Patient information and consent to minimally invasive oesophagectomy

Key messages for patients

- Please read your admission letter carefully. It is important to follow the instructions we give you about not eating or drinking or we may have to postpone or cancel your operation.

- Please read this information carefully, you and your health professional will sign it to document your consent.

- It is important that you bring the consent form with you when you are admitted for surgery. You will have an opportunity to ask any questions from the surgeon or anaesthetist when you are admitted. You may sign the consent form either before you come or when you are admitted.

- Please bring with you all of your medications and its packaging (including inhalers, injections, creams, eye drops, patches, insulin and herbal remedies), a current repeat prescription from your GP, any cards about your treatment and any information that you have been given relevant to your care in hospital, such as x rays or test results.

- Simple painkillers such as paracetamol and ibuprofen may be required after surgery. Simple bowel medication such as senna and lactulose may be required after surgery. It is suggested that you discuss with your pharmacist and have a seven day supply of these medications at home to take as you need according to the instructions.

- Take your medications as normal on the day of the procedure unless you have been specifically told not to take a drug or drugs before or on the day by a member of your medical team. If you have diabetes please ask for specific individual advice to be given on your medication at your pre-operative assessment appointment.

- If you experience any concerns requiring urgent medical advice please call the nurse specialist during working hours on 01223 596383 or through the hospital contact centre on 01223 245151 and ask for pager 154-348. During evenings or weekends please call Upper GI Enhanced recovery unit (ward M4) via contact centre.

After the procedure we will file the consent form in your medical notes and you may take this information leaflet home with you.
Important things you need to know

Patient choice is an important part of your care. You have the right to change your mind at any time, even after you have given consent and the procedure has started (as long as it is safe and practical to do so). If you are having an anaesthetic you will have the opportunity to discuss this with the anaesthetist, unless the urgency of your treatment prevents this.

We will also only carry out the procedure on your consent form unless, in the opinion of the health professional responsible for your care, a further procedure is needed in order to save your life or prevent serious harm to your health. However, there may be procedures you do not wish us to carry out and these can be recorded on the consent form. We are unable to guarantee that a particular person will perform the procedure. However the person undertaking the procedure will have the relevant experience.

All information we hold about you is stored according to the Data Protection Act 1998.

About oesophagectomy

You have been recommended surgery to remove most of the oesophagus (gullet) – termed an oesophagectomy. An oesophagectomy is nearly always performed for a cancerous or precancerous growth in the gullet and rarely for benign disease.

The main function of the oesophagus is to transport food from your mouth to your stomach. When a section is removed the two ends are joined back together which means that the stomach is higher up than before. The stomach, after the operation, will be situated more inside your chest than your abdomen but will function almost normally in this position.

Intended benefits

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.

Who will perform my procedure?

This procedure will be performed or supervised by a consultant surgeon.

Before your procedure

Most patients attend a pre-admission clinic, when you will meet a member of the team. At this clinic, we will ask for details of your medical history and carry out any necessary clinical examinations and investigations (see below). Please ask us any questions about the procedure, and feel free to discuss any concerns you might have at any time.
Patient Information

We will ask if you take any tablets or use any other types of medication either prescribed by a doctor or bought over the counter in a pharmacy. Please bring all your medications and any packaging (if available) with you. Please tell the ward staff about all of the medicines you use. If you wish to take your medication yourself (self-medicate), please ask your nurse. Pharmacists visit the wards regularly and can help with any medicine queries.

This procedure involves the use of anaesthesia. We explain about the different types of anaesthesia or sedation we may use at the end of this leaflet. You will see an anaesthetist before your procedure.

You will be admitted to hospital the day of your operation, occasionally in the afternoon or early evening of the day before.

You will have had a number of investigations including an endoscopy (telescope test), CT scans, PET scan and an EUS (endoluminal ultrasound scan). These give us a fairly accurate indication of whether there is a chance of curing you by radical surgery. In addition, you may have had some special tests to assess your lung and heart function to see whether you will cope with the anaesthetic (Cardiopulmonary exercise test CPEX). These are all designed to make sure that the operation is the right treatment for you.

Hair removal before an operation

For most operations, you do not need to have the hair around the site of the operation removed. However, sometimes the healthcare team need to see or reach your skin and if this is necessary they will use an electric hair clipper with a single-use disposable head, on the day of the surgery. Please do not shave the hair yourself or use a razor to remove hair, as this can increase the risk of infection. Your healthcare team will be happy to discuss this with you.

During the procedure

The object of the operation is to remove the cancerous or precancerous growth in the gullet. This involves removing most of the gullet. We usually use the stomach to replace the removed gullet. The stomach can be made into a long tube, which will reach all the way from the abdomen up to the back of the throat. The stomach tube is then brought up into the chest and joined on to the remaining upper oesophagus, in the neck. Doing this allows you to swallow.

You may find the following diagrams useful in understanding the operation.
Most patients will have three - four small (0.5-2cm) cuts on the back of the right side of the chest and five small (0.5-2cm) and one larger (>5cm) cuts on the abdomen. There will also be a cut in the left side of the neck. At any time during a minimally invasive (keyhole) operation it may be necessary to revert to traditional open surgery. This may require large incisions in the abdomen, chest or both. **The consultant will discuss the exact details of the operation with you.**

During surgery, you may lose blood. If you lose a considerable amount of blood your doctor may want to replace the loss with a blood transfusion as significant blood loss can cause you harm. The blood transfusion can involve giving you other blood components such as plasma and platelets which are necessary for blood clotting. Your doctor will only give you a transfusion of blood or blood components during surgery, or recommend for you to have a transfusion after surgery, if you need it.

Compared to other everyday risks the likelihood of getting a serious side effect from a transfusion of blood or blood component is very low. Your doctor can explain to you the benefits and risks from a blood transfusion. Your doctor can also give you information about whether there are suitable alternatives to blood transfusion for your treatment. There is a patient information leaflet for blood transfusion available for you to read.

**After the procedure**

Once your surgery is completed you will usually be transferred to the recovery ward where you will be looked after by specially trained nurses, under the direction of your anaesthetist. The nurses will monitor you closely until the effects of any general anaesthetic have adequately worn off and you are conscious. They will monitor your heart rate, blood pressure and oxygen levels. You may be given oxygen via a facemask, fluids via your drip and appropriate pain relief until you are comfortable enough to return to your ward.

**When you wake up:** You will be in the fast track Unit. This is normal and does not mean that anything has gone wrong. Because this is a big operation we plan to have you in an
area of the hospital where you can receive very intensive nursing and physiotherapy care with lots of monitoring for the first day or so. You will be transferred to IDA and subsequently to Enhanced recovery unit.

If there is not a bed in the necessary unit on the day of your operation, your operation may be postponed as it is important that you have the correct level of care after major surgery.

Feeling sick after you wake up: 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.

Drain Tubes: You may have some tubes in your abdomen, chest and down your nose. You will have a plastic drain in each side of your chest which drains via an underwater seal into special bottles (chest drains). These are necessary to stop your lungs collapsing immediately after the operation because both chest cavities are entered during the mobilisation of the bottom part of your gullet. The purpose of these is to prevent the accumulation of body fluids that may lead to infection. Usually drain tubes are kept in for three to seven days.

Feeding tube: During surgery a fine plastic tube will be placed through the abdominal wall into the bowel beyond the stomach. This is called a feeding jejunostomy. Through this tube a special formulation of feed will be administered starting on the first day after surgery. This is because you will not be able to eat for about 5 days. We will train you and your family in managing the feeding tube and you will be discharged on overnight feed and monitored closely by the dieticians and the team.
Expected pattern of progress

<table>
<thead>
<tr>
<th>Day</th>
<th>Expected progress</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>The operation usually takes about five to seven hours. You will spend your first night in fast track recovery.</td>
</tr>
<tr>
<td>1</td>
<td>You are moved to the intermediate dependency area (IDA) on level 4. Here you will be encouraged to get out of bed for a short period sitting in a reclining chair and have physiotherapy to help you cough. The nurses will monitor your pulse, blood pressure, temperature and oxygen levels frequently.</td>
</tr>
<tr>
<td>2-5</td>
<td>You will stay in IDA and will spend more time sitting in your chair each day and mobilising. You will be allowed water by mouth. Your feeding will be via the jejunostomy tube. You must work hard on doing deep breathing exercises and coughing.</td>
</tr>
<tr>
<td>6-7</td>
<td>You will be managed in the Enhanced recovery unit, if you have an epidural, this will usually be removed around day five to prevent infection. Your pain will then be controlled using a morphine drip that you control via a small button (‘patient controlled analgesia’ PCA). All your drains are usually removed by seven days after surgery. If you are well you will be allowed to have free fluid and aim to move to soft diet.</td>
</tr>
<tr>
<td>8-11</td>
<td>We will aim in getting you home and mobilising freely.</td>
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**Eating and drinking.** You will have small amounts of water to keep your mouth wet at first. We usually wait for about five days before we allow you to start drinking normally again. You will start by taking clear fluids which include water, squash/cordial, Bovril, black tea and coffee and a nutritional supplement called Fortijuce. Following this you will proceed to “free fluids” which are all liquids including milk based and strained soups without bits or lumps. You will also be able to take a supplement called Fortisip. Usually about seven days after surgery you will be able to start on a very light diet (focusing on softer or mushy foods initially) in conjunction with nourishing drinks. Once you are eating adequately we will change feeding to only night time via the feeding jejunostomy.

One of the most noticeable things after this operation is that you will no longer be able to manage to eat the same amount of food as you used to. 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 will now need to adopt a small frequent meal pattern, ideally we advised five to six small snacks/meals per day with nourishing drinks. You may need to continue with nutritional supplements which your GP can prescribe.

**Getting about after the procedure.** 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. The physiotherapist will see you.
Leaving hospital. People who have had an oesophagectomy will probably stay as an inpatient for about 7-11 days. Obviously some people recover a little quicker than others but it is unusual after this operation to get home earlier than the time stated. Complications will keep you in hospital longer. We will give you a copy of your discharge summary when are discharged.

Resuming normal activities including work. You will feel very tired when you get home and you will need to rest a lot. This is normal. As your strength improves and the discomfort in your wounds settles you will be able to do more. It can take between six and twelve months to feel completely normal again. Your swallowing will be a little strange to begin with but with time this should improve greatly. Eating little and often can help build up your strength and appetite. You will not harm yourself drinking alcohol in moderation.

Check-ups and results. We routinely give everyone a check up at two weeks in the outpatients department. Then we review you at three, six and twelve months from the date of your surgery and then yearly thereafter, for five years. You will have a detailed discussion with your consultant with the histology results when you are seen in the outpatients department following surgery.

Special measures after the procedure
Weight loss is highly likely. After the stomach has been pulled up and made into a tube, it does not have the same storage capacity so you will manage considerably less. You will feel full up quickly and will be uncomfortable if you try to eat any more. However, after some weeks to months you will notice that you can eat a little more. Most patients report that their meal sizes are about 50% compared to before the operation. The dietitian will support you with this aspect of your recovery but everyone finds it difficult at first. Many patients, over a period of several months, adapt well to the new internal plumbing and can eat well. To maintain the weight we encourage our patients to have night time feed via jejunostomy.

During your operation, the main nerve (vagus nerve) to the intestines has to be cut. This usually has some effects on the bowel function and is called “Dumping syndrome”. One of the commonest effects is that you can have attacks of unexpected diarrhoea. This is sometimes associated with some discomfort or pain in the abdomen and sometimes dizziness and feeling very hot. It usually occurs shortly after eating and the effects normally disappear within an hour or so. Ordinarily, food is partially digested in the stomach and then released gradually into the intestines. Dumping syndrome occurs when the food you have eaten passes into your small intestine more rapidly as a consequence of the surgery. This does not affect everyone and those who experience it usually find that it improves with time. The dietitian can advise you on changes to your diet that can reduce these effects.
Significant, unavoidable or frequently occurring risks of this procedure

**Chest infection** – Major surgery carries with it a risk of developing an infection in the lungs or pneumonia and it is quite common following this procedure (25%). This is usually because you are a little immobile and not breathing deeply following surgery, resulting in the lower part of the lungs becoming stagnant. Chest infections are treated with antibiotics and physiotherapy. It is very important that you get up and moving as soon as possible and work closely with the nursing staff or physiotherapist in making sure you are taking regular, deep breaths. You will be given deep breathing exercises to undertake. The risk of developing a chest infection is greatly increased if you smoke cigarettes (particularly within three months of surgery).

**Anastomotic leak** – This is the most important, serious complication following an oesophagectomy. Fortunately it is rare (approx 5% risk). An anastomosis is where the gastro-intestinal tract is rejoined after an operation. With an oesophagectomy the stomach is joined to the remaining oesophagus after the abnormal section of oesophagus has been removed. Surgeons take great care and time in constructing a water tight anastomosis that will not leak. However, in rare cases the anastomosis does not remain water tight. This is often because of a poor blood supply rather than any particular problem with the surgery. If a leak does occur, there is a significant risk of infection and you will require antibiotics and possibly a fine drain tube to be inserted (under local anaesthetic) next to the anastomosis to get rid of any excess fluid or infection. With an anastomotic leak you are not usually permitted to take anything by mouth as this may worsen the leak.

Most anastomotic leaks are very small (pin head size) and resolve spontaneously after five to seven days, without too many problems. In rare cases, patients can become very ill and need to be transferred back to the intensive care unit or require further surgery.

**Pleural effusion** – Fluid that collects between the lung and the chest wall is called a pleural effusion. This sometimes develops following surgery and is in many ways the body’s normal reaction to surgery. In fact, after most surgery in the chest, drain tubes are left in to drain off this excess fluid. If fluid does, however, accumulate as a pleural effusion it may need to be specifically drained.

**Pneumothorax or air leak** – Whenever surgery is performed within the chest cavity the lung is always adjacent. Because the lung is quite delicate even a tiny tear can result in the leaking out of air. This is called an air leak, or if the air accumulates in the chest cavity compressing the lung, it is called a pneumothorax. The drain tubes that are placed at the time of surgery usually drain any air leak and resolve any pneumothorax. If a pneumothorax does develop later on then sometimes another drain tube needs to be inserted into the chest cavity. This is most frequently performed under a local anaesthetic either on the ward or by our colleagues in the X ray department.

**Chyle leak** – A chyle leak is a rare (3%) but potentially serious complication of surgery performed in the chest. In order to remove all the appropriate lymph glands it is necessary to also take out the “thoracic duct” which is a vein like tube which drains fat from the intestines. If the clips or ligature used to seal it fail to do so, fluid (called chyle) accumulates in the chest. Sometimes this can be more than 500 ml to one litre per day.

Minimally invasive oesophagectomy, CF424, V3, September 2018
Patient Information

This fluid also contains immune cells and is critical in the absorption of necessary fats from the gut. If it does occur, we will stop placing feed into the gastro-intestinal tract via the feeding jejunostomy. Stopping feed will greatly decrease the volume of the leak and usually, after two to three days, the leak will stop completely and you will be able to be fed again. In rare cases the chyle leak does not stop and another operation is required to find the leaking duct and ligate it again.

**Stomach necrosis** – This severe complication is fortunately very rare (less than 1% risk). If the blood supply to the stomach is very poor, over a few days the stomach may die (“necrosis”). As a result, a second operation is required and the stomach needs to be removed from where it is has been brought up into the chest. If this problem is not dealt with by surgery there is a risk that you can become critically ill. If stomach necrosis occurs, the upper oesophagus is sewn to the skin in the neck and covered with a drainage bag. This means you temporarily will not be able to eat or drink. Swallowing liquids will be allowed as they will come out into the drainage bag. You will be fed via the feeding tube in the abdomen. After around three months another operation can be considered to reconnect things so that you are able to swallow normally again. This is usually successful.

**Complications relating to the heart** – Major surgery places considerable stress on the body and there is a small risk of a problem relating to the heart. This may take two forms and varies from very minor to severe. Firstly, the heart may develop an abnormal rhythm (usually beating excessively quickly). You may notice a fluttery feeling (palpitations) in the chest or nothing at all. Usually, simple measures such as balancing the body’s salt concentrations or administering medications resolve these problems. Secondly and more seriously, suffering a heart attack (damage to the heart muscle) is possible. Because of these risks you are very closely monitored (including continuously recording the rhythm of the heart) for the first five days following your surgery. Therefore, if a problem arises it can usually be treated early and effectively. The risk of developing a heart problem is increased if you have a history of heart problems, smoke cigarettes (particularly within three months of surgery) or have other risk factors for heart disease.

**Complications related to the feeding jejunostomy** – A feeding jejunostomy is routinely inserted during this procedure and having one placed has been shown to improve recovery following an oesophagectomy. It is a fine tube that passes through the skin into the bowel beyond where the surgery has been performed. It allows us to feed you during the first week or so following surgery when you are unable to eat. There are, however, small risks of complications specifically relating to the feeding tube (estimated 1%). These risks include the tube moving or leakage from the bowel where the tube has been inserted. In rare cases, the bowel may twist around the tube causing an obstruction. These complications can sometimes be managed with antibiotics or removal of the tube. In rare cases an operation may be required to correct the problem.
Deep vein thrombosis (DVT) and pulmonary embolus - All surgery carries varying degrees of risks of thrombosis (clots) in the deep veins of your leg. In the worst case a clot in the leg can break off and travel to the lung (pulmonary embolism). This can significantly impair your breathing. To prevent these problems around the time of your operation and following your operation we give you some special injections to ‘thin’ the blood. We also ask you to wear compression stockings on your legs before and after surgery and also use a special device to massage the calves during the surgery. Moving about as much as you can, including pumping your calf muscles in bed or sitting out of bed as soon as possible reduces the risk of these complications.

Damage to the bowel (intestines) - Any surgery inside the abdominal cavity is associated with a very small risk (less than 1 in 500 chance) of damaging other organs, such as the bowel. This is particularly the case if there has been previous surgery with scarring and structures are abnormally stuck to each other. If there is damage to the bowel it can almost always be repaired at the time. If it is not noticed at the time and you later become unwell a second procedure may be required. This is a more serious situation.

Damage to major blood vessels - Any major surgery is associated with a small risk of bleeding from a major blood vessel. This is uncommon; however, if the surgery involves delicate procedures very close to major blood vessels there is a risk. If this were to occur the surgeon would take measures to stop the bleeding and it is possible you would require a blood transfusion.

Damage to the spleen - During the operation, the small blood vessels between the spleen and the upper part of the stomach (fundus) are cut using special instruments that seal the blood vessels before they are divided. Very rarely, damage to the spleen can occur (5% risk) that results in bleeding. Most times, this is not serious and can be controlled simply, however, if the spleen were to sustain more severe injury the spleen may have to be removed to prevent further bleeding. Removing the spleen normally has few complications. If your spleen is removed you will be given some vaccinations prior to leaving hospital. Additionally, you will be advised to stay on a low dose of preventative antibiotic for at least two years.

Altered Voice - A rare complication of oesophagectomy is damage to one of the nerves to the voice box (recurrent laryngeal nerve). This can result in hoarseness of the voice. This is nearly always temporary and is due to bruising of the nerve. Very rarely, permanent damage is done, resulting in a change in the quality of the voice. It is not uncommon to have a slightly hoarse voice following your anaesthesia. This is because of slight swelling as a result of the breathing tube used in your operation. This will usually recover over a few days to weeks. In rare cases it may slowly resolve over several months.

Bleeding – This very rarely occurs after any type of operation. Your pulse and blood pressure are closely monitored after your operation as this is the best way of detecting this potential problem. If bleeding is thought to be happening, you may require a further operation to stop it. This can usually be done through the same scar(s) as your first operation. It is possible that you also may require a blood transfusion.
Wound haematoma - Bleeding under the skin can produce a firm swelling of blood clot (haematoma), this may only become apparent several days after the surgery. It is essentially a bruise. This may simply disappear gradually or leak out through the wound without causing any major consequences to you.

Wound infection – This affects your scars (‘wound infection’). If the wound becomes red, hot, swollen and painful or if it starts to discharge smelly fluid then it may be infected. It is normal for the wounds to be a little sore, red and swollen as this is part of the healing process and represents the body’s natural reaction to surgery. It is best to consult your doctor if you are concerned. A wound infection can happen after any type of operation. Simple wound infections are easily treated with a short course of antibiotics.

Deep infection – A rarer and more serious problem with infection is where an infection develops inside your abdomen or chest cavity. This will often need a scan to diagnose, as there may be no obvious signs on the surface of your body. Fortunately, this type of problem will usually settle with antibiotics. Occasionally, it may be necessary to drain off infected fluid. This is most frequently performed under a local anaesthetic by our colleagues in the X-ray department. In the worst case scenario a further operation is required to correct this problem.

Anastomotic stricture - The join between the remnant of your oesophagus and your new stomach tube (“anastomosis”) can sometimes narrow down during its healing phase. A stricture is a technical term that simply means a narrowing. This narrowing can cause problems with swallowing, particularly with solid foods. If this happens you might need to have the join stretched gently to make it wider again. This can be done as an outpatient in the endoscopy unit under gentle sedation. Anastomotic strictures often are not apparent for at least several months after surgery and may not occur until one to two years later.

Scarring – Any surgical procedure that involves making a skin incision carries a risk of scar formation. A scar is the body’s way of healing and sealing the cut. It is highly variable between different people. All surgical incisions are closed with the utmost care, usually involving several layers of sutures. The sutures are almost always dissolvable and do not have to be removed. The larger an incision the more prominent it will be. Despite our best intentions, there is no guarantee that any incision (even those only 1-2 cm in length) will not cause a scar that is somewhat unsightly or prominent. Scars are usually most prominent in the first few months following surgery, however, tend to fade in colour and become less noticeable after a year or so.

Death – All major surgery carries a risk of death related to the procedure and the anaesthetic. It is estimated that this risk of death with this procedure is 1-2%.

Other complications – We have tried to describe the most common and serious complications that may occur following this surgery. It is not possible to detail every possible complication that may occur following any operation. If another complication that you have not been warned about occurs, we will treat it as required and inform you as best we can at the time. If there is anything that is unclear or risks that you are particularly concerned about, please ask.
**Alternative procedures that are available**

Surgical removal of the gullet is currently the only known way of curing most oesophageal cancers. In many cases surgery is combined with chemotherapy and radiotherapy before, and sometimes after, surgery to maximise the chances of cure. You may be one of the patients who will benefit from this and it will have been discussed with you prior to any surgery. Not everyone is suitable for this treatment so don't worry if you are just having surgery.

Some very early, small oesophageal cancers can be removed via a gastroscopy that is passed via the mouth and therefore does not require any cuts. This technique is only appropriate for very early or precancerous growths.

**Information and support**

We may give you some additional patient information before or after the procedure such as leaflets that explain what to do after the procedure and what problems to look out for.

If you have any questions or anxieties, please feel free to ask a member of staff including your consultant, one of the senior trainees or the oesophago-gastric cancer nurse specialist on 01223 596383.

The consultants can be contacted on 01223 217421 or 01223 358024.

**Anaesthesia**

Anaesthesia means ‘loss of sensation’. There are three types of anaesthesia: general, regional and local. The type of anaesthesia chosen by your anaesthetist depends on the nature of your surgery as well as your health and fitness. Sometimes different types of anaesthesia are used together.

**Before your operation**

Before your operation you will meet an anaesthetist who will discuss with you the most appropriate type of anaesthetic for your operation, and pain relief after your surgery. To inform this decision, he/she will need to know about:

- your general health, including previous and current health problems
- whether you or anyone in your family has had problems with anaesthetics
- any medicines or drugs you use
- whether you smoke
- whether you have had any abnormal reactions to any drugs or have any other allergies
- your teeth, whether you wear dentures, or have caps or crowns.
Your anaesthetist may need to listen to your heart and lungs, ask you to open your mouth and move your neck and will review your test results.

**Pre-medication**

You may be prescribed a 'premed' prior to your operation. This is a drug or combination of drugs which may be used to make you sleepy and relaxed before surgery, provide pain relief, reduce the risk of you being sick, or have effects specific for the procedure that you are going to have or for any medical conditions that you may have. Not all patients will be given a premed or will require one and the anaesthetist will often use drugs in the operating theatre to produce the same effects.

**Moving to the operating room or theatre**

You will usually change into a gown before your operation and we will take you to the operating suite. When you arrive in the theatre or anaesthetic room and **before starting your anaesthesia, the medical team will perform a check of your name, personal details and confirm the operation you are expecting.**

Once that is complete, monitoring devices may be attached to you, such as a blood pressure cuff, heart monitor (ECG) and a monitor to check your oxygen levels (a pulse oximeter). An intravenous line (drip) may be inserted. If a regional anaesthetic is going to be performed, this may be performed at this stage. If you are to have a general anaesthetic, you may be asked to breathe oxygen through a face mask.

**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. Your anaesthetist achieves this by giving you a combination of drugs.

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 at the correct level of unconsciousness for the period of the surgery. 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.

**Regional anaesthesia**

Regional anaesthesia includes epidurals, spinals, caudals or local anaesthetic blocks of the nerves to the limbs or other areas of the body. Local anaesthetic is injected near to nerves, numbing the relevant area and possibly making the affected part of the body difficult or impossible to move for a period of time. Regional anaesthesia may be performed as the sole anaesthetic for your operation, with or without sedation, or with a general anaesthetic. Regional anaesthesia may also be used to provide pain relief after your surgery for hours or even days.
Your anaesthetist will discuss the procedure, benefits and risks with you and, if you are to have a general anaesthetic as well, whether the regional anaesthesia will be performed before you are given the general anaesthetic.

**Local anaesthesia**

In local anaesthesia the local anaesthetic drug is injected into the skin and tissues at the site of the operation. The area of numbness will be restricted and some sensation of pressure may be present, but there should be no pain. Local anaesthesia is used for minor operations such as stitching a cut, but may also be injected around the surgical site to help with pain relief. Usually a local anaesthetic will be given by the doctor doing the operation.

**Sedation**

Sedation is the use of small amounts of anaesthetic or similar drugs to produce a ‘sleepy-like’ state. Sedation may be used as well as a local or regional anaesthetic. The anaesthesia prevents you from feeling pain, the sedation makes you drowsy. Sedation also makes you physically and mentally relaxed during an investigation or procedure which may be unpleasant or painful (such as an endoscopy) but where your co-operation is needed. You may remember a little about what happened but often you will remember nothing. Sedation may be used by other professionals as well as anaesthetists.

**What will I feel like afterwards?**

How you will feel will depend on the type of anaesthetic and operation you have had, how much pain relieving medicine you need and your general health.

Most people will feel fine after their operation. Some people may feel dizzy, sick or have general aches and pains. Others may experience some blurred vision, drowsiness, a sore throat, headache or breathing difficulties.

You may have fewer of these effects after local or regional anaesthesia. When the effects of the anaesthesia wear off you may need pain relieving medicines.

**What are the risks of anaesthesia?**

In modern anaesthesia, serious problems are uncommon. Risks cannot be removed completely, but modern equipment, training and drugs have made it a much safer procedure in recent years. The risk to you as an individual will depend on whether you have any other illness, personal factors (such as smoking or being overweight) or surgery which is complicated, long or performed in an emergency.

**Very common (1 in 10 people) and common side effects (1 in 100 people)**

Feeling sick and vomiting after surgery
Sore throat
Dizziness, blurred vision
Headache

Minimally invasive oesophagectomy, CF424, V3, September 2018
Patient Information

Bladder problems
Damage to lips or tongue (usually minor)
Itching
Aches, pains and backache
Pain during injection of drugs
Bruising and soreness
Confusion or memory loss

**Uncommon side effects and complications (1 in 1000 people)**
Chest infection
Muscle pains
Slow breathing (depressed respiration)
Damage to teeth
An existing medical condition getting worse
Awareness (becoming conscious during your operation)

**Rare (1 in 10,000 people) and very rare (1 in 100,000 people) complications**
Damage to the eyes
Heart attack or stroke
Serious allergy to drugs
Nerve damage
Death
Equipment failure

Deaths caused by anaesthesia are very rare. There are probably about five deaths for every million anaesthetics in the UK. For more information about anaesthesia, please visit the Royal College of Anaesthetists’ website: [www.rcoa.ac.uk](http://www.rcoa.ac.uk)
Information about important questions on the consent form

1  Creutzfeldt Jakob Disease (‘CJD’)
We must take special measures with hospital instruments if there is a possibility you have been at risk of CJD or variant CJD disease. We therefore ask all patients undergoing any surgical procedure if they have been told that they are at increased risk of either of these forms of CJD. This helps prevent the spread of CJD to the wider public. A positive answer will not stop your procedure taking place, but enables us to plan your operation to minimise any risk of transmission to other patients.

2  Photography, Audio or Visual Recordings
As a leading teaching hospital we take great pride in our research and staff training. We ask for your permission to use images and recordings for your diagnosis and treatment, they will form part of your medical record. We also ask for your permission to use these images for audit and in training medical and other healthcare staff and UK medical students; you do not have to agree and if you prefer not to, this will not affect the care and treatment we provide. We will ask for your separate written permission to use any images or recordings in publications or research.

3  Students in training
Training doctors and other health professionals is essential to the NHS. Your treatment may provide an important opportunity for such training, where necessary under the careful supervision of a registered professional. You may, however, prefer not to take part in the formal training of medical and other students without this affecting your care and treatment.

4  Use of Tissue
As a leading bio-medical research centre and teaching hospital, we may be able to use tissue not needed for your treatment or diagnosis to carry out research, for quality control or to train medical staff for the future. Any such research, or storage or disposal of tissue, will be carried out in accordance with ethical, legal and professional standards. In order to carry out such research we need your consent. Any research will only be carried out if it has received ethical approval from a Research Ethics Committee. You do not have to agree and if you prefer not to, this will not in any way affect the care and treatment we provide. The leaflet ‘Donating tissue or cells for research’ gives more detailed information. Please ask for a copy.

If you wish to withdraw your consent on the use of tissue (including blood) for research, please contact our Patient Advice and Liaison Service (PALS), on 01223 216756.
Privacy & Dignity

Same sex bays and bathrooms are offered in all wards except critical care and theatre recovery areas where the use of high-tech equipment and/or specialist one to one care is required.

We are now a smoke-free site: smoking will not be allowed anywhere on the hospital site. For advice and support in quitting, contact your GP or the free NHS stop smoking helpline on 0800 169 0 169.

Other formats:

If you would like this information in another language or audio, please contact Interpreting services on telephone: 01223 348043, or email: interpreting@addenbrookes.nhs.uk For Large Print information please contact the patient information team: patient.information@addenbrookes.nhs.uk.

Document history

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Minimally invasive oesophagectomy +/- OGD (endoscopy)

A  Patient's side   left / right   or N/A

Consultant or other health professional responsible for your care

Name and job title:

☐ Any special needs of the patient (e.g. help with communication)?

Please use ‘Procedure completed’ stamp here on completion:

B  Statement of health professional (details of treatment, risks and benefits)

1  I confirm I am a health professional with an appropriate knowledge of the proposed procedure, as specified in the hospital's consent policy. I have explained the procedure to the patient. In particular, I have explained:

   a) the intended benefits of the procedure (please state)

      Treatment of malignant or early cancer lesion of oesophagus

   b) the possible risks involved. Addenbrooke's always ensures any risks are minimised. However all procedures carry some risk and I have set out below any significant, unavoidable or frequently occurring risks including those specific to the patient

      Full details are set out in the patient information and include:

      bleeding, infection, anastomotic leak, re-operation, chest infection, chyle leak, cardiac complications, deep vein thrombosis, pulmonary embolism, recurrent laryngeal nerve palsy, vascular or intestinal injury, inoperability, splenic injury, stomach necrosis, complications related to the feeding jejunostomy, wound infection, wound haematoma, anastomotic strictures, mortality (death 1-2%).

   c) what the treatment or procedure is likely to involve, the benefits and risks of any available alternative treatments (including no treatment) and any particular concerns of this patient:
Minimally invasive oesophagectomy +/- OGD (endoscopy)

**Consent Form**

**Minimally invasive oesophagectomy +/- OGD (endoscopy)**

**d)** any extra procedures that might become necessary during the procedure such as:
- [ ] Blood transfusion
- [ ] Other procedure (please state)

2 The following information leaflet has been provided:
Minimally invasive oesophagectomy +/- OGD (endoscopy)

Version, reference and date: CF424, Version 3, September 2018

or [ ] I have offered the patient information about the procedure but this has been declined.

3 This procedure will involve:
- [ ] General and/or regional anaesthesia
- [ ] Local anaesthesia
- [ ] Sedation
- [ ] None

**Signed** (Health professional): __________________________ Date: [DD/]MM/YY

**Name** (PRINT): __________________________ **Time (24hr):** HH:MM

**Designation:** __________________________ **Contact/bleep no.:** __________________________

**C Consent of patient / person with parental responsibility**

I confirm that the risks, benefits and alternatives of this procedure have been discussed with me and that my questions have been answered to my satisfaction and understanding.

**Important:** please read the patient information about this procedure and then put a tick in the relevant boxes for the following questions:

1 **Creutzfeldt Jakob disease (CJD)**
Have you ever been notified that you are at risk of CJD or variant CJD for public health purposes? If yes, please inform your health professional. [ ] Yes [ ] No

2 **Photography, Audio or Visual Recording**
   a) I agree to the use of any of the above type of recordings for the purpose of diagnosis and treatment. [ ] Yes [ ] No
   
   b) I agree to unidentified versions of any of the above recordings being used for audit and medical teaching in a healthcare setting. [ ] Yes [ ] No

3 **Students in training**
I agree to the involvement of medical and other students as part of their formal training. [ ] Yes [ ] No
Use of Tissue

a) I agree that tissue (including blood) not needed for my own diagnosis or treatment can be used and stored for ethically approved research which may include ethically approved genetic research.

b) Where additional clinical information is needed for the purposes of ethically approved research, I agree that relevant sections of my medical record may be looked at by researchers or by relevant regulatory authorities. I give permission for these individuals to have access to my records.

I have listed below any procedures that I do not wish to be carried out without further discussion.

I have read and understood the Patient Information about this procedure and the above additional information. I agree to the procedure or treatment.

Signed (Patient): 

Name of patient (PRINT): 

Date: __/__/__

If signing for a child or young person; delete if not applicable.
I confirm I am a person with parental responsibility for the patient named on this form.

Signed: 

Relationship to patient: 

Date: __/__/__

If the patient is unable to sign but has indicated his/her consent, a witness should sign below.

Signed (Witness): 

Name of witness (PRINT): 

Address:
Minimally invasive oesophagectomy +/- OGD (endoscopy)

D Confirmation of consent

Confirmation of consent (where the treatment/procedure has been discussed in advance)
On behalf of the team treating the patient, I have confirmed with the patient that she/he has no further questions and wishes the treatment/procedure to go ahead.

Signed (Health professional): .................................................. Date: ...D.D./M.M./Y.Y.Y.Y....

Name (PRINT): ................................................................. Job title: ..................................................

Please initial to confirm all sections have been completed:

E Interpreter's statement (if appropriate)

I have interpreted the information to the best of my ability, and in a way in which I believe the patient can understand:

Signed (Interpreter): .................................................. Date: ...D.D./M.M./Y.Y.Y.Y....

Name (PRINT): .................................................................

Or, please note the language line reference ID number:

F Withdrawal of patient consent

☐ The patient has withdrawn consent (ask patient to sign and date here)

Signed (Patient): .................................................. Date: ...D.D./M.M./Y.Y.Y.Y....

Signed (Health professional): .................................................. Date: ...D.D./M.M./Y.Y.Y.Y....

Name (PRINT): ................................................................. Job title: ..................................................