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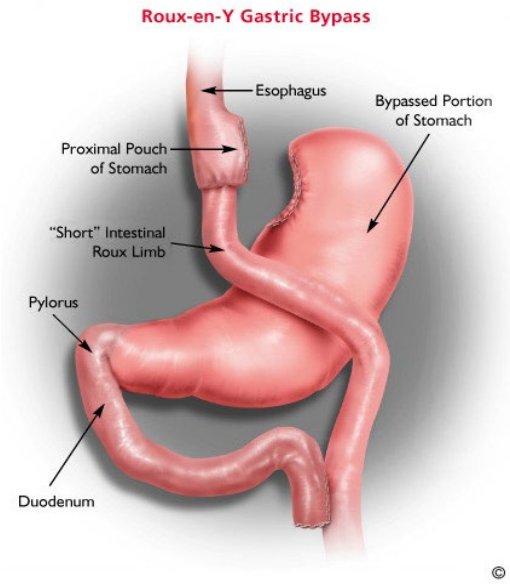
Roux-en-Y gastric bypass (RYGB) surgery

This leaflet provides information about Roux-en-Y gastric band surgery, including risks and benefits. If you have any questions or concerns not covered in this leaflet, feel free to discuss with your hospital bariatric team.

What is Roux-en-Y gastric bypass (RYGB) surgery?

Gastric bypass surgery is a weight loss procedure that is considered when diet and exercise alone have not worked, or when you have serious health problems because of your weight.



It works by decreasing the amount of food you can eat at one sitting and by changing the hormones released in the gastro-intestinal tract. The surgeon staples across the top of your stomach, sealing it off from the rest of your stomach. The resulting pouch is about the size of a large egg and can hold only about an ounce of food. Normally, your stomach can hold about 3 pints of food. Then the surgeon divides the small intestine and sews part of it directly onto the new stomach pouch. When eating, food passes into this small pouch of stomach and then directly into the small intestine. The food has therefore 'bypassed' most of your stomach and the first section of your small intestine which alters the production of specialised gut hormones that control appetite and satiety. This leads to a decrease in appetite and often also reduces cravings and thoughts about food. Sometimes, people experience taste changes meaning that certain foods may taste different or become unappealing.

The operation is done under general anaesthesia, meaning you will be asleep during the procedure. Gastric bypass is routinely done using keyhole (laparoscopic) surgery. The operation usually takes around two hours. You will usually be able to go home 1-2 days after your operation but it can take up to 4-6 weeks to make a full recovery from a gastric bypass operation.

What are the advantages of this type of surgery?

- Weight loss starts from the time of surgery.
- It is unusual for a patient not to lose a significant amount of weight.
- You can expect to lose roughly 65-75% of your excess weight over 2 years.
- The average excess weight loss over the first 3 years after a gastric bypass procedure is generally higher than with a gastric band.
- It has the highest and fastest remission rate for Type 2 diabetes. Many patients can come off or significantly reduce their medication straight after the operation.

What are the disadvantages of this type of surgery?

- The gastric bypass operation is more difficult to perform and carries a higher risk of death and early complications requiring a reoperation compared with a gastric band.
- The surgery, the hospital stay and the recovery time are all longer than with a gastric band.
- It will be necessary to take long-term regular iron, calcium, multivitamin and B12 supplements after the surgery
- If you eat sugary foods it can make you feel faint and sweaty. This is called "dumping" syndrome.
- 10% (1 in 10) people will fail to lose significant amount of weight following the bypass operation.

What are the side effects and risks?

As with any major surgery, gastric bypass is associated with potential health risks, both in the short term and long term. For most people, the benefits in terms of losing excess weight are much greater than any disadvantages. In order to make an informed decision and give your consent, you need to be aware of the possible side-effects and the risk of complications.

Side effects

Side-effects are the unwanted but mostly temporary effects of a successful treatment, for example, feeling sick as a result of the general anaesthetic.

- Afterwards, you are likely to have some bruising, pain and swelling of the skin around the healing wound(s) for a few days.
- You may feel or be sick after eating, especially if you try to eat too much.
- A condition known as dumping syndrome can occur from eating too much sugar. While it isn't considered a serious health risk, the results can be very unpleasant. Symptoms can include vomiting, nausea, weakness, sweating, faintness, and, on occasion, diarrhoea. This acts as a deterrent from eating the wrong types of food.
- After the operation you will need to take tablets daily containing iron, calcium and certain vitamins, as well as, have 3-monthly vitamin B12 injections.

Risks

Complications are when problems occur during or after the operation. Most people aren't affected. Being very overweight increases the risk of complications following any operation.

Possible risks include:

- Chest or other infection. You will be given antibiotics during the operation to reduce the chance of getting an infection.
- Injury to bowel, blood vessels or adjacent organs (oesophagus, liver, spleen)
- Anastomotic or staple line leak or stricture (see below)
- Blood clots in the legs (DVT) with the risk of a clot passing into the lung. Blood thinning injections are used to help prevent DVT, and you will have these daily for at least 2 weeks after your operation.

- Reaction to the anaesthetic or medication.
- Complications with your heart, breathing or blood circulation.
- In fewer than 1 in 500 patients, the surgery may need to be converted from the keyhole approach to the traditional open surgical approach. This means making a bigger cut on your abdomen. This is only done if it's impossible to complete the operation safely using the keyhole technique.

The table below summarises the risks specific to having a RYGB procedure:

Risk	What does this mean?	How is it treated?
Death	The risk of death as a result of a gastric bypass operation is about 0.1% (1 in 1000). The most common cause of death is a blood clot in the lung (pulmonary embolism) or problems arising from a leak in one of the joins made during the surgery.	
Gastrointestinal tract leak	Leak from where the stomach and the small intestine are connected or stapled. The risk of this is about 1% (1 in 100).	In case of small leaks, a drain may be placed by x-ray. However, with larger leaks patients require emergency surgery (laparoscopic or open) to wash out the area of the leak and place drains.
Bowel obstruction	Bowel blockages can be caused by scar tissue in the abdomen or kinking of the bowel. This can happen early after surgery but also late (months to years) after surgery This occurs in 2% to 4% of patients.	An emergency operation may be necessary.
Stricture	Excessive scar tissue formation can occur where the stomach pouch is connected to the bowel. This occurs in about 2% (1 in 50) patients.	A stricture may be treated by endoscopy and balloon dilatation. This procedure involves inserting a tube (endoscope) through the mouth into the stomach, passing a balloon down the tube to the area of stricture, and inflating the balloon to dilate (stretch) the scar tissue.
Ulcer	An ulcer may develop in the area where the new stomach pouch is connected to the small bowel. An ulcer occurs in about 2% (1 in 50) patients.	Ulcers are typically diagnosed by an upper endoscopy examination. They are treated by long-term use of an anti-ulcer medication.

RYGB risks (continued)

Risk	What does this mean?	How is it treated?
Gallstones	Up to a third of all patients will develop gallstones during rapid weight loss.	Patients with symptomatic gallstones may require an operation to have the gall bladder removed (cholecystectomy).
Chronic abdominal pain	About 0.5% (1 in 200) patients develop chronic abdominal pain or nausea after surgery.	Very rarely, patients may require reversal of the surgery.
Bleeding at operation or damage to other organs in the abdomen	Bleeding occurs in about 2% (1 in 50) patients.	In rare cases, either endoscopic or further surgery may be needed to stop the bleeding.
Failure to lose weight	10% (1 in 10) patients do not lose the desired amount of weight or regain some weight. This may typically occur 2-3 years after surgery.	Most of weight regain is due to failure to follow the prescribed diet or lack of exercise. Patients who "graze" on food all day or constantly eat to the point of stretching their stomach pouch may re-gain weight. Also, patients who do not exercise regularly may not achieve their goal weight.

Contacting us

If you have any questions, please contact your clinical nurse specialist: Kath Hallworth-Cook
0118 322 8811 katharine.hallworth-cook@royalberkshire.nhs.uk
Endocrinology and Diabetes Centre
Clinical Admin Team (CAT 9) Tel: 0118 322 7969
Email: Cat9@royalberkshire.nhs.uk

Useful websites

British Obesity Surgery Patient Association: www.bospauk.org
Weight Loss Surgery Information: www.wlsinfo.org.uk

To find out more about our Trust visit www.royalberkshire.nhs.uk

Please ask if you need this information in another language or format.

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