Oxford University Hospitals NHS Trust

Oxford Upper Gastrointestinal Centre

Surgical treatment for cancer of the oesophagus
Information for patients
This leaflet gives you information about your planned operation, possible risks and complications, and implications of surgery. We believe that all people have a right to information to help them make a more informed decision or choice about treatment. Please feel welcome to discuss any information with the medical and specialist nursing staff.

**If you would like to speak with someone who has had surgery on the oesophagus, either before or after your operation, please contact:**

**Oxfordshire Oesophageal and Stomach Organisation (OOSO)**
www.ooso.org.uk
Tel: 07711 160 766

## Introduction

Surgery for cancer of the oesophagus and the junction between the oesophagus and the stomach can offer the chance of a potential cure or long-term survival for many people.

Your surgeon and the Advanced Nurse Practitioner will discuss the details of the planned surgery with you. The surgery is major and has significant risks.

Following surgery, you will be nursed in the Churchill Overnight Recovery Unit (CORU) before being transferred to the Oxford Upper Gastrointestinal Centre the next day. Occasionally, some people need to be admitted to the Intensive Care Unit (ICU) for extra care.

## Are there any alternatives?

If the cancer can be removed by surgery, this offers a possibility of a cure or long term survival. In certain types of cancer, a combination of chemotherapy and radiotherapy may be another treatment option. This will have been discussed with you if it is an appropriate treatment option for you. Other options may slow down the cancer, but they are less likely to offer a cure than surgery.
What does the operation involve?

The oesophagus (the gullet) runs from your neck to your stomach through the chest cavity. In order to remove the cancer, most of the oesophagus and sometimes some of the stomach needs to be taken away. The type of surgery offered and where the incision(s) (cuts) are made will depend on the size and position of the cancer. Some surgery involves a large incision to the left side of the chest, going down towards the abdomen. Other surgery involves up to three small incisions, one to the right side of the chest, one in the abdomen, and one in the neck. If the cancer is at the bottom end of the oesophagus, then the surgery may be carried out through one incision in the abdomen and one in the neck.

An oesophagectomy involves removing most of the oesophagus including the cancer. The stomach is then formed into a tube to replace the oesophagus and is drawn up into the chest or neck where it is joined to the remainder of the oesophagus.

The surrounding lymph glands close to the cancer will also be removed. Examination of the lymph glands will give the doctors information about any spread of the cancer.

During the surgery your surgeon will also insert a small feeding tube directly into your bowel. This tube will stick out through your skin and is used to give you liquid food to support the healing process. When you are eating and drinking by mouth the tube can be removed.

Will I need any chemotherapy before the operation?

Many people, if they are fit, will be considered for a course of chemotherapy before their operation. This usually involves 2 or 3 cycles of a standard chemotherapy regime (each chemotherapy cycle is 21 days).

You may be eligible to enter a clinical trial, evaluating new drugs or ways of giving chemotherapy. You will be offered entry into a clinical trial if there is one available at the time of your clinic appointment.
If you are suitable for chemotherapy, you will be seen by an oncology doctor and the Advanced Nurse Practitioner, who will give you more information about the chemotherapy itself and side effects.

If you are not suitable for chemotherapy you will be booked directly for surgery.

**How long will the operation take?**

The operation will take on average 4 - 6 hours.

**How long will I be in hospital?**

The usual length of stay in hospital is 10 - 14 days. If there are any complications after the operation, your hospital stay is likely to be longer, sometimes considerably so.

**What are the risks of surgery?**

All major operations carry risks of a complication related to the surgery itself and to the anaesthetic. It is important that you are aware and understand these risks. A complete list of risks will be discussed with you by your surgeon. The important risks for you to think about include:

- **Risk of death**
  
  There is a less than 5 % chance that you will die from this operation. The risk can be higher, depending on how fit you are for surgery.

  This figure the same as published results for other specialist centres for this surgery in UK.

  Other risks include:

- **Bleeding (haemorrhage)**

  All surgery carries a risk of bleeding. In the event of serious bleeding, the surgeon may need to re-operate. About 1 in 3 of all people...
having this operation will receive a blood transfusion, although this will be avoided if at all possible.

- **Chest infection or breathing problems**
  This is partly due to the surgery on the chest and abdomen and also due to the anaesthetic. The risk is significantly higher in people who smoke. All people who smoke will improve their chances of avoiding this problem if they stop smoking completely. To reduce the risk of chest infections we will give you painkillers, encourage you to breathe deeply and cough regularly and help you to get up and about as quickly as possible after your operation.

- **Wound infection**
  All surgery carries a risk of infection. To reduce this risk we will give you antibiotics at the time of the operation.

- **Anastomotic leak (less than 10% chance)**
  There is a small risk that the join (anastamosis) between the stomach tube and the remainder of the oesophagus will leak. If this happens soon after the operation, then the surgeon may need to re-operate. If this happens at a later date, then you are less likely to require another operation. To reduce this risk, you will only be allowed to sip small amounts of water and not be allowed to eat anything for several days after the operation. A nasogastric tube will be inserted into the stomach tube to protect the join from the inside by draining away any fluid from the stomach tube.

- **Hoarse voice (less than 1% chance)**
  The nerve to the voice box (the larynx) passes very close to the oesophagus. Occasionally, this nerve can become bruised during the operation, resulting in a temporary hoarse voice and difficulty coughing. If this nerve has been damaged the hoarseness may be permanent.

- **Blood clot in the leg (deep vein thrombosis)**
  All major surgery carries a risk of developing a clot or thrombosis in the leg. The clot may then travel to the lungs (a pulmonary embolus). This risk is reduced by encouraging you to get up and
about quickly, to wear support stockings and by giving you blood-thinning injections after the operation. You are likely be discharged with a course of blood-thinning injections.

What are the long-term effects of surgery?

**Change in eating**
As a result of the operation you will have a reduced stomach capacity. This means that you are likely to feel full more quickly after meals and will need to eat small amounts on a regular basis.

**Tiredness or fatigue**
Most people feel very tired when they go home from hospital. This is normal and will improve as the weeks and months go by. Many people do not feel that they have “returned to normal” for at least 6-9 months after the operation. Indeed, it may take longer if there have been complications or you needed additional treatment.

What can I do to help myself before the operation?

1. **Stop smoking** – It cannot be emphasised enough that it is in your best interests to stop smoking as soon as possible before any major surgery. This will reduce the risk of any breathing problems during and after the operation. The longer you are smoke free before your operation, the better the condition of your lungs will be for surgery. Continuing to smoke before surgery can increase the risk of complications involving the heart, lungs and surgical wounds, all of which may result in you having a slower recovery and a longer stay in hospital.

There are several places you can find information about stopping smoking:

- Make an appointment at your GP practice or health centre. There is usually a Smoking Cessation Advisor who can give you advice about stopping smoking.
• Smokefree Oxfordshire
  This group supports people through the process of quitting – they have over 800 advisors in Oxfordshire ready to help you quit.
  http://www.smokefreeoxfordshire.nhs.uk/
  Helpline: 0845 408 0300

**NHS SmokeFree**
Advice to help you stop smoking.
http://smokefree.nhs.uk/

2. **Reduce alcohol intake** – It is helpful to stop or significantly reduce any heavy drinking of alcohol. This will help to reduce problems with alcohol withdrawal after the operation and will also aid healing.

3. **Diet** – Eating a healthy diet can help wound healing and your general well-being after the operation. You may have experienced difficulties with swallowing, loss of appetite and weight loss. Such problems should be discussed with your surgeon and Advanced Nurse Practitioner. A referral is usually made to the specialist dietitian for advice, so that your nutritional state is as good as possible before the operation. The dietitian will also visit you once you have been admitted to hospital.

If you have difficulty swallowing even liquids or have lost a lot of weight you may require the insertion of a feeding tube before the operation to help with nutrition.

It is very important to inform the Advanced Nurse Practitioner or the specialist dietitian if your swallowing becomes worse at any time or if you are losing weight.

4. **Moderate exercise** – Moderate exercise before the operation helps to strengthen muscles, build up stamina, reduce breathing problems and reduce fatigue after the operation. It is recommended that you walk regularly or do other appropriate exercise – for example, swimming or gym exercises. If you are unsure what you should be doing, then please ask for advice from the Advanced Nurse Practitioner.
5. **Home circumstances** – Before your surgery, it is useful to plan ahead for your discharge from hospital; identifying any particular problems or needs you think you might have when you go home. These should be discussed with the Advanced Nurse Practitioner or the nursing staff on the ward.

**Pre-admission assessment clinic**

We will ask you to come to a pre-admission assessment clinic 1-2 weeks before the date of your surgery. At this appointment we will assess your fitness for an anaesthetic and surgery. You will be seen by a nurse who will ask you questions about your general health. Tests will be carried out to provide further information relevant to your surgery; for example, blood tests. You may be seen by an anaesthetist at the same time. The information will be used to plan your care in hospital and to deal with any problems at an early stage.

**Enhanced Recovery After Surgery (ERAS)**

The Enhanced Recovery Programme is a new way of improving the experience and well-being of people who need major surgery. It helps them to recover sooner so that life can return to normal as quickly as possible. The programme focuses on making sure that you are actively involved in your recovery with daily goals and targets to achieve. This will also help to keep you focused and motivated in your recovery.

**There are four main stages:**

1. Planning and preparation before admission (including improving your nutrition and health before you come in for surgery).
2. Reducing the stress of the operation.
3. A planned approach to peri-operative (during surgery) and post-operative (after surgery) management, including pain relief.
4. Early mobilisation (getting you moving as soon as possible).

The Enhanced Recovery Programme is a guideline for all professionals involved in looking after you. This programme may not be suitable for
everyone. If this is the case for you, the team looking after you can make changes, making sure that the care you receive is not only of the highest quality, but is also designed around your specific needs.

You will be given a detailed leaflet about the Enhanced Recovery Programme before your operation.

**Inspiratory Muscle Training (IMT)**

Inspiratory Muscle Training (IMT) is a form of resistance (weight) training which strengthens the breathing muscles of the chest and diaphragm. By training these muscles for a period of at least two weeks before your operation they adapt, become stronger and more able to work efficiently. By improving muscle strength, it is hoped that IMT can reduce the chance of you developing breathing complications following your surgery.

If you are a candidate for IMT you will be seen in the clinic by the physiotherapist, who will teach you how to use the techniques.

The physiotherapist will give you the training equipment, a specific leaflet about IMT and a training record.

**What happens after the operation?**

All people undergoing major oesophageal surgery will normally spend one or two days in the Churchill Overnight Recovery Unit (CORU) or in the Intensive Care Unit (ICU). The stay may be longer if there are complications. There will normally be several tubes and wires attached to you for monitoring purposes and to give you fluids and medication. Once your doctors feel you are well enough, you will be transferred back to the observation area on the ward. The Intensive Care Outreach Team will continue to review you on the ward.

**Breathing/oxygen therapy**

You will have oxygen therapy for several days after surgery. The oxygen is attached to a water bottle on the wall; this moistens (humidifies) the oxygen. The water prevents the oxygen from becoming too dry and keeps any chest secretions moist, making them
easier to cough up. Oxygen therapy given this way is unfortunately quite noisy.

The physiotherapist will see you at least once a day in the first few days following surgery. He/she will advise on deep breathing and coughing exercises to help clear your lungs of secretions.

**Monitoring**
You will be closely monitored by the nursing and medical staff. We will regularly record your pulse, blood pressure, breathing rate, and oxygen saturation levels (how much oxygen is in your blood). We will also monitor your fluid balance (how much fluid goes into your body and how much fluid comes out). Your wounds and “drips and drains” will be checked regularly by the nursing staff.

**“Drips and drains”**
There will be several “drips and drains” in place after such major surgery, such as:

- Tubes called ‘venflons’ in your arm(s) or a ‘central line’ in your neck to give you fluids and some drugs, such as painkillers.

- A feeding tube inserted into your abdomen to give you liquid food while you are still not able to eat solid food.

- An epidural tube in your back to give you painkillers.

- Drainage tubes in your chest to remove any fluid that may collect there.

- A catheter tube in your bladder to drain urine.

- A nasogastric tube inserted through your nose into your stomach to remove any fluid in collecting there and to prevent reflux (a back-up of stomach/bowel fluid into your mouth). This tube is often secured with a stitch and tape, as it is very important that it doesn’t fall out.

It is easy for some of these tubes to fall out accidentally so please take care not to dislodge any of them. Your nurse will be checking them regularly but please let us know if you have any concerns.
Pain control

Pain control is very important for your comfort after such a major operation. It will help to encourage deep breathing and coughing and help you to get mobile. There are many effective ways of preventing and relieving pain. The Acute Pain Team will visit you on the ward to make sure your pain is controlled well.

Pain relief options include:

- **Epidural**: this involves a small tube being placed near the nerves in your back, through which we can give you pain-killing drugs.

- **Patient Controlled Epidural Analgesia (PCEA)**: you are able to press a button on the PCEA machine when you need to. This will give you a measured dose of painkiller into the epidural tube in your back.

- **Patient Controlled Analgesia (PCA)**: you are able to press a button on the PCA machine and give yourself a measured dose of painkiller into a tube in your arm or hand.

- **Other ways of giving painkillers include**: through the feeding tube, via the rectum (bottom), or by mouth (if you are allowed to eat and drink).

It is important that you tell us if you feel your pain is not being controlled well and could be improved.

**Nutrition**

For the first few days, you may be kept “Nil by Mouth”. This means you won’t be able to eat or drink, or may only be allowed to sip small amounts of fluids. This helps the join between your stomach tube and the rest of the oesophagus to heal. You will be allowed to have mouthwashes during this time, to stop your mouth from feeling dry. The small feeding tube placed in your gut will give you enough ‘liquid feed’ until we are certain that you can eat satisfactorily.

Sometimes, before you can start drinking, a special X-ray swallow
test is performed to check whether the join has healed. This will also show whether there are any leaks from the join. As long as there are no obvious problems, you will be allowed to gradually build up your intake of fluids and on to a soft diet.

The dietitian will give you information and advice about your diet.

**Mobility**

The nurses, doctors and the physiotherapist will encourage and help you with your mobility (getting up and moving about). Early mobility is very important for improving your breathing, reducing the risk of chest infections and blood clots (deep vein thrombosis), improving stamina, and reducing fatigue (tiredness) after the operation. The physiotherapist will organise a special programme of walking following your surgery, often as part of the Enhanced Recovery Programme.

We appreciate that it can be difficult to move, particularly if you still have “drips and drains” in place. The nurses and physiotherapist will guide and help you during this time.

**Rest**

It is important to have periods of rest in hospital. It is helpful to plan a dedicated rest period in the afternoon without visitors, so that you can sleep or just rest quietly on the bed. Try not to sleep after 4 o’clock, as this may disturb your sleep at night.

**When will I be discharged home?**

You will normally be discharged from hospital when you have met specific targets with your recovery.

Some examples of these are:
- being assessed as medically fit (well enough) for discharge
- controlling your pain with painkillers
- managing a soft/moist diet and fluids
- being able to open your bowels
- being independently mobile (able to get out of bed and on/off the toilet without help).
Once you are eating enough, moving well and feel reasonably well, then we can plan for your discharge from hospital. The Advanced Nurse Practitioner will give you written advice about discharge from this type of surgery and will discuss any specific issues with you. The dietitian and the physiotherapist will give you written information about diet and exercises too.

The ward nurses will teach you (or your carer) how to give yourself a short course of blood-thinning injections ready for when you go home.

Most people will be discharged with their feeding tube in place. To keep the tube clear it simply needs flushing through with water once a day. We will show you how to do this on the ward before you go home. Provided that you are eating well and maintaining a stable weight at your first out-patient appointment, we will remove the feeding tube in clinic. The ward nurses may arrange for a district nurse to visit you at home if you have any particular needs, for example, to help you care for your wound.

You will need to make your own arrangements for discharge, including transport and ensuring that you have adequate support at home. If you have any questions or concerns about leaving hospital, please speak to your ward nurse.

Further information can be found in the following patient information booklets, which are available from the Oxford Upper Gastrointestinal Centre at the Churchill Hospital, Oxford or by visiting the OUH website library (see back of this leaflet for details).
- Leaving Hospital: information for patients leaving hospital
- Discharge after an oesophagectomy or an oesophagogastrectomy
- A guide to life after surgery (Oesophageal Patients Association (OPA))
- Life after an oesophagectomy or gastrectomy (Oxfordshire Oesophageal and Stomach Organisation (OOSO))
- Eating and drinking following oesophageal or stomach surgery
- Life after discharge from intensive care.
How often will I need check-ups?

We usually see you in clinic two weeks after your discharge from hospital. After this, your routine follow-up appointments will take place at three to four monthly intervals during the first year and then usually on a six monthly basis after this. We will of course see you earlier if you have problems or concerns.

Please do not hesitate to contact the Advanced Nurse Practitioner or the medical team if you have any concerns or problems.

Please also contact your consultant’s secretary or the Advanced Nurse Practitioner if you have not received any information about outpatient appointments.

Will I need further treatment?

All your scans/X-rays and tissue samples (histology) are discussed at specialist multidisciplinary team (MDT) meetings at different times during your treatment programme. After the operation we will review the tissue removed at the time of surgery. We will discuss the results of the operation with you either on the ward or in the clinic.

Occasionally, further treatment with chemotherapy or radiotherapy will be needed. If this is recommended for you, we will discuss this with you either on the ward or in clinic.

Sometimes, soon after the operation, the join or “anastomosis” can narrow, usually due to benign scar tissue. This can result in difficulties with swallowing. This narrowed join can usually be gently stretched during an endoscopy. Please contact the Advanced Nurse Practitioner or the medical staff if you have any difficulty swallowing.
Useful telephone numbers

Consultant Oesophagogastric Surgeons
Mr Nick Maynard       01865 235 673
Mr Bob Marshall       01865 235 158
Mr Bruno Sgromo       01865 235 158
Mr Richard Gillies    01865 235 673

Upper Gastrointestinal Advanced Nurse Practitioner:
Telephone: 01865 235 706
or 01865 741 841 and ask for Bleep 1977 or 5928

Dietitian:
Telephone: 01865 235 421
or 01865 741 841 and ask for Bleep 4176

Further information

Oxfordshire Oesophageal and Stomach Organisation (OOSO)
www.ooso.org.uk
Telephone: 07711 160 766
OOSO is a volunteer-led organisation made up of former patients and carers. They can help patients and their families cope after having treatment on the oesophagus or the stomach. They provide support and can encourage you to achieve a good quality of life.

Oesophageal Patients Association
www.opa.org.uk

Oxford Oesophagogastric Centre
www.oxforduppergi.org.uk

NHS Choices
http://www.nhs.uk/Conditions/Pages/bodymap.aspx

CancerLinks (Oxfordshire Cancer Information)
http://www.cancerlinks.org.uk/
If you have a specific requirement, need an interpreter, a document in Easy Read, another language, large print, Braille or audio version, please call 01865 221 473 or email PALSJR@ouh.nhs.uk