# Total Gastrectomy

**Brief description**:

- You have been advised to have surgery to remove all of the stomach – termed a total Gastrectomy. Gastrectomies can be performed for several conditions of the stomach particularly for patients who have stomach cancer but sometimes for non-cancerous conditions such as bleeding or narrowing of the stomach.
- Here, we explain some of the aims, benefits, risks and alternatives to this procedure (operation/treatment). We want you to be informed about your choices to help you to be fully involved in making any decisions.
- Please ask about anything you do not fully understand or wish to have explained in more detail.

## About total gastrectomy

## Before your procedure

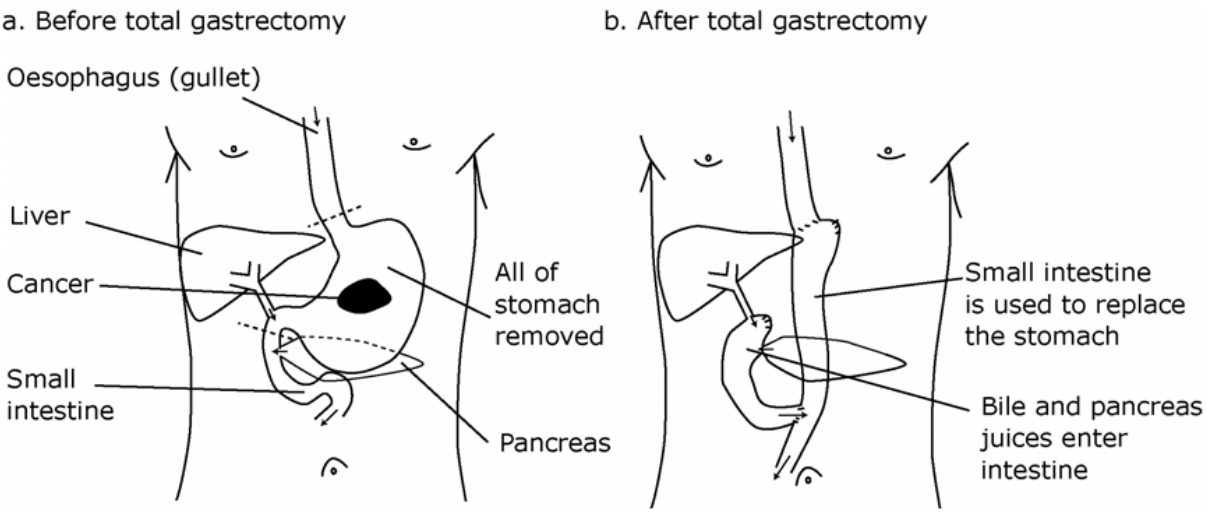
- We want to make sure you are fit enough to undergo the operation. We will arrange some further investigations, which will give us information about your general fitness. We will also make arrangements for you to attend our pre-admission clinic where you will be seen by one of the doctors working with your Consultant surgeon. He or she will ask you questions about your general health and carry out some further investigations such as blood tests. This is a good opportunity for you to ask us any questions about the procedure, but please feel free to discuss any concerns you might have at any time.
- You will be asked if you are taking any tablets or other types of medication - these might be ones prescribed by a doctor or bought over the counter in a health food shop. It helps us if you bring details with you of anything you are taking (eg bring the packaging with you).
- This procedure involves the use of general anaesthesia. See below for further details about this type of anaesthesia.
- You will be admitted to hospital the day before your operation, usually in the afternoon or early evening.

## During the procedure

- Before your procedure, you will be given the necessary general anaesthetic.
- The stomach lies within the abdomen and therefore it is necessary to make a cut (incision) in your abdomen to remove the stomach. The cut will run from just above your tummy button to just below the bottom of your breastbone.

## Total gastrectomy

- The stomach is then released from the structures that hold it in place and removed. A new stomach is then reconstructed from the small intestine and is brought up and attached to the oesophagus (gullet) to bridge the gap. It may also be necessary to remove part of your pancreas or spleen if the cancer has affected them.



## After the procedure

- You will wake up in the recovery room after your operation. You might have an oxygen mask on your face to help you breathe. You might also wake up feeling sleepy.
- After this procedure, most people will have a small, plastic tube in one of the veins of their arm. This might be attached to a bag of fluid (called a drip), which feeds your body with fluid until you are well enough to eat and drink by yourself. There will also be two tubes in your abdomen one for giving food directly into the small intestine and the other a drainage tube.
- While you are in the recovery room, a nurse will check your pulse and blood pressure regularly. When you are well enough to be moved, you will be taken to a ward.
- Sometimes, people feel sick after an operation, especially after a general anaesthetic, and might vomit. If you feel sick, please tell a nurse and you will be offered medicine to make you more comfortable.
- **Eating and drinking**: You will have a feeding tube inserted during surgery which goes through the skin and muscle of the tummy wall directly into the small intestine (Feeding Jejunostomy). We will feed you for the first 10 days via this tube while you are recovering.
- After the operation, you may only have small amounts of cold water to drink. After about 5 days, you will have a special X-Ray investigation to check that the joins in the gut are all healing properly before you are allowed to drink normally and then start eating again (usually about day 10).
- **Getting around and about**: Generally, it is best to get out of bed as soon as you feel you can. If, on the first day, you cannot get out of bed, you will be encouraged to move your legs in bed to prevent blood clots forming.
- **When you can leave hospital**: People who have had a gastrectomy will probably stay as an inpatient for about 10 days. The time that you stay in hospital will depend on how quickly you recover from your operation, the type of operation, and your doctor's opinion.
- **When you can resume normal activities including work:** You will have had major surgery and it is likely to take at least three months before you feel like you are really over it. For the first four weeks you will be convalescing and will need to increase your activity gradually. You will need to make some adjustments to your lifestyle initially but you will be able to resume your normal activities eventually. We will provide you with specific information and instructions on your recovery before you go home.
- You should not return to work for at least three months after you are discharged from hospital.
- **Special measures you need to take AFTER the procedure**: One of the most important functions of the stomach is that it acts as a storage area for food allowing it to come into contact with stomach juices that begin to break down and digest the food. Perhaps the thing that will be most noticeable after the operation is that you will no longer be able to manage to eat the same amount of food as you used to. After the stomach is removed there is no longer the same storage area and even though a new stomach is reconstructed the amounts that can be eaten are considerably less. You will feel full up quickly and will be uncomfortable if you try to eat any more.
- The only way of ensuring that you still get sufficient calories is to eat smaller amounts but more regularly. Where you may have been used to having three meals a day you may now need to have six or seven. The dietician will see you before you are discharged and provide you with information regarding your diet after you go home.
- After the stomach is removed, food moves straight into the small intestine from the oesophagus (gullet). Although the small intestine is capable of maintaining the breakdown of food that normally takes place in the stomach, some patients do not absorb vitamin B12 and need regular injections of this vitamin. Iron supplements may also be necessary to reduce the risk of anaemia if a gastrectomy interferes with the amount of iron normally absorbed during digestion.

- **Check-ups and results**: For us to understand your cancer and how far it has progressed, we aim to 'stage it'. Tissue removed at the operation will be sent off for examination under the microscope. It takes 10-14 days for the results to be returned, and any further treatment, if recommended, will be discussed with you then.

## Intended benefits of the procedure

- The aim of the surgery is to remove the cancer or abnormality – completely if possible. For cancer operations, surgery gives the best chance of cure, but the treatment may need to be combined with chemotherapy and/or radiotherapy.

## Alternative procedures that are available

- Currently, the only known way of curing stomach cancer includes this type of surgery (sometimes with other treatments to follow). Cancers involving only the mucosa (stomach lining) can sometimes be safely removed by an endoscopy (telescope) under sedation (Endoscopic Mucosal Resection or EMR).

## Serious or frequently occurring risks

- As with any operation there are risks associated with it and complications following this type of surgery are not uncommon. However, the fact that you are being looked after by a specialist team in a specialist centre means that the chances of you getting through the operation are very good.
- **Surgery:** The general risks of surgery include problems with the wound (eg infection), breathing (eg chest infection), heart (eg abnormal rhythm or occasionally a heart attack), blood clots (eg in the legs or occasionally in the lung). Leakage from the join between the small intestine and the gullet is the most serious complication specific to a total gastrectomy.
- **Scar after the operation:** the surgeons need to make a large incision, usually under your ribs, to get adequate access to the area. The wound will look large but it usually heals very well. It is likely to take about six months for it to heal completely. Infection of this wound is not common but if it does occur can slow your recovery.
- **Bowel disturbances:** During the operation on your stomach, some of the main nerves (vagus nerves) to the intestines are cut. This usually has some effects on the bowel function. One of the commonest effects is that you can have attacks of unexpected diarrhoea. This does not affect everyone and those who experience it usually find that it improves with time. Patients commonly get abdominal pain and colic when they eat after a gastrectomy (dumping) but this usually improves with time. Eating enough food after a gastrectomy is usually the biggest problem and you will need to prepare yourself to eat smaller meals more frequently (five to six times a day). Our dietician will help you with this aspect of your recovery but everyone finds it difficult at first to a greater or lesser degree. Many patients however can eat well after their bodies have adapted to the new internal plumbing.
- **Death:** Most people have no serious complications after this operation, but published figures show that the overall risk of a complication leading to death from this operation is approximately 2-4%. For patients with risk factors for complications (i.e. a bad heart), this may be higher. All precautions are taken before during and after the surgery to minimise risks.
- Most people will not experience any serious complications from their surgery. The risks increase for the elderly or overweight and for those who already have heart, chest or other medical conditions such as diabetes or kidney failure. You will be cared for by a skilled team of doctors, nurses and other health care workers who are involved in this type of surgery on a daily basis. Any problems that arise can be rapidly assessed and appropriate action taken.

- Sometimes during the operation it becomes apparent that the disease is more complicated than was anticipated: the type of surgery may need to be altered to achieve the desired result. This may mean removing more stomach, part of the bowel or part of the nearby organ eg liver. The surgeon will only remove an organ if it is felt to be absolutely necessary.

## Information and support

- If you have any questions or anxieties, please feel free to ask your surgeon.

## General Anaesthesia

During general anaesthesia you are put into a state of unconsciousness and you will be unaware of anything during the time of your operation.

## Before your operation

Before your operation you will be seen in a pre-anaesthetic assessment clinic. The anaesthetist who looks after you on the day of your operation is the one who is responsible for making the final decisions about your anaesthetic. He or she will need to understand about your general health, any medication that you are taking and any past health problems that you have had. Your anaesthetist will want to know whether or not you are a smoker, whether you have had any abnormal reactions to any of the drugs or if you have any allergies. They will also want to know about your teeth, whether you wear dentures, have caps or a plate. Your anaesthetist needs to know all these things so that he or she can assess how to look after you in this vital period. Your anaesthetist may examine your heart and lungs and may also prescribe medication that you will be given shortly before your operation, the pre-medication or 'pre-med'.

**Pre-medication** is the name given to medication (drugs) given to you some hours before your operation. These drugs may be given as tablets, injections or liquids.They relax you and may send you to sleep. They are not always given. Do not worry if you do not have a pre-med, your anaesthetist has to take many factors into account in making this decision and will take account of your views on the topic if possible. Do not be worried about your anaesthetic.

When your anaesthetist visits you before your operation, this is the time to ask all the questions that you may have, so that you can forget your fears and worries.

Before your operation you will usually be changed into a gown and wheeled to the operating suite into an anaesthetic room. This is an ante-room outside the theatre. The anaesthetist, his or her assistant and nurses are likely to be present. An intravenous line (drip) may be inserted. Monitoring devices may be attached to you, such as a blood pressure cuff or a pulse oximeter. A pulse oximeter is usually a little red light in a small box, which is taped to your finger. It shows how much oxygen you have in your blood and is one of the vital monitors that an anaesthetist uses during your operation to ensure that you remain in the best of health. You may be given some oxygen to breathe.

## During your operation

While you are unconscious and unaware your anaesthetist remains with you at all times. He or she monitors your condition and administers the right amount of anaesthetic drugs to maintain you in the correct level of unconsciousness for the period of the surgery. Your anaesthetist is constantly aware of your condition and trained to respond. Your anaesthetist will be monitoring such factors as heart rate, blood pressure, heart rhythm, body temperature and breathing. He or she will also constantly watch your need for fluid or blood replacement. If you have any other medical conditions, your anaesthetist will know of these from your pre-operative assessment and be able to treat them during surgery.

## After your operation

After your operation your anaesthetist continues to monitor your condition carefully. You will probably be transferred to a recovery ward where specially trained nurses, under the direction of anaesthetists, will look after you. Your anaesthetist and the recovery nurses will ensure that all the anaesthetic effects are reversed and that you are closely monitored as you return to full consciousness. You may be given some oxygen to breathe in the recovery area, and may find that intravenous drips have been inserted whilst you are unconscious in theatre and that these will be replacing fluids that you might require. You will be given medication for any pain that you might feel, and systems, such as Patient Controlled Anaesthesia (PCA) may be set up to continue pain control on the ward.

You are likely to feel drowsy and sleepy at this stage. Some patients feel sick, others may have a sore throat related to the insertion of the breathing tube during surgery. During this time it is important that you relax as much as you can, breathe deeply, do not be afraid to cough, and do not hesitate to ask the nursing staff for any pain relief, and about any queries you may have. You are likely to have hazy memories of this time and some patients experience vivid dreams.