PROCEDURE

Anti-reflux surgery

Anti-reflux surgery strengthens the barrier between the stomach and oesophagus to reduce acid reflux.

PURPOSE
Prevent stomach contents flowing back into the oesophagus

PROCEDURE TYPE
Therapeutic, usually minimally invasive surgery

WHERE IT IS DONE
Operating theatre

ANAESTHESIA
General

HOW LONG IT TAKES
1 to 3 hours

PREPARATION
Fasting and medication adjustments, including blood thinners

RECOVERY
Same day or overnight; no driving after general anaesthesia

MAIN RISKS
Swallowing difficulty, gas-bloat, recurrence, bleeding or organ injury

RESULTS
Symptom response becomes clear over several weeks

Overview

Anti-reflux surgery strengthens the barrier between the stomach and oesophagus. The most common operation is fundoplication , in which the surgeon wraps the upper stomach around the lower oesophagus. The wrap may be complete, often called a Nissen fundoplication, or partial.

A hiatal hernia, where part of the stomach has moved through the diaphragm, is usually repaired at the same time. Most operations use several small abdominal cuts and a camera, known as laparoscopic or keyhole surgery. Open surgery is occasionally needed.

For selected people, an alternative is magnetic sphincter augmentation. A flexible ring of magnetic beads is placed around the lower oesophagus. It opens during swallowing and closes afterward to resist reflux.

Why the procedure is performed

Anti-reflux surgery treats gastro-oesophageal reflux disease, or GERD. It may be considered when:

Surgery aims to reduce reflux, regurgitation, and reliance on medicine. It cannot guarantee that throat, chest, cough, or digestive symptoms will improve, particularly if reflux is not their cause.

- Tests confirm reflux that remains troublesome
- Medicines do not control symptoms adequately
- Medicines work, but you prefer surgery after discussing the trade-offs
- Regurgitation remains a major problem
- Reflux has caused inflammation, narrowing, or other complications
- A large hiatal hernia contributes to reflux

Who should and should not have it

Benefit is more likely when testing confirms that reflux causes your symptoms. People whose typical heartburn or regurgitation responds to acid-reducing medicine like omeprazole or lansoprazole often have more predictable results.

Tests may include upper endoscopy, reflux monitoring, and oesophageal manometry. Manometry checks how well the oesophageal muscles work and helps determine which operation is suitable.

Surgery may be avoided or delayed when:

Previous abdominal surgery, obesity, or a large hiatal hernia may change the approach but do not automatically prevent surgery. For some people with obesity, gastric bypass may offer reflux control and weight loss.

- Testing does not confirm significant reflux
- Another condition better explains the symptoms
- General anaesthesia is unsafe
- You have an active infection or unstable medical condition
- Oesophageal movement is severely impaired and a standard wrap could worsen swallowing
- You are pregnant, unless there is an urgent surgical reason

How to prepare

Follow your treating facility's instructions, as preparation varies.

Stop eating and drinking for the period specified before anaesthesia. Tell the team if you have diabetes, use a continuous glucose monitor, or take medicines that affect appetite or stomach emptying.

Provide a complete list of medicines, vitamins, and supplements. Blood thinners and other medicines affecting clotting may need adjustment. Do not stop prescribed medicine unless the team responsible for your procedure tells you to.

Arrange for an adult to take you home and, if requested, stay with you. Tell the team if you develop a fever, chest infection, vomiting, diarrhoea, or other illness before surgery.

What happens during the procedure

You receive general anaesthesia and a breathing tube supports your breathing.

For laparoscopic surgery, the surgeon makes several small abdominal cuts. Carbon dioxide creates working space, and a camera shows the operating area.

If there is a hiatal hernia, the stomach is returned below the diaphragm and the opening may be tightened with stitches. During fundoplication, the upper stomach is wrapped around the lower oesophagus and secured. The wrap is complete or partial depending on your anatomy and swallowing tests.

For magnetic sphincter augmentation, a ring of magnetic beads is placed around the lower oesophagus instead of creating a stomach wrap.

The instruments are removed and the cuts closed. The surgeon may need to change to open surgery if keyhole surgery cannot be completed safely.

Recovery and what to expect afterward

Pain: Soreness around the cuts, upper abdominal discomfort, and shoulder-tip pain from the surgical gas are common. Use pain relief as directed. Pain should improve over several days.

Eating: Swelling can initially make swallowing slow or tight. You may start with liquids or soft foods before gradually advancing your diet. Eat slowly, take small bites, chew thoroughly, and follow your facility's diet plan.

Activity: Walk gently during recovery. Avoid strenuous exercise and heavy lifting until your

surgeon confirms the repair has healed sufficiently.

Driving: Do not drive home. Avoid driving while affected by anaesthesia or drowsy from medicine, or until you can move comfortably and perform an emergency stop.

Work: Return depends on your job and operation. Physical work and recovery after open surgery usually require more time off than desk work.

Risks and possible complications

Possible complications include:

Magnetic devices can erode, move, or require removal. Some also restrict which MRI scanners can be used. Ask which device you would receive and what information to carry afterward.

- Difficulty swallowing, which is often temporary but can persist
- Gas-bloat, increased wind, or reduced ability to belch or vomit
- Bleeding, infection, or blood clots
- Injury to the oesophagus, stomach, nearby organs, or nerves
- Anaesthesia-related heart or breathing problems
- A wrap that is too tight, slips, or comes apart
- Recurrent hiatal hernia or reflux
- Need for stretching, another procedure, or further surgery

Results and follow up

Regurgitation may improve early, but swelling and diet changes can make the first weeks difficult to judge.

Follow-up checks your wounds, swallowing, diet, and reflux symptoms. Keep appointments even if recovery seems straightforward. Contact your team if swallowing is not steadily improving or symptoms return.

Some people reduce or stop acid-reducing medicine, while others still need it. Do not stop prescribed treatment without advice. Surgery does not replace recommended monitoring for conditions such as Barrett's oesophagus.

Alternatives

Proton pump inhibitors and other medicines reduce stomach acid but do not physically prevent fluid or food coming back up. Long-term treatment may be needed.

Lifestyle measures include weight management, avoiding personal food triggers, and not lying down soon after eating. These may not control severe reflux or repair a hiatal hernia.

Endoscopic procedures are performed through the mouth without abdominal cuts. They suit fewer people, may not repair a large hernia, and have less established long-term evidence than fundoplication.

Magnetic sphincter augmentation may preserve belching better for some people but leaves an implanted device. Gastric bypass may help people with obesity but permanently changes digestion and requires long-term nutritional follow-up. Continuing current treatment is also reasonable when symptoms are controlled and surgery is not urgent.

When to call your healthcare team

Contact your surgical team promptly for increasing wound redness or drainage, fever, worsening pain, repeated vomiting, worsening swallowing, returning reflux, or inability to progress through the recommended diet.

Seek urgent medical assessment if you cannot swallow liquids, have signs of dehydration, develop new shortness of breath, or have persistent abdominal swelling and vomiting.

Call emergency services for severe chest or abdominal pain, major breathing difficulty, fainting, vomiting blood, or black, tar-like stools.

Common questions

Will I be asleep?

Yes. The operation uses general anaesthesia.

Can I drive home?

No. Arrange for an adult to take you home. Do not drive while affected by anaesthesia or sedating pain medicine.

How painful is it?

Temporary soreness and shoulder or upper abdominal discomfort are common. Increasing or severe pain needs medical advice.

When will I know if it worked?

Results are usually judged over several weeks as swelling settles and eating becomes more normal.

Will I still need reflux medicine?

Possibly. Your team will advise based on your symptoms and any oesophageal condition requiring ongoing care.

Will I be able to burp or vomit afterward?

Burping or vomiting may be more difficult, especially after a complete fundoplication. Discuss this trade-off and the choice of wrap before surgery.

Sources

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