PROCEDURE

Laparoscopic gastric banding

Laparoscopic gastric banding is keyhole surgery that places an adjustable band around the upper stomach to support weight loss.

PURPOSE
Support weight loss by limiting comfortable meal size

PROCEDURE TYPE
Therapeutic, minimally invasive surgery

WHERE IT IS DONE
Operating theatre

ANAESTHESIA
General

HOW LONG IT TAKES
About 1 to 2 hours

PREPARATION
Fasting and medicine changes following your surgical team's plan

RECOVERY
Same day or overnight; no driving until your team clears you

MAIN RISKS
Band slippage, erosion, infection, blood clots

RESULTS
Weight loss develops over months with regular band adjustments

Overview

Laparoscopic gastric banding is a type of weight-loss surgery. A surgeon uses several small cuts in your abdomen to place an adjustable silicone band around the upper part of your stomach.

The band creates a small pouch above a narrow opening into the rest of the stomach. This can help you feel full after eating a smaller amount. Food still passes through your stomach and intestines in the usual direction.

The band connects by tubing to a small access port placed under your skin. Your healthcare team can inject or remove sterile fluid through this port to tighten or loosen the band.

No part of the stomach is removed, and the intestines are not rerouted. The band can be

removed, but removal requires another operation. Gastric banding is now used less often than sleeve gastrectomy or gastric bypass because it usually produces less weight loss and may require later procedures.

Why the procedure is performed

Gastric banding is performed to support long-term weight loss when obesity is affecting health or creating a substantial future health risk.

Weight loss may improve conditions linked with obesity, such as type 2 diabetes, high blood pressure, sleep apnoea, joint problems and fatty liver disease. It may also improve mobility and quality of life.

The operation is a tool rather than a stand-alone treatment. Its results rely on eating changes, physical activity, regular band adjustments and long-term follow-up.

Who should and should not have it

A specialist weight-management team may consider gastric banding if non-surgical treatment has not provided enough benefit and you are medically fit for surgery. Eligibility usually considers your body mass index, obesity-related health conditions, previous treatment and ability to take part in lifelong follow-up. The exact criteria differ between healthcare systems.

Gastric banding may appeal to someone who prefers an adjustable procedure that does not remove part of the stomach. However, it may not be the best option if stronger or faster weight-loss effects are needed.

The procedure may be avoided or delayed if:

Having a mental health condition does not automatically rule out surgery. The aim of assessment is to make sure you have suitable treatment and support.

- You are pregnant or planning pregnancy in the near future
- General anaesthesia would be unsafe because of an uncontrolled medical condition
- You have an active infection or an untreated stomach or oesophageal problem
- A severe eating disorder, mental health condition or substance-use problem is not adequately treated
- You cannot attend regular adjustments and long-term follow-up
- You are unable to follow the required eating pattern after surgery

How to prepare

Your treating facility's own instructions take priority over general information. Follow its directions about fasting, medicines and arrival time.

You will usually have a medical assessment, blood tests and sometimes heart, lung or imaging tests. You may meet a surgeon, dietitian, anaesthesia professional and other members of a weight-management team.

Tell the team about all medicines, supplements and non-prescription products you take. Blood thinners and some diabetes or weight-management medicines may need a specific plan. Do not stop prescribed medicine unless the treating team tells you to.

Some programs ask you to follow a short-term diet before surgery to reduce the size of the liver and make the operation easier. If you smoke, the team may help you stop because smoking can interfere with healing and increase surgical risks.

Arrange for an adult to take you home and, if requested, stay with you after discharge.

What happens during the procedure

You receive general anaesthesia, so you are unconscious and do not feel the operation. A breathing tube supports your breathing.

The surgeon makes several small cuts in your abdomen. A thin camera called a laparoscope and narrow surgical instruments are passed through the cuts. Gas is used to create working space inside the abdomen.

The surgeon places the band around the upper stomach and secures it in position. Tubing connects the band to the access port, which is fixed beneath the skin of your abdominal wall.

The band may be left relatively loose while the area heals. Adjustments are usually made later during clinic visits. The instruments are then removed and the small cuts are closed.

Recovery and what to expect afterward

Pain is usually felt around the cuts. You may also have shoulder discomfort from the gas used during surgery. Your team can provide pain relief. Pain that is severe or getting worse needs medical review.

Eating restarts gradually. You will normally begin with liquids and progress to puréed, soft and then solid foods according to your program's schedule. Once healed, you will need small bites,

thorough chewing and pauses between mouthfuls. Eating too quickly or too much can cause discomfort, reflux or vomiting.

Gentle walking is encouraged soon after surgery to support circulation. Increase activity gradually and avoid heavy lifting until your surgeon says it is safe.

You cannot drive home after general anaesthesia. Do not drive while taking medicine that makes you drowsy or until you can move comfortably, wear a seat belt and perform an emergency stop safely. Follow your insurer's requirements and your surgical team's advice.

People with desk-based work may return within one to two weeks. A job involving lifting or strenuous activity may require more time away.

Risks and possible complications

All surgery carries risks from anaesthesia, bleeding, infection and blood clots. Injury to nearby organs is uncommon but possible.

Risks specific to a gastric band include:

Nutrient deficiencies are generally less common than after operations that reroute the intestines. They can still occur if your food intake is limited or unbalanced, so recommended blood tests and supplements remain important.

- The band slipping or moving out of position
- The band wearing into the stomach wall, called erosion
- Enlargement of the stomach pouch or oesophagus
- Reflux, trouble swallowing or repeated vomiting
- Leakage or disconnection of the band, tubing or access port
- Port pain, movement or infection
- Inadequate weight loss or later weight regain
- The need to reposition, replace or remove the band

Results and follow up

Weight loss happens gradually rather than immediately. Results differ according to band function, eating patterns, activity, health conditions and follow-up. On average, gastric banding produces less weight loss than sleeve gastrectomy or gastric bypass.

You will need regular appointments to check healing, nutrition, weight and symptoms. Band adjustments are made by passing a needle through the skin into the access port. Fluid is added to tighten the opening or removed to loosen it.

Contact the team rather than waiting for a routine appointment if eating becomes difficult or you develop frequent reflux or vomiting. The band may need assessment or adjustment.

Long-term follow-up is important even when you feel well. It can identify nutritional problems, band-related complications or weight regain. If you become pregnant, tell your bariatric team because the band and nutrition plan may need review.

Alternatives

The main alternatives have different benefits and trade-offs:

Ask how each option fits your health needs, priorities and willingness to accept long-term follow-up or further surgery.

- Structured weight-management care: Nutrition, activity and behavioural support avoid surgery, but weight loss may be smaller and harder to maintain.
- Weight-management medicines: These avoid an operation and can produce meaningful weight loss. They may cause side effects, require ongoing use and may not be suitable for everyone.
- Endoscopic treatments: A balloon or internal stomach sutures are placed through the mouth. These are less invasive than surgery but usually produce less durable weight loss.
- Sleeve gastrectomy: Part of the stomach is removed. It usually produces more weight loss than a band and needs no adjustments, but it is not reversible and may worsen reflux.
- Gastric bypass: A small stomach pouch is connected to the small intestine. It often has stronger weight-loss and metabolic effects, but it is more complex and carries greater nutritional demands.
- No procedure for now: You can continue non-surgical care and reconsider later. This avoids immediate surgical risk but may not provide the health or weight changes you are seeking.

When to call your healthcare team

Contact your bariatric team during routine hours if you have ongoing reflux, trouble swallowing, repeated vomiting, new discomfort around the port or unexpected weight regain.

These symptoms may mean the band needs adjustment or testing.

Seek urgent medical advice if you cannot keep fluids down, have increasing abdominal pain, fever, wound redness that is spreading, pus from a wound, or swelling and pain in one leg.

Call emergency services for trouble breathing, chest pain, fainting, vomiting blood, severe sudden abdominal pain or signs of a serious allergic reaction.

Common questions

Will I be asleep?

Yes. Gastric banding is performed under general anaesthesia, so you are unconscious during the operation.

Can I drive home?

No. An adult must take you home. Resume driving only when your team says it is safe and you are no longer taking sedating pain medicine.

How painful is gastric band surgery?

Mild to moderate soreness around the cuts is common. Some people also have temporary shoulder discomfort. Severe or worsening pain is not expected and should be assessed.

When will I know if it has worked?

There is no immediate final result. Weight loss develops over months as you recover, adjust your eating and have the band adjusted.

Is a gastric band reversible?

The band can be removed, and the stomach is not cut away. Removal still requires surgery, and weight regain can occur afterward.

How often will the band need adjusting?

Adjustments are more frequent during the early weight-loss period, then less frequent once the setting is stable. Your symptoms, eating comfort and progress guide the schedule.

Sources

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