Laparoscopic gastric banding

Information for patients
What is laparoscopic gastric banding?

Laparoscopic gastric banding (or Lap Band™) is a surgical procedure designed to help with weight loss. The procedure involves fitting a band around your stomach. This limits the size of the stomach so that just a small meal can make you feel full and prevent you from feeling hungry between meals.

By helping to restrict portion sizes the band acts as a tool to help you towards long term weight loss. Together with increased activity levels this can lead towards a healthier lifestyle.

This operation is intended for morbidly obese adults (with a BMI of over 40) or severely obese adults (with a BMI of over 35) who are already experiencing life limiting diseases related to their weight such as diabetes, heart disease or high cholesterol.

The gastric band is designed to stay in place for life. However, if for any reason it needed to be removed, a further keyhole operation would be performed to remove the band.
What’s involved?

The procedure is generally done laparoscopically (using keyhole surgery). This means that instruments are passed through 5 small holes (ports) made in your skin. A special camera is inserted through one of the holes, as well as tubes which the surgeon can perform the operation through. This way the surgeon can carry out the operation by seeing inside your abdomen on a screen. The operation is normally carried out under general anaesthetic and usually you will stay in hospital for one night.

How does it work?

The adjustable band is made of silicone and is placed around the uppermost part of the stomach to create a small pouch (the size of an eggcup).

Once the band has been fitted it can be adjusted without further surgery – depending on your weight loss and how much food you are eating, as well as the textures of food you eat. The band is adjusted by injecting water through the skin into the band ‘port’. This makes the band tighter so you feel full for longer. To loosen the band some of the salt water is removed. The port is placed under your skin during surgery on the upper left side of your body.

The nurse specialist and radiographer will make band adjustments according to your individual needs. This will be discussed with you, the dietician and the nurse specialist. The adjustments can be as early as 6 weeks after surgery and then periodically after this depending on your progress and needs.

Adjustments take place as an outpatient procedure and take around 30 minutes. These adjustments can take place in the X-ray department – where we may ask you to drink some barium (a chalky drink) which allows the surgeon to see your stomach and band on a screen. Adjustments may also take place in clinic without X-ray.
What are the benefits of having laparoscopic gastric banding?

The operation is an effective long term weight loss solution. Weight loss after having a gastric band fitted can help improve:

- Diabetes
- Coronary heart disease
- Arthritis
- High cholesterol

It can generally help you to lead a more active and healthy lifestyle, with more confidence and a greater sense of self esteem.

As the procedure is performed laparoscopically the operation carries fewer risks and a lower mortality (death) rate than open surgery.

Female fertility can also be improved with weight loss. However, you need to wait 2 years after your surgery before you conceive. If you would like to discuss this then please mention it at your outpatient appointment.

What are the risks and consequences of laparoscopic gastric banding?

All operations carry risks and this operation is no exception. Risks of this surgery include:

- **Death.** Around 1 in 2000 patients will die during or after this procedure.

- **DVT – Deep Vein Thrombosis (blood clots).** We try to prevent blood clots by giving you small injections of anti-coagulant therapy such as Dalteparin. This will be given the evening after your operation and lasts for 24hrs. Anti-coagulation is not normally required after you go home. We will encourage you to move around as soon as you return to the ward after your operation and also once you get home to reduce the risk of DVT.
• **Infections.** This could be a wound infection or a chest infection. If you develop a chest infection we will treat it with antibiotics. Wound infections normally clear up without antibiotics but we will monitor you closely. Less than 5% of patients will contract an infection.

• **Pouch enlargement, band slippage, band erosion, band leakage:** These complications can happen at any time after your operation, even years later, and to as many as 1 in 10 patients. Symptoms to be aware of may include some of the following:
  – pain or discomfort
  – vomiting
  – cessation of weight loss, weight gain or food intolerances

If you experience one or all of these then please contact your Bariatric Specialist Nurse. These complications can be easily diagnosed and best treated if detected early. In some cases the band may need to be repositioned, replaced or removed.

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**Preparing for your surgery**

It is extremely important that you are in the best possible health for your operation. You will be asked to make some health or lifestyle changes before you have your operation. This may include stopping smoking, increasing your activity or making changes to your diet. It is important that you follow the advice given as whether or not you will be able to have the operation may well depend on it.

**Outpatient appointments**

Once you have been referred to the Bariatric Team you will be seen in clinic by one of three consultant surgeons, the specialist nurse and senior dietitian.

We will ask you some general questions about your general health and about any medications you currently take.

The team will discuss the operation with you, talk to you about
lifestyle changes and take a detailed diet history. They will also discuss with you your hospital admission and aftercare.

You will also be asked to attend a pre-operative assessment clinic where you may undergo some routine tests such as an ECG (a tracing of your heart), blood tests or X-ray. You may also be asked to attend other clinics for more in depth tests such as assessments for sleep apnoea or tests for diabetes or oesophageal reflux.

**The Liver Diet**
You will need to follow a strict diet known as “The Liver Diet” for two weeks before your operation. This is a strict diet of 800 calories a day, which is essential to prepare the liver for this operation. The liver often becomes fatty and enlarged when overweight and so will need to shrink (get smaller) in order for the operation to proceed safely. Because the liver sits just over the stomach it needs to be moved during the operation. If the liver is fatty and bulky it makes the operation more complicated and less safe and the surgeon may be forced to abandon the operation without placing the band. For this reason it is vitally important that you follow The Liver Diet closely. We will give you information about the Liver Diet separately.

**Diet after the operation**
For the 2 weeks after the operation you will need to follow a liquid diet. This gives the swelling around your stomach a chance to go down. It also lets the band settle and the internal stitches heal before any pressure is put on the band. If you do eat any solid food in the first 2 weeks then you run the risk of moving the band (band slippage) which will stop it from working and you will not lose weight. Your dietician will give you advice on what to ‘drink’ for these two weeks.

**Medications**
You will need to discuss any medications you are currently taking with your GP as you will need these in liquid, dispersible or chewable form when you are following the liquid diet after your operation. Please talk to your GP about this at the earliest opportunity and at least 6 weeks before your operation.
**Admission**

You will be asked to arrive at the hospital early in the morning on the day of your operation. We will tell you when you need to stop eating and drinking before your operation.

On the morning of the operation you will meet with the surgeon who will go over the operation with you, including the risks and benefits. If you have any remaining questions or concerns, please ask the surgeon. The surgeon will then ask you to sign the consent form to agree to the operation going ahead.

This operation is carried out under a general anaesthetic which means you will be asleep throughout the operation. The anaesthetist will discuss this with you before the operation, as well as any previous anaesthetics you have had and any allergies you are aware of.

You will be given a hospital gown to wear and the nurse will walk with you to the operating theatre. If this is difficult for you, you may be wheeled through on a bed.

The operation last between 45 minutes and 2 hours.

**What should I expect after the operation?**

After the operation you will wake up in recovery. If you have any pain the nurse looking after you will give you some pain relief.

You will also have a ‘drip’ in your arm which delivers fluids directly into your veins through a small needle which is taped to your skin.

Once you are collected and brought to the ward you will be asked to sit in a chair. You are likely to feel tired for some time but it is important that you begin moving around as soon as possible after your operation.

For the first few hours after the operation you will have your blood pressure, heart rate, breathing and oxygen levels recorded regularly. If
you wear a CPAP mask at home you must bring this in with you as you will be asked to wear this when you are asleep in hospital.

If you feel sick at any time after your operation please tell your nurse immediately. It is important to avoid vomiting immediately after having a gastric band inserted as repeated vomiting before the band has had time to settle can make it shift and could lead to a band slippage.

Your nurse will give you the Dalteparin injections as well as anti-thrombolitic stockings to wear – which both help prevent blood clots.

**Wounds and dressings**
You will have 5 small cuts in your abdomen. These are normally glued or stitched but could be stapled. If they are glued they should require no further treatment. If they are stapled or stitched you will need to see your practice nurse to have them removed between 7-10 days after your operation.

You may shower after your operation but avoid soaking the wounds in the bath for 2 weeks after your operation.

**Pain relief**
After laparoscopic surgery there is much less pain than after ‘open’ surgery – but it is certainly not pain free. You will feel some discomfort and you should tell the nurses if you feel this prevents you from moving around and taking deep breaths. The nurses will give you pain relief. Mostly the discomfort is localised around the cuts on your abdomen. However, many patients also experience pain from trapped wind after laparoscopic surgery. This can be felt around the abdomen but also around the shoulders. Moving around will help dispel this discomfort but it can persist for 2-3 days after the operation.

**Moving around**
You will be encouraged to move around as soon as you arrive back at the ward. This is to help prevent blood clots and chest infections as well as to minimise the discomfort from any trapped wind you may have.
What you can drink after the operation
As soon as you fully wake up from your surgery we will ask you to begin to take sips of water. Because of the swelling around your stomach you will need to take these sips very slowly. The intravenous drip in your arm will be removed in the first 12 hours after your operation – by which point you will need to be taking enough water to remain hydrated. This can be difficult so be prepared to monitor your drinking volumes closely.

After this you will need to follow the dietician’s post-operative diet plan – we will post this to you before your operation. Please decide what you would like to drink for the first day before you come into hospital and please bring this in with you. The ward will be able to provide you with water, ice, semi-skimmed milk, tea, coffee, and sugar-free squash but you will need to provide your own Slimfast shakes etc.

Discharge home
You will normally stay in hospital for one night and return home either the next morning or afternoon after seeing your surgeon. Occasionally a patient may need to stay for an extra night. If your operation required a larger cut to be made on your abdomen, then you may stay as long as a week.

Wound care
You will need to check your wounds for signs of infection – redness, heat and pain. If you experience any of these then please contact your GP or practice nurse as you could need antibiotics.

Pain relief
We will give you pain relief tablets to last you for 7 days. This is likely to include Paracetamol, Tramadol or Codeine, and possibly an anti-inflammatory such as Ibuprofen or Diclofenac. You must not take any other pain relief at the same time unless you have discussed this with your doctor beforehand.
**Time off work**
We advise you to take two weeks off work after the procedure and avoid heavy lifting for 4 weeks. If your work is particularly strenuous then please discuss this with your surgeon.

**Driving**
Do not drive until you can perform an emergency stop safely and wear a seat belt comfortably. This is normally around 1 week after surgery. However it is still essential to contact your insurance company to check your insurance cover as you may not be insured if you drive too early. If you are in doubt, contact the DVLA.

**Diet**
You will need to follow a liquid diet for at least 2 weeks after your operation, and possibly as long as 4 weeks depending on when your swelling goes down. Never eat solid foods before two weeks. You will also need to take a complete vitamin supplement during this time – the dietitian will offer you advice on this. You will need to drink at least 2 litres of fluid a day.

**Exercise**
It is important to introduce some gentle exercise, such as walking, as soon as you feel well again. This will tone muscles as well as help you to lose weight.

**Follow up appointments**
We will see you in clinic for a post-operative check at about 5 weeks after your operation. After 6 weeks we will see you for a band adjustment and barium X-ray. It is essential that you attend these follow up appointments. After these initial appointments we will see you as often as is necessary for your own health and weight loss. Mostly we see patients frequently, certainly in the first year, so please be prepared for numerous clinic appointments.
After having gastric banding surgery it is important to consider the following points at all times:

• Stomach capacity is greatly reduced and is now the size of an egg cup.

• You will need to take regular sips of fluids throughout the day to remain hydrated.

• You must chew all food thoroughly.

• You will need to wait at least an hour after eating before drinking.

• You will need to eat three regular meals a day on a small plate (7” max)

• You may only snack on fruit.

• Drinking too fast or eating too much food may cause vomiting.

• Choosing the wrong texture of food may lead to the food slipping through the band too quickly and so you may not loose weight. It is important to follow the advice of the dietitian strictly.

• You must consider the impact that these changes may have on your family and social life. Dining in restaurants and holidays may prove to be challenging.

• Success with a gastric band depends as much on lifestyle changes and behavioural modifications as it does attending your band adjustment appointments.

• It may not be necessary to adjust your band at each appointment.

• The gastric band is intended to be permanent.
How to contact us

If you have any questions or concerns, or if you need further advice on your diet, please contact:

Annie Gilbert – Bariatric Nurse Specialist 01865 235131
Liz Ward – Senior Upper GI Dietitian 01865 235419
E mail: bariatric.surgery@orh.nhs.uk
Oxford Upper GI Centre (Ward) 01865 235063

Useful Websites

www.bospa.org
(British Obesity Surgery Patient Association)

www.wlsinfo.org.uk
(Weight Loss Info)

If you need an interpreter or need a document in another language, large print, Braille or audio version, please call 01865 221473. When we receive your call we may transfer you to an interpreter. This can take some time, so please be patient.