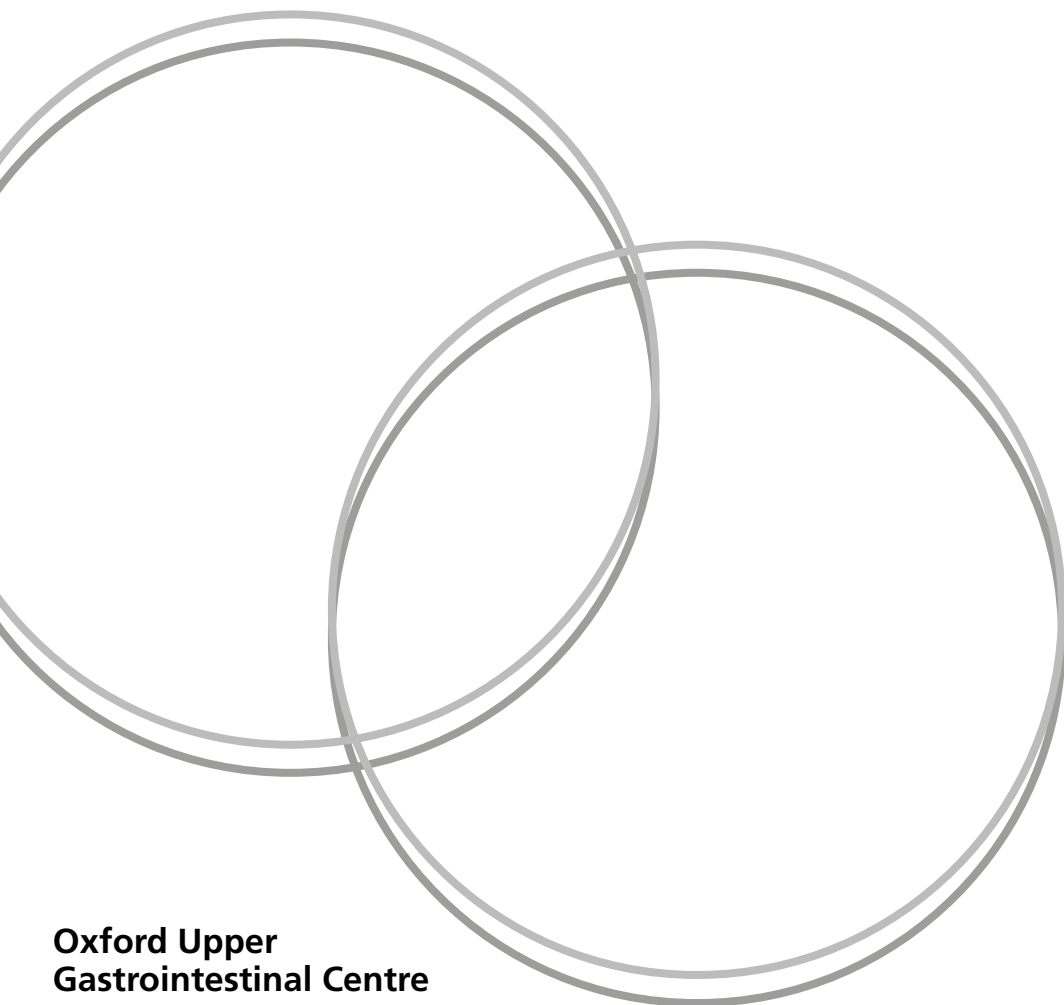




Oxford University Hospitals  
NHS Foundation Trust

# Surgical treatment for cancer of the stomach

Information for patients



Oxford Upper  
Gastrointestinal Centre

## **Information for patients**

This leaflet gives you information about your planned operation, the possible risks and complications, and what this will mean for you in the future. We believe that all people have a right to information in order to 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 stomach, either before or after your operation, please contact:**

**Oxfordshire Oesophageal and Stomach Organisation (OOSO)**

**[www.ooso.org.uk](http://www.ooso.org.uk)**

**Tel: 07711 160 766**

## **Introduction**

Surgery for cancer of the stomach can offer the chance of potential cure or longer term survival for many people who have cancer.

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

## **Are there any alternatives?**

If the cancer can be removed by surgery, this offers a possibility of a cure or long term survival. Other options may slow down the cancer, but they are less likely to offer a cure than surgery.

## **What does the operation involve?**

The aim of the surgery is to remove a cancerous tumour. We may also need to remove tissue which was near the tumour and lymph nodes to which the cancer may have spread.

Depending on the position of the tumour, part or all of your stomach will need to be removed. Occasionally, the lower part of the tube from your mouth to your stomach (oesophagus or gullet) may also need to be removed. Removal of the surrounding lymph nodes close to a cancer will take place at the same time. These will help to give us information about whether the cancer has spread.

The operation involves an incision (cut) in the top of your abdomen, or sometimes across the top of your abdomen extending over onto the left side of your chest. If all of your stomach needs to be removed, part of your small bowel (jejunum) will be reconnected to the bottom of the oesophagus. If only part of your stomach has been removed, then the small bowel is joined to the remaining part of the stomach.

It may be possible to perform keyhole surgery (laparoscopic surgery). If we think that this is an option for your operation then this will be discussed with you in detail.

## **Will I need chemotherapy before the operation?**

Many people, if they are fit, will be considered for a course of chemotherapy before their operation. This usually involves 3 or 4 cycles of a standard chemotherapy regime.

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 a candidate for chemotherapy you will be seen by an oncology doctor and the Specialist Nurse. They will give you more information about the chemotherapy itself and any side-effects.

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

## **How long will the operation take?**

The operation will take on average 2-4 hours.

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

The usual length of stay in hospital is 5 - 8 days. If there are any complications after the operation your hospital stay is likely to be longer, sometimes considerably so.

## **What are the risks?**

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

### **Risk of death**

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

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 people who have 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 abdomen and also due to the anaesthetic. The risk is significantly higher in people who smoke. If you smoke, you will improve your chances of avoiding this problem if you stop smoking completely before the operation. 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 (anastomosis) between the stomach and the small bowel or the oesophagus and the small bowel 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 treatment is less likely to involve an operation.

## **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 travel to the lungs (a pulmonary embolus). This risk is reduced by encouraging you to get up and about quickly, wear support stockings and by giving you blood-thinning injections after the operation.

## **What are the long-term effects of surgery?**

The stomach stores food, produces gastric juices and acid, absorbs iron, and then passes the food into the small bowel.

### **Change in nutrition**

As a result of the operation the capacity (size) of your stomach will be reduced. If your stomach is completely removed, any food eaten will pass more quickly into the small bowel. This means that many people find that they may not be able to eat as large a meal as before, will feel full more quickly after meals and will need to eat small amounts "little and often".

It is important for people who have had their whole stomach removed to have Vitamin B12 injections every three months. Vitamin B12 is an important vitamin for the formation of red blood cells and it cannot be absorbed from food without a stomach.

### **Dumping syndrome**

This syndrome sometimes develops in a small number of people. As a result of removing part or all of the stomach, food can empty rapidly straight into the small bowel. This can cause a drop in blood sugar levels and an increase in the amount of fluid draining into the bowel. This can lead to temporary symptoms of feeling faint, weak and sweating, as well as occasional diarrhoea. Most symptoms settle with time and are usually helped by introducing simple changes to your diet. The dietitian will be able to advise you on this.

## **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 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 after surgery.

# 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 your 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:

- Contact “**Here for Health**”, a Health Improvement Advice Centre for information and support on healthy living.

Tel: **01865 222958**

Email: **hereforhealth@ouh.nhs.uk**

- 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 aid healing.

- Contact “**Here for Health**”, a Health Improvement Advice Centre for information and support on healthy living.

Tel: **01865 222958**

Email: **hereforhealth@ouh.nhs.uk**

3. **Diet** – Eating a healthy diet can help wound healing and your general well-being after the operation. You may have experienced loss of appetite, a feeling of fullness and/or weight loss. Such problems should be discussed with your surgeon and the Specialist Dietitian. A referral can be 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.

**It is very important to inform the specialist nurse, doctor, or specialist dietitian if you are losing weight or vomiting.**

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 Physiotherapist or the Specialist Nurse.

5. **Home circumstances** – Before your surgery, it is useful to plan ahead for your discharge from hospital, to identify any particular problems or needs you think you might have when you go home. These should be discussed with your Specialist Nurse or the nursing staff on the ward.

6. **Dental Health** – It is advised that you see a dentist before surgery to check if you need any treatment for your teeth and gums. Poor oral health and oral hygiene can cause an increase in bacteria which could spread to the lungs.

## **Pre-admission assessment clinic**

We will ask you to come to a pre-operative 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 will be seen by an anaesthetist at the same time. A Cardiopulmonary Exercise Test allows the anaesthetist to measure how well your heart and lungs are working at rest and during exercise. 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 way of improving the experience and well-being of people who need major surgery. It will help you 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?**

Most people undergoing major stomach surgery will go directly to the recovery area in the operating theatre before returning to the ward. There will normally be several tubes and wires attached to you for monitoring purposes and to give you fluids and medication. Occasionally, some people will require more intensive monitoring in the Intensive Care Unit (ICU).

### **Breathing / oxygen therapy**

You will have oxygen therapy for several days after surgery. The oxygen is attached to a water bottle on the wall, which 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.

The physiotherapist will see you at least once a day in the first few days following surgery. He/she will advise you 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 the 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.
- An epidural tube in your back to give you painkillers.
- A catheter tube in your bladder to drain urine.
- A nasogastric tube inserted through your nose into your remaining stomach or the small bowel to remove any fluid 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.
- A chest drain, if your operation included removing part of the oesophagus as well.

**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 additional pain relief. 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

If all of your stomach has been removed, you may initially be kept strictly "Nil by Mouth". This means you won't be able to eat or drink, or may only be allowed to sip small amounts of fluid. This helps the join from your surgery to heal. You will be allowed to have mouthwashes during this time to stop your mouth from feeling dry.

Sometimes, before you can start drinking, a special X-ray swallow test is needed 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 pureed 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 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 the 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 from hospital?

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 pureed 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 Specialist Nurse will give you written advice about discharge 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 before you go home.

**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:

- Leaving Hospital: information for people leaving hospital
- Discharge advice after surgery on the stomach
- Eating and drinking following oesophageal or stomach surgery
- A guide to life after surgery (Oesophageal Patients Association (OPA))
- Life after an oesophagectomy or gastrectomy (Oxfordshire Oesophageal and Stomach Organisation (OOSO)).



## **How often will I need check-ups?**

We usually see you in clinic around two weeks after your discharge from hospital. (This appointment may be sooner if you have had complications or problems after the operation.)

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 any problems or concerns.

Please do not hesitate to contact the specialist nurse, specialist dietitian or the medical team if you have any concerns or problems.

Please also contact your consultant's secretary if you have not received any 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.

Many people will need further treatment with chemotherapy and/or radiotherapy. If we feel that this treatment would be suitable for you we will be discuss it in more detail with you, either on the ward or in clinic.

## **Useful telephone numbers**

### **Consultant Oesophagogastric Surgeons**

Tel: **01865 228991**  
**01865 223901**

### **Upper Gastrointestinal Specialist Nurse:**

Tel: **01865 235058**

### **Dietitian:**

Tel: **01865 228305**

## **Further information**

### **Oxfordshire Oesophageal and Stomach Organisation (OOSO)**

[www.ooso.org.uk](http://www.ooso.org.uk)

Tel: **07711 160 766**

OOSO is a volunteer-led organisation made up of former patients and carers. They can help people 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 (OPA)**

[www.opa.org.uk](http://www.opa.org.uk)

### **Oxford Oesophagogastric Centre**

[www.oxforduppergi.org.uk](http://www.oxforduppergi.org.uk)



## Further information

If you would like an interpreter, please speak to the department where you are being seen.

Please also tell them if you would like this information in another format, such as:

- Easy Read
- large print
- braille
- audio
- electronic
- another language.

We have tried to make the information in this leaflet meet your needs. If it does not meet your individual needs or situation, please speak to your healthcare team. They are happy to help.

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