tube through your nose to measure changes in the gullet), endoscopy (telescope test through your mouth looking at the gullet and stomach), and blood tests may be necessary. Your surgeon should then be able to discuss with you whether or not this operation may be of benefit to you. He will also help you decide between the risks and benefits of laparoscopic anti-reflux surgery and leaving the condition treated medically.

Before surgery, more information would be given to you prior to informed consent.