Radiotherapy to the Oesophagus

Information for patients
This leaflet aims to help you and your families understand more about your treatment. It will be given to you in addition to the information you will receive from your clinical oncologist (who is a specialist doctor in cancer treatment).

Their team will be caring for you during your treatment. This team may include radiographers, nurses, social workers, physiotherapists and dietitians. This leaflet describes radiotherapy planning and treatment. It also explains the side-effects which you may experience during and after treatment.

Each person’s treatment will vary, so the information given is a general guide. The healthcare team looking after you will explain your treatment and the side-effects in detail. If you hear any words or phrases that you do not understand, please ask your doctor or a member of your healthcare team what it means. It does not matter how many times you ask.

Staff will make every effort to meet your individual needs or will direct you to the person who can help.

**All your radiotherapy planning and treatment will take place in the Radiotherapy Department on Level -2, Bexley Wing, Leeds Cancer Centre (LS9 7TF).**

**Radiotherapy reception desk tel: 0113 206 8940**

Please do not bring any valuables into hospital with you as the Trust cannot accept liability for loss or theft.
What is radiotherapy?

Radiotherapy is the use of high energy X-rays and other types of radiation, to treat cancer. The organs and tissues of the body are made up of tiny building blocks called cells.

Radiotherapy causes physical and chemical damage to the cancer cells in the treated area.

Although normal cells are also affected, they can repair themselves and are able to recover.

Radiotherapy is a local treatment. This means it only affects the part of the body that is treated. You do not feel anything and you will not be radioactive. It is perfectly safe for you to be with other people, including children and pregnant women, throughout your treatment.

You will have your radiotherapy on a treatment machine called a linear accelerator as shown here in the photograph.

Radiotherapy is given by male and female therapy radiographers. You will see your radiographers at each treatment session and they will be happy to answer any questions you may have.
If you would like to visit the radiotherapy department before your treatment starts please call 0113 206 7603 to arrange a time. This visit can be very useful as you can find out more information about radiotherapy. It is a good opportunity to visit the hospital and tour the simulators and treatment areas. You will also have the opportunity to ask questions.

‘I was so pleased to see the machines before my treatment and the staff were so helpful and really put my mind at rest.’

Pregnancy

It is important that women do not become pregnant while having cancer treatment because the radiotherapy and chemotherapy can have an effect on the unborn child. It is suggested that you use a barrier form of contraception (for example condoms). For more information see the ‘Contraception and pregnancy during cancer treatment’ leaflet. Please do not hesitate to ask your doctor or nurse if you have any questions or concerns about these issues.

Students

Please be aware that the radiotherapy department is a training centre for male and female radiographers. Students may be present on the treatment units. They are supervised at all times. If you do not wish students to be present during your treatment please speak to a member of staff. This will not affect your treatment or care.
How is radiotherapy given?

Radiotherapy to the oesophagus is usually given over 1-4 weeks. This is a total of between 5-20 treatment days. Treatment is normally given daily, Monday to Friday; however your treatment may not start on a Monday. If your treatment falls over a bank holiday, you may need to be treated on one or two Saturdays to compensate for this. We will let you know if this is the case. Your radiographer will be able to explain the details of your individual radiotherapy appointments.

Your treatment is usually given as an outpatient but you may need to come into hospital at some stage if your side-effects become a problem.

Planning your treatment

Your first appointment for radiotherapy will be a planning appointment. This will be used to gather all the information we need to accurately plan your treatment. You will be contacted by phone, with an appointment for your radiotherapy planning session. Some tests and scans may be needed to help plan your treatment. We will explain which of these areas you will need to visit when your appointment is made.

You may see your clinical oncologist (or a member of their team) at this appointment. This is an ideal opportunity for you to ask questions.
**What to bring with you:**

- a list of all the questions you may have;
- an up-to-date list of all the medications you are taking (including inhalers, sprays, vitamins or herbal products); any medication that you may need during your visit;
- something to eat and drink and something to occupy yourself with, as this first visit can be quite lengthy (up to two hours).

Your treatment position depends on which part of your oesophagus is to be treated. The following information explains the different positions we may use for your planning and treatment. Only one position will be used throughout your treatment.

If you need treatment to the upper part of your oesophagus you may need to have a plastic mask made (as shown in this picture). This will be made the same day as your scan. This helps in the accurate delivery of your radiotherapy treatment as it supports your head and neck so you can keep still.

The radiographers can draw treatment marks on your mask, instead of your skin, to position you for your treatment each day. If you have any concerns about the mask, please let your clinical oncologist or a member of their team know. We have a support team who will help you.
If you are having your middle or lower oesophagus treated you will have your scan and treatment lying flat with your arms above your head. You must be able to keep this position for about 15 minutes each day during your radiotherapy treatment. If you are not comfortable and think you are unable to hold this position then please tell the radiographers at your planning scan. They can make you more comfortable. Please tell your doctor, preferably in advance, if you are unable to keep your arms up. In this case we may need to use a mask.

**Planning CT Simulator**

In order to plan your treatment you will have a CT scan using X-rays. This is done on a machine called a CT Simulator, shown here in the photograph. Planning scans are not diagnostic examinations and will not be reported on as such.

You may need to have a dye injected into a vein in your arm or a 4D scan to monitor your breathing (see next page). These can help the doctor when planning your treatment. The radiographer will explain about the type of scan you will need. When you have this scan you will be asked to drink some water, but only if you can manage this.

There will be several members of staff present at your scan. These may include therapy radiographers, a mould room technician and a dosimetrist (the person who will produce the computer plan for your treatment).
The radiographers will draw some marks onto your skin or mask, to be used as a reference for your treatment. You will then be scanned, which will only take a few minutes. At the end of the scan the skin marks will be replaced by permanent marks. These marks, shown here next to a five pence piece, are no bigger than a freckle and will be used each day for your treatment. These permanent marks help us to reproduce your treatment with accuracy each day. It also means that you can wash as normal without worrying about your marks coming off.

**Contrast (dye)**

A special contrast agent, often called a dye, may be used to make specific organs, blood vessels and tissue types ‘stand out’. This can make it easier for the doctor to plan your treatment.

The dye is given through a small needle into a vein in your arm. You should tell the radiographer if you have any allergies, but they will go over this before they use any dye.

**The most common side-effects of the dye are:**

- warm or hot “flushed” sensation during the injection;
- A “metallic” taste in the mouth, which usually lasts less than a minute or so.
- You may also feel as if you have passed urine however to date no-one has! This will pass very quickly and it should cause no ill effects.
There is a slight risk of an allergic reaction to the injection, such as a skin rash, but it may lead to other significant complications. The doctors in the radiotherapy department are trained to deal with any complications and again the risk involved is very small. You will be able to drive your car or go to work after your scan. The radiographers will advise you about drinking plenty of fluid after your injection.

**4D Scan**

This type of scan is only needed for tumours in the lower part of the oesophagus.

A belt is placed around your stomach which is attached to the scanner to monitor how your tumour moves when you are breathing. This monitoring process can take about 30 minutes. However, the actual scan itself will take less than two minutes.

Your doctor will explain the details of the scan, if you need it when you are seen in clinic.

When the planning procedure is finished, you will be able to start your treatment. This is usually in a couple of weeks’ time. The radiographer will talk to you about future appointments and you will be given a list of your first five before you go home.

If you are thinking of booking a holiday please discuss this with your consultant or radiographer to avoid a clash with your treatment start times.
Having your treatment

When you arrive for your treatment you should go to the reception at the entrance of the radiotherapy department. You will be given directions to your treatment machine. The radiographers will explain what will happen and answer any questions that you may have.

The number of treatments you will be having will be confirmed and you will be given a list with all the appointments you need.

Treatment is normally given daily, Monday to Friday however your treatment may start on any day of the week. Whenever possible you will be treated at the time of day that suits you, but this cannot always be arranged or guaranteed. There may be occasions when you may have a longer stay in the department or be asked to attend at a different time, e.g. to see your oncologist.

Although you have the small permanent marks on your skin, the radiographers may need to draw around them each time you come for treatment. This is part of the quality checking procedure for your treatment. If you have pen marks on your skin you may prefer to wear older clothing as the marks may discolour fabric. It is also generally advisable to wear loose clothing around the treated area.

You will have your treatment in the same position as your planning scan. Depending on the location of your cancer, you may be asked to drink water shortly before your treatment.

The radiographers will take images to check your treatment position before giving you your first radiotherapy treatment.
More routine images are taken during the course of your radiotherapy, this is usually for the first week and then once a week until you finish. Treatment times vary from 10-20 minutes each day depending on the type of treatment you are having. The treatment machine is only switched on for a fraction of this time. For most of the time the radiographers are carefully placing you and the machine in the correct position for your treatment. The machine will move around you but does not touch you.

Once you are in the correct position (see picture above) the radiographers will leave the room to switch on the machine. You will only be alone for a few minutes at a time.

The radiographers will be watching you on a closed circuit TV (CCTV) monitor. The CCTV camera is not recording or saving any images.

There is also an intercom system so the radiographers can talk to you. Please let the radiographers know if you would like them to use the intercom during your treatment.
Each radiotherapy treatment room is fitted with an alert system. If you need assistance at any point during your treatment press the button and the radiographers will come straight back in to you.

Treatment itself takes about 15 minutes, at the beginning of treatment and every week you will also have a scan. You will be on the bed longer on these days. The scan is used to ensure accuracy of treatment. It cannot predict the outcome of treatment; the doctor will discuss this with you at your follow up appointment.

Although you have to lie still, you can breathe and swallow normally during your treatment.

The machine stops automatically after your prescribed dose of treatment has been given. The machine can also be stopped at any time if needed. The treatment machines make a buzzing noise when switched on; this is the only way you will know the machine is on. You will not feel anything.

During the treatment course, please tell the radiographers how you are feeling. If you have any problems or questions, please let them know. Your clinical oncologist or a member of the radiotherapy team will see you regularly in the radiotherapy review clinic to see how you are getting on. They will also monitor any side-effects you may develop.
Side-effects

Side-effects can be divided into short term (acute) effects that happen during or soon after your treatment, and long term side-effects occurring months or years later. Some side-effects are common, whilst others are rare.

Short term effects

As your treatment progresses you may experience some side-effects. Not everyone will experience all of these reactions.

If you do experience any of the following side-effects, do not worry, they are normal reactions to treatment and are temporary. They usually begin about half way through the course of treatment, may last for a few weeks after it has finished and then slowly settle down. Please tell us how you are feeling, particularly if your symptoms worsen, so that we can advise and treat you.

Tiredness (fatigue)

Radiotherapy can make you feel more tired than usual, especially if you have to travel a long way for treatment each day. How tired you feel will vary with the dose you are given and can vary between individuals. For some shorter courses of treatment it may only last a few days but for others it can last weeks or a few months.

Things you can do to help yourself:

- Gentle exercise can help reduce the symptoms of fatigue.
- Having enough to drink can prevent tiredness caused by dehydration.
- Small meals or snacks eaten more often than three times a day maybe easier to face.
• Try to get a good night’s sleep where possible, a daytime nap may help.
• Try to ‘pace’ yourself; listen to what your body is telling you and rest if you need to.
• Pick out the things that you enjoy, and try to accept help with other tasks.
• Little and often is the rule of thumb.

There is a Macmillan information leaflet available ‘Coping with fatigue’. If you would like a copy, or support with your fatigue please ask a member of staff.

**Heartburn (Oesophagitis)**

Radiotherapy can cause inflammation, swelling and soreness of your oesophagus. This can result in soreness or difficulty when swallowing and may feel like heartburn. This can get gradually worse during treatment and can last for a few weeks afterwards. It is usually possible to control this discomfort with painkillers or by changing the types of food you eat. We can prescribe an antacid to ease this discomfort. Take it before meals and at bedtime. If your swallowing becomes too uncomfortable or difficult you may not be able to get enough calories from food and supplements. If this happens you may benefit from being fed through a feeding tube.

Please read the information leaflet enclosed with any medications, this will explain any side-effects you may experience when taking them. If you are at all concerned about any side-effects you are experiencing please talk to your pharmacist, nurse specialist or GP.
Skin reaction
You may notice some reddening and soreness of the skin around the treated area. Before you go in for your treatment the radiographer will explain what will happen to your skin and how to look after it. They will also give you a leaflet to take home. The same will happen at the end of your treatment.

Please be aware that smoking can make skin reactions worse.

If you are concerned about your skin reaction please talk to your radiographers or contact the nursing staff in Princess Royal Suite on: 0113 206 7587.

Cough
During treatment a small part of your lung, closest to the area being treated can get inflamed. This can occasionally cause a dry cough or increased shortness of breath. This is uncommon and is rarely serious enough to need treatment.

Sickness (Nausea) and loss of appetite
If you feel sick during your radiotherapy please tell the radiographers treating you. It is usually possible to control this with medication. You may feel less hungry. The combination of nausea, poor appetite and swallowing problems can make it difficult for you to eat and drink enough during treatment. We will check this with you regularly. This will involve the dietitians and checking your weight. If you are struggling with any of these symptoms, then please tell us. You may need to come into hospital for further care. Drinking regularly ‘little and often’ is a good way to make sure your body has enough fluid.

Effects on the heart or bones during treatment are extremely rare.
Long term effects

• The commonest long term side-effect of radiotherapy is scarring and narrowing of the treated part of your oesophagus. Swallowing may be difficult or painful. There is a procedure to stretch the scarring which can be arranged if this develops.

• Late effects on the lungs can cause a cough or shortness of breath but this is very unusual.

• The spinal cord is the large bundle of nerves which passes down the spine from the brain and carries signals to your body and limbs. Radiotherapy is planned very carefully to avoid an excessive dose to your spinal cord. Damage to the spinal cord can be serious but it is very rare.

• The long term effects of radiotherapy on the heart are not fully understood. It is likely that in long-term survivors of treatment the rate of heart attacks and heart failure will be slightly higher than the general population but accurate figures are not available.

• The rate of second or new cancers caused by treatment may be slightly increased in long-term survivors. Again, accurate data on this is not available.

These effects need to be balanced against the aggressive behaviour of most oesophageal cancers if treatment is not given.
Further information

If you have any further questions please discuss these with your hospital team. The following are also potential sources of information and support you may wish to use.

Hospital contact numbers

Most queries during treatment can be addressed to the radiographers on your machine. If needed, they will contact the medical team on your behalf.

For urgent problems out of office hours, including weekends and bank holidays, contact:

St. James’s University Hospital (0113) 243 3144 and ask for the oncology patient enquiries bleepholder.

Leeds Cancer Support

Leeds Cancer Support complements care provided by your clinical team. We offer access to information and a wide range of support, in a welcoming environment for you, your family and friends.

We can be found in the information lounges in Bexley Wing and also in the purpose built Sir Robert Ogden Macmillan Centre.

The Sir Robert Ogden Macmillan Centre

The Centre is on the St James’s Hospital site and offers a variety of support services including counselling, support groups and complementary therapies. These therapies include Reiki, relaxation and visualisation, hand and foot massage and many others.
You can just drop in for a coffee and a chat anytime. Open from 10am - 4pm Monday to Friday.

**Contact numbers for Leeds Cancer Support**

**Information Lounge Level -2 Radiotherapy Department**
Open from 8.00am - 6.00pm Tel: (0113) 206 7603

**Information Centre Level 1 Outpatients Department**
Open from 10am - 4pm. Tel: (0113) 206 8816

**Sir Robert Ogden Macmillan Centre**
Open from 10am - 4pm. Tel: (0113) 206 6498

*All the above services can be emailed on:*
leedsth-tr.cancersupport@nhs.net

**Macmillan Cancer Support**
Information and support for people affected by cancer.
Freephone: 0808 808 0000  Textphone: 108001 0808 808 0000
Monday to Friday 9am - 8pm
www.macmillan.org.uk

**Oesophageal Patients Association**
A charity set up by former patients. Limited information on the website but links to telephone support and local meetings.
Tel: 0121 704 9860
www.opa.org.uk
**Ochre**
A national cancer charity that has been formed to promote awareness of oesophageal cancer. It also intends to encourage research into the causes of oesophageal cancer and to develop information and support services for patients and their families.
www.ochre-charity.co.uk

**Cancer Research UK**
Reliable, easy to understand information from Cancer Research UK.
www.cancerresearchuk.org

**Patient Advice and Liaison Service (PALS)**
This supports patients and their families when they have concerns about the service they have received from the NHS.
Tel: 0113 206 7168