Laparoscopic Single Anastomosis Gastric Bypass

Single Anastomosis Gastric Bypass is a weight loss (metabolic) operation. Obesity and the metabolic consequences are a more common problem in Australian society. Latest statistics report 71% of men and 56% of women are obese or overweight. The surgical management of obesity and improvement in weight loss and co-morbidity resolution are well accepted treatment options and are performed generally as laparoscopic procedures.

What are the advantages of surgery?

Advantages include:

- Significant weight loss
- Co-morbidity (diabetes, sleep apnoea, hypertension, PCOS) improvement or resolution
- Improved quality of life.

What are the options for surgery?

There are generally 3 types of surgery offered:

1. Laparoscopic Sleeve Gastrectomy
2. Laparoscopic Roux-en-Y Gastric Bypass
3. Laparoscopic Single Anastomosis Loop Gastric Bypass

Your surgeon will recommend one operative approach based on your clinical symptoms, previous surgery and medical problems. It is your decision to proceed with surgery.
What if I don’t have surgery?

Surgery is currently recommended for patients with BMI > 35kg/m² (IFSO guidelines). The American Diabetes Society currently recommends surgery as first line treatment for patients with BMI > 40 kg/m² or patients with poorly controlled diabetes and BMI > 35kg/m².

1. **Diet and exercise are important lifestyle changes that patients can make, however long term weight loss is only achievable for ~ 2% of patients.**
2. **Medical management of co-morbidities can be achieved with the use of medications** (oral hypo-glycaemics/anti-hypertensives) or medical equipment (CPAP machine).

What does the surgery involve?

The surgery generally involves admission to hospital for two days. The surgery will be performed laparoscopically (keyhole) under General Anaesthesia. Local anaesthetic and intravenous antibiotics will be administered during the procedure.

Laparoscopic surgery involves five small incisions in your abdominal wall. The abdomen will be inflated with gas to create space for your surgery to be performed. Surgical instruments will be introduced to assist in performing your surgery. Your surgeon will then use a medical stapling device to create a small tube (gastric pouch) and separate it from the remaining stomach (gastric remnant). The pouch will then be attached to small bowel (jejunum). Your surgeon will close the small cuts with sutures.

Things to know?

**Fasting**

Generally, you will need to fast for 6 hours prior to surgery. Your surgeon will provide instructions when booking your surgery. If you are unsure or have any concerns please contact our team.

**Medications**

Discuss with your surgeon/anaesthetist all the medications you take, particularly any blood thinning (warfarin, aspirin, clopidogrel, Xarelto, Eliquis, Pradaxa) or herbal medications. Your surgeon will advise which medications need to be ceased prior to surgery.

**Smoking**

Your surgeon will advise you to stop smoking prior to surgery. Smoking increases the risk of developing complications post-operatively.

**Weight**

Any weight you can lose prior to surgery will improve the outcomes following surgery. Overweight patients have a higher risk of developing complications following surgery. Optifast diet will be commenced at a minimum of two weeks prior to surgery. Your surgeon and dietitian will discuss this with you prior to surgery.

**Exercise**

Regular exercise improves lung and heart function which improves recovery following surgery. For hernias, you should avoid heavy lifting and exercise which you feel worsen your symptoms. Seek the advice of your surgeon or GP prior to surgery.

**General information**

**Pregnancy** - please advise your surgeon if there is any possibility you are pregnant.

**Hair removal** – in the week prior to the procedure do not shave/wax in the region of your surgery.
Hygiene - have a shower the day before or day of surgery. Please discuss any other questions with Total Upper GI Surgery.

Complications

Your surgeon and their team will make your surgery as safe as possible, however complications do occur. Some of these can be serious and even cause death.

Common risks and complications

Pain – can occur following surgery. Local anaesthesia and oral analgesia will be given to help you move about freely and cough. Left shoulder and abdominal pain are common and generally the result of gas and fluid within the abdomen following the surgery. Mobilising following surgery can improve these symptoms significantly.

Bleeding – can occur and may require a return to the operating theatre. Bleeding is more common if you take blood thinning medications.

Infection – can occur within the surgical site. It is important to leave the dressings intact as guided by the surgical team. If your wound develops redness or discharge please advise your surgeon as soon as possible.

Urinary retention (1 in 100) – following surgery you may have difficulty passing urine. Occasionally a urinary catheter will need to be placed.

Wound – thickened scarring of the skin may occur. Small pockets of fluid (seroma) can develop and usually resolve without treatment.

Lungs – small areas of lung can collapse and pneumonia develop. Antibiotics and physiotherapy may be required.

Clots – a blood clot in the leg (deep vein thrombosis DVT) or lung (pulmonary embolism – PE) can develop following surgery. DVT may present with swelling, pain or redness in the leg. PE can present with shortness of breath, chest pain or bloody cough. Further treatment with blood thinners may be required if these develop.

Wound infection, chest infection, heart and lung complications and blood clots are more common in people who are overweight, smoking or have a history of diabetes. Emergency surgery increases the risk of these complications.

Altered bowel habit – diarrhoea usually occurs secondary to a diet high in fats and carbohydrates. Constipation usually occurs due to poor hydration and low fibre diet.

Uncommon risks and complications

Include:

Leak – occurs in < 2% of patients. A leak usually occurs at the gastro-jejunal, jejuno-jejunal anastomosis or along the staple line. This will generally require further medical (antibiotics) or interventional (endoscopic/surgical) management.

Dumping – usually occurs following surgery secondary to consumption of foods high in fats or carbohydrates. Can be early (1/2hr) or late (2hrs) after a meal. Early refers to symptoms of nausea, bloating, abdominal cramps or diarrhoea. Late refers to dizziness, palpitations, sweating/flushing and are secondary to hypoglycaemia. Symptoms are generally improved with dietary changes.

Internal hernia – 2–7% of patients develop a hernia within the abdominal cavity through a space created by the surgery. This can present as vague abdominal pain or severe abdominal pain. If you have severe pain or recurrent mild pain please discuss this with your treating surgeon.

Conversion to open surgery – laparoscopic technique may not be possible and your surgeon may
need to convert to open surgery.

**Damage to surrounding structures** – damage to large blood vessels, spleen and bowel may occur during surgery.

**Heart and lung complications** – rarely gas used to inflate the abdomen can cause heart and lung complications. Heart attack or stroke can occur due to strain on the heart.

**Hypo-albuminaemia** – can occur in up to 4% of patients. In these circumstances, dietary changes or even further surgery may be necessary.

**Adhesions** – scar tissue may form leading to a bowel obstruction.

Anaesthetic risks are uncommon however you should discuss these risks with your anaesthetist. Death as a result of this procedure is rare.

**What to expect following surgery**

The majority of patients make a full recovery following Laparoscopic Single Anastomosis Gastric Bypass. Following the operation you will be transferred to the recovery area and then to the ward. You should be able to be discharged 2 days following surgery.

You should talk to your surgeon if you develop any of the following:

- **Worsening pain, especially with walking or coughing**
- **A high temperature or fever**
- **Dizziness or shortness of breath**
- **Unable to tolerate oral diet – 1.5 to 2L fluid a day needs to be consumed**
- **Swelling of the abdomen or wound**
- **Not opening bowels or passing wind**
- **Difficulty passing urine.**

If you do not improve over the week following surgery, please contact your surgeon or GP. Medications to be taken following surgery include a reflux tablet, 2 multi-vitamins and calcium tablet daily. Do not smoke following surgery as it increases the risk of ulcer formation and bleeding. Do not drive following surgery until you have complete movement, sensation and function.

Do not drive if taking opiate analgesia. Do not drive until you feel you can safely control your vehicle. Do not consume alcohol for 24hrs following general anaesthesia.

You can usually return to normal activities one week following surgery. Do not do any strenuous activities or heavy lifting for 4-6 weeks following surgery. Please discuss with your surgeon prior to commencing strenuous exercise.

This document contains general information only as at the date of publication and should not replace advice obtained by your treating doctors applicable for your specific circumstances.