# Upper Gastrointestinal Surgery

# Surgery for cancer of the oesophagus

# Information for patients, relatives and carers

# Introduction

This leaflet is designed to answer some of the questions that you or those important to you may have about surgery for cancer of the oesophagus (also known as oesophagectomy).

It is not meant to replace the consultation between you and your medical team but aims to help you understand more about what is discussed.

Here, we explain some of the aims, benefits, risks, and alternatives to oesophagectomy. We want you to be informed about your choices to help you to be fully involved in decisions.

# What is an oesophagectomy?

The oesophagus (gullet) is part of your digestive system and is a long muscular tube that connects your mouth to your stomach. It can be divided into three parts: the upper, middle, and lower third.

An oesophaegectomy is an operation in which the part of the oesophagus containing the cancer is removed. The part that is removed depends on the size and position of the cancer inside the oesophagus.

During an oesophaegectomy we will:

- 1. Remove either the lower half of the oesophagus or most of the oesophagus.
- 2. Pull up the stomach as a tube into the chest to join to the remaining oesophagus.
- 3. Remove all the lymph glands around the oesophagus and stomach. This is because most oesophageal cancers spread to the lymph glands. By removing the lymph nodes, we aim to remove all the disease, and by doing this reduce the chance of the cancer coming back. We will also analyse the samples of the lymph glands after the surgery to look at the cancer and plan your treatment accordingly.

An oesophagectomy is a major operation and takes between five and eight hours to perform.

The operation can be performed using open surgery, laparoscopic (keyhole) surgery, or a combination of both types.

There are two operations that can be performed:

• a two-stage procedure (Ivor-Lewis oesophagectomy), or

• a three-stage procedure (three-stage oesophagectomy)

We explore these operations in more detail below. Whichever operation you have, you can expect to be in hospital for at least 10 days.

Your surgeon will discuss with you the most appropriate approach to remove your cancer.

# Two-stage lvor-Lewis oesophagectomy

#### Stage 1

In this stage the stomach is detached and the abdominal lymph glands are dissected in order to be removed with the tumour. The stomach is converted into a tube and a feeding tube is inserted into the bowel. This stage is done either through a traditional open surgery technique or by keyhole surgery. In a traditional open surgery, a cut is made across the abdomen. In a keyhole surgery, five to six small (1 cm or less) cuts are made, through which special instruments are used to perform the surgery.

#### Stage 2

Following this, you are turned over on your side and the lower oesophagus and the attached lymph glands are removed. The stomach is pulled up into the chest and a join is made between the stomach tube and the remaining oesophagus. This stage is usually performed by an open technique where a cut is made across the chest and the ribs are retracted (drawn back) to gain access into the chest.

## Three-stage oesophagectomy

#### Stage 1

The whole oesophagus and the attached lymph glands are dissected to be removed through the abdomen later. This can be done by the open surgery technique or by keyhole surgery. In the open technique you are turned over on your side and a cut is made across the chest, and the ribs are retracted to gain access into the chest

#### Stage 2

The stomach is freed from its attachment, and the abdominal lymph glands are dissected to be removed with the tumour. The stomach is converted into a tube and a feeding tube is inserted into the bowel. This stage is done by an open surgery technique or by keyhole surgery.

#### Stage 3

A cut is made on the left side of the neck, and the part of the oesophagus in the neck is dissected. The oesophagus is cut at this level and the whole oesophagus, dissected in the first stage, is pulled out through the abdomen. The stomach tube is then pulled through the chest into the neck and a join is made between the stomach tube and the remaining oesophagus in the neck.

Your surgeon will draw pictures below to show you how the oesophagus and stomach will look before and after the surgery.

Before oesophagectomy:

After oesophagectomy:

#### What are the benefits of the surgery?

Oesophagectomy is considered the best treatment for potentially curable oesophageal cancer. It gives good symptom relief and offers the best chance of a long-term cure.

## Is there an alternative?

At present, a combination of pre-operative chemotherapy followed by oesophagectomy is considered to be the best treatment for potentially curable oesophageal cancer.

If you do not wish to have an oesophagectomy, chemotherapy is a potential alternative but is considered palliative (non-curative) only. There are a small number of very early cancers that may be treated endoscopically. Please discuss this with your consultant surgeon.

Sometimes a combination of chemotherapy and radiotherapy may be recommended as a curative treatment, depending on the type of cancer you have. Please discuss this with your consultant surgeon and oncologist.

# What are the possible risks and side effects?

This is a major operation and there are risks. Make sure you speak to your surgeon about possible complications and ask all the questions you need to.

#### Risks include:

- **difficulties in swallowing in the neck region**, which could result in some food and drink 'going down the wrong way'. This complication is more likely if you are undergoing a three-stage oesophagectomy. This problem tends to resolve within a month
- **heart problems**, including a heart attack or abnormal heart rhythms. This is due to the strain that the operation puts on the heart
- a leak at the joint where the stomach and the gullet are stitched together (called an anastomotic leak). If you have an anastomotic leak, you are usually not permitted to eat or drink as this may make it worse. Most anastomotic leaks are very small (the size of a pinhead) and resolve of their own accord after 10 to 14 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
- **chest infections and pneumonia** (these are common complications of many operations). To reduce the risk of this occurring, there are breathing exercises that you can do before and after the operation. Stopping smoking will significantly reduce these risks
- infection of your wounds or drain sites
- **blood clot** in your legs (deep vein thrombosis) or in your lung (pulmonary embolus), or both

- **bleeding** this can usually be managed by blood transfusions but in rare cases it may be necessary to reoperate to stop the bleeding
- complications can be serious and delay your recovery. Also, it may not be possible to remove the cancer if it is more advanced than the staging investigations suggested
- there is a risk of death from this operation, but, overall, it is less than 3 per cent (fewer than 3 in 100 people)

# Possible side effects include:

Please also refer to 'Going home after your surgery for cancer of the oesophagus' leaflet for full details

- diarrhoea this is quite common due to the changes in the shape of your digestive tract. The diarrhoea can usually be controlled with changes in eating behaviour as well as medication and improves in time
- **feeling full** the stomach will be smaller after the operation. It is a narrow tube and will not be able to accommodate large amounts of food. This results in a feeling of fullness soon after meals. It is essential that you eat small amounts of food frequently
- taste changes many patients say their taste is altered after their operation. This can
  last for a few weeks after the surgery. Try cold food as well as hot because some
  patients find that cold food is more palatable
- **loss of appetite** you are likely to have a small appetite after surgery. It is important to persevere and eat little and often to try and maintain your weight
- **dumping syndrome** this is a relatively common side effect which is due to food entering parts of the bowel too quickly, leading to either a drop in blood pressure or a reduced blood sugar level. This can result in feeling light-headed, sweaty or an urge to open the bowels. It can be improved by eating small amounts at regular intervals, reducing the sugar in your diet, eating slowly, and avoiding drinks or liquids close to mealtimes
- reflux (acid coming from the stomach) because the valve between the gullet and stomach is removed during this operation, and the stomach is moved up into the chest, stomach acid can reflux causing heartburn. This can be treated with antacid medications. Many patients need to sleep more upright after the operation
- altered voice a rare complication of oesophagectomy is damage to the nerves of the voice box. This can result in hoarseness of the voice. This is nearly always temporary and is due to bruising of the nerve. However, it may take some months to recover. 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 because 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.

Please speak with the medical team if you are concerned about any of these.

# Consent

You will be asked for your consent before the hospital staff begin your treatment. Your doctor, or clinical nurse specialist (CNS) or key worker will carefully explain the procedure. No medical treatment can be given without your written consent.

If you do not understand what you have been told, let the staff know straight away, so they can explain again. You may also find it useful to write a list of questions before your appointment and to have a relative or friend with you to help you remember the discussion when the treatment is explained.

All clinical communications copied to your GP may also be sent to you, at your request. Please discuss this with your CNS or key worker.

#### What you can do to get ready for your operation

There are things you can do to help prepare for the operation. These include:

- **stopping smoking** this will help to reduce the risks of breathing problems during and after your operation. If you would like further advice about stopping smoking, please speak to your GP or practice nurse
- **try to gain weight** the dietician will advise you on this, but unless advised otherwise, you should try and eat foods you enjoy, to try to gain some weight before your operation
- try to limit your alcohol intake if you are not sure whether the amount of alcohol you
  drink is within the recommended guidelines, please speak with your CNS or key worker.
  There is support available if you need it
- take some gentle exercise to improve your general fitness
- **practice your breathing exercises** you will be taught breathing exercises during your physiotherapy appointments. You must practice these before the operation and perform them from the day after your operation.

## What happens before the operation?

If you have had chemotherapy, we recommend waiting for at least four weeks after completing chemotherapy before having surgery, to allow the body to recover.

Before the operation we will ask you to attend a pre-assessment clinic for blood tests, lung function tests and an echocardiography to assess your heart.

## What happens on the day of the operation?

• you should not eat for six hours before the operation but you can have water and other clear, non-fizzy liquids for up to two hours before the operation.

- you should continue to take your regular medications as usual unless you have been advised otherwise by your surgeon or anaesthetist. If you are diabetic, you will be started on an insulin drip.
- most patients are admitted on the morning of their operation. You will need to arrive at 06:40am and report to Hammersmith Hospital, A8 ward, 4th Floor, Block B.

### Will I go back to the ward after the operation?

After the operation you will be taken to the intensive care unit (ICU), where you will be closely monitored. You will be in the ICU for at least two days after the operation. If a bed is not available in the ICU, the operation will not be able to go ahead that day and you will have to be rescheduled for another date. You will be contacted once this is arranged for you.

Most patients will be awake and able to breathe for themselves within hours of the operation.

## Who will be looking after me after the surgery?

There will be a large team looking after you. The doctors and nurses will be supervising your recovery. Other members of the team include:

- **a physiotherapist**, who will help with your breathing and mobility. You will be expected to sit out in a chair and start to walk the first day after your operation. Gradually they will help you increase your mobility so that you can walk assisted along the ward corridor within two to three days
- a dietitian, who will advise you on what to drink and eat
- a speech and language therapist, who may be involved to assess swallowing in the neck region, or to talk to you about changes to your voice

## Will I have any tubes attached to me after the surgery?

We will use tubes to monitor you closely and promote a safe, quick recovery. These are routine, so try not to be alarmed by their appearance. The following tubes may be used:

- a central line a special intravenous tube inserted via a large blood vessel to prevent dehydration and to allow us to monitor your fluid needs
- a nasogastric (NG) tube a tube attached through your nose. It drains fluid out of the new oesophagus and into a bag
- a jejunostomy tube inserted into the first part of your intestine. You will be fed through this tube on the first day after surgery and the nutrition it supplies will speed up recovery. It will be removed once your weight, eating and post-operative treatment are established and stable. This can be done in a follow-up clinic appointment
- one or two chest drains to remove any excess fluid from your chest

- a wound drain inserted into the abdomen to stop blood, bile and tissue fluids collecting around the site of the wound. One or more of these tubes may be added
- a catheter line inserted into your bladder to monitor the amount of urine you are passing

Once the doctors are happy with your progress these tubes will be removed. Normally, most of these tubes are removed within a week.

# How will my pain be controlled?

Normally an epidural catheter will be inserted into your back. This numbs all the pain nerves supplying the abdomen and controls post-operative pain. Adequate pain control will enable you to take deep breaths, cough effectively and mobilise. It's important that you are able to do these things, because, if you aren't able, you may be at higher risk of developing a chest infection or DVT (deep vein thrombosis). While there may be a bit of discomfort when you move or cough, it is essential that you let the nurse looking after you know if you are in any pain.

After 5 days, the epidural catheter will be taken out and you will receive pain medication by mouth.

There are some alternatives to an epidural that can be used and if these are proposed the anaesthetist will go through this with you.

# When can I eat and drink again?

Initially after your operation you will not be able to take anything by mouth for up to five days; this includes water. This allows the new join to heal with fewer risks of complications. You will receive liquid food via the feeding tube which will be inserted into your small intestine during the operation.

Five days after the operation, you will have an x-ray to check if the join has healed. During this, you will be asked to swallow a dye (liquid barium) and the radiologist will take a series of x-ray images to check whether the join is intact. The dye coats your throat and stomach and allows the new join to be seen on the x-ray. It is not harmful. You may also need an assessment of your swallowing in the neck region.

If the x-ray shows the join is intact, and that your swallowing in the neck region is fine, the nasogastric tube will be taken out. You will then be allowed to start drinking in small amounts.

If the join has not healed completely, you will be kept fasting and we will continue to feed you through the feeding tube. If the join has healed and there is no leak, we will start on a liquid diet by day six, progressing your diet slowly as advised by the dietitian. The dietitian will give you advice on when and what to start eating. It is not unusual to have diarrhoea.

# When will I be able to sit and walk after my operation?

You must try your best to sit in a chair for at least two hours in the morning and two hours in the evening. Sitting up helps you to breathe more freely and prevents lung collapse and pneumonia.

You must also take a few steps around the ward from the first day and gradually increase the distance you walk every day. This again helps your breathing.

It also keeps the blood in your veins flowing and prevents clots forming in your legs and lungs.

To prevent clots, you will also be encouraged to wear support stockings and will be given one dose of blood thinning medication (heparin) every day.

## When can I go home?

If there are no complications, you should be ready for discharge ten days after your operation. Before you are discharged, we will want to make sure that all observations and blood tests are within the normal range, you are independently walking and getting out of bed, and are able to tolerate a liquid diet.

## Oesophageal specific support

#### The Oesophageal Patients Association

This charity organises support groups around the UK to enable new patients to meet and talk to former patients who have recovered, are back at work (if not retired) and lead relatively normal lives.

Telephone: 0121 704 9860

#### Website: www.opa.org.uk

There is also a forum available for patients with oesophageal cancer to connect and talk with other patients affected by the disease.

#### Further sources of support and information

#### Macmillan cancer navigator service at Imperial College Healthcare NHS Trust (ICHT)

This is a single point of contact for ICHT cancer patients and their families, helping you to navigate your care and resolve queries that you may have. Our Navigators can access information about your appointments, connect you to appropriate services and signpost you on to further support. They can additionally book you in for a telephone call back from your CNS if you have a query that requires clinical input.

The service is open Monday to Friday 8:30 to 16.30 (excluding bank holidays).

Call: 020 3313 0303

# Macmillan cancer information and support service at Imperial College Healthcare NHS Trust (ICHT)

The Macmillan information and support service provides free, confidential support and information to anyone affected by cancer. Our service offers the opportunity to talk to one of our team one-on-one about whatever matters most to you, as well as a range of weekly virtual groups that provide the opportunity to connect with other patients in a relaxed environment.

Our Macmillan welfare and benefits adviser can offer ICHT patients tailored advice on additional financial support.

We have physical centres at Charing Cross and Hammersmith Hospitals and also offer virtual and telephone support.

The service is open Monday to Thursday (excluding bank holidays), with various drop-ins available within our physical centres. For more information, please call us on 020 3313 5170 or email imperial.macmillansupportservice@nhs.net

#### Maggie's west London

Maggie's is a cancer charity that provides the emotional, practical, and social support to people with cancer and their family and friends. The centre combines beautiful architecture, calming spaces, a professional team of support staff and the ability to talk and share experiences with a community of people who have been through similar experiences. Maggie's centres are warm, friendly, and informal places full of light and open space with a big kitchen table at the heart of the building. Maggie's west London is in the grounds of Charing Cross Hospital but is independent of our hospital. The centre is open Monday to Friday, 09.00 to 17.00.

#### Call 020 7386 1750.

#### **Macmillan Support Line**

The Macmillan Support Line offers confidential support to people living with cancer and their loved ones. This support line is a national line provided by Macmillan and is independent of our hospital

Call: 0808 808 000 (everyday, 08.00-20.00) or visit www.macmillan.org.uk

#### How do I make a comment about my visit?

We aim to provide the best possible service and staff will be happy to answer any of the questions you may have. If you have any **suggestions** or **comments** about your visit, please either speak to a member of staff or contact the patient advice and liaison service (**PALS**) on **020 3312 7777** (10.00 – 16.00, Monday to Friday). You can also email PALS at imperial.pals@nhs.net The PALS team will listen to your concerns, suggestions or queries and is often able to help solve problems on your behalf.

Alternatively, you may wish to complain by contacting our complaints department:

Complaints department, fourth floor, Salton House, St Mary's Hospital, Praed Street London W2 1NY

Email: ICHC-tr.Complaints@nhs.net

Telephone: 020 3312 1337 / 1349

# Alternative formats

This leaflet can be provided on request in large print or easy read, as a sound recording, in Braille or in alternative languages. Please email the communications team: imperial.communications@nhs.net

#### Wi-fi

Wi-fi is available at our Trust. For more information visit our website: www.imperial.nhs.uk

Upper GI Surgical Team Published: May 2024 Review date: May 2027 Reference no: 952 © Imperial College Healthcare NHS Trust