Royal United Hospitals Bath
NHS Foundation Trust

South West Radiotherapy
Operational Delivery Network

Radiotherapy to the oesophagus

Contents

Introduction

Your oncologist has recommended that you have a course of radiotherapy. This information leaflet aims to tell you about radiotherapy and what will happen.

Please be aware that radiotherapy centres are training centres for doctors, nurses and radiographers. Students may be present in the department but they are supervised at all times. If you would prefer not to have students present during your treatment please let a member of staff know.

You may find it useful to write down some questions before you start your treatment. A space is provided towards the back of this leaflet for you to do so.

Useful contacts

Radiotherapy appointments: _____

_____

_____

Radiographers: _____

_____

Clinical Nurse Specialist: _____

Radiotherapy to the oesophagus

You have been advised to have radiotherapy treatment to your oesophagus (the long tube that carries food from your throat to the stomach) using external radiotherapy.

Doctors usually use radiotherapy to slow the growth of an oesophageal cancer, to improve swallowing and to reduce the risk of bleeding. They can also use radiotherapy in combination with chemotherapy to try to cure the cancer. You will be told which treatment is right for you when you have your ‘consent’ discussion.

What is radiotherapy?

Radiotherapy uses high energy X-rays or other types of radiation to destroy cancer cells. It is sometimes also known as radiation therapy or external beam radiotherapy. The organs and tissues in the body are made up of cells. Normal cells in the treated area can also be damaged by radiotherapy, but normal cells can repair themselves more effectively than cancer cells. Side effects can occur as a result of damage to normal cells and more details are included later in this information.

How is radiotherapy given?

Radiotherapy is given using a special type of X-ray machine called a linear accelerator, or ‘LINAC’. Therapy radiographers operate these machines to deliver your treatment. The radiotherapy is given as a beam focused from outside the body (external radiotherapy). This treatment will not make you radioactive, so it is perfectly

OPA: The Oesophageal Patients Association
Website: www.opa.org.uk

Further support will be available locally, please speak to your oncology team who can advise what local charities are there to help you, and which support groups are available near you.

Your data

All personal images and photographs taken during your radiotherapy will be used in accordance with the local Trust policy on the protection and use of patient information.

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Further information

Further information is readily available online, we would recommend beginning with:

Macmillan Cancer Support

Tel: 0808 808 0000

Website: www.macmillan.org.uk

Cancer Research UK

Website: www.cancerresearchuk.org

NHS UK

www.nhs.uk (search for upper abdomen cancer)

The QR codes below will direct you to further resources relating to your radiotherapy treatment. You can use your smartphone camera to scan the codes:

The Society and College of Radiographers: Radiotherapy Skin Reactions

Website: Website: www.sor.org/getmedia/e091da21-6dc8-47fb-9e08-094a0cb3135e/5056_-_sor_design_doc_a_patient_infosheet_-_skin_care_a5_leaflet_llv2-1_2.pdf

Macmillan: Understanding Radiotherapy

Website: www.macmillan.org.uk/cancer-information-and-support/stories-and-media/booklets/understanding-radiotherapy

safe for you to mix with other people, including children or anyone who is pregnant, throughout your treatment.

The machine delivers the treatment by moving around you. It may come close to you but will not touch you. You will not see or feel the treatment, but you may hear the sound of the machine moving around you.

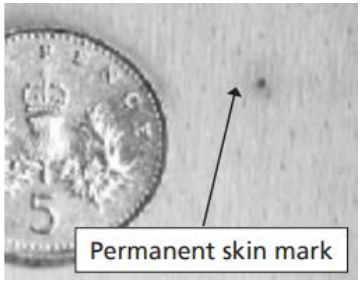
What will happen at my planning scan appointment?

You will normally have a planning scan appointment before your radiotherapy starts, so that the radiotherapy team can make a treatment plan for you. This is a CT scan and will be taken with you in the position in which you will have your treatment. This scan is for the sole purpose of planning your radiotherapy, and there will not be any results available from it. You will need to be in a stable position so that you do not move during your treatment. This will be done using varying pieces of equipment depending on your mobility.

Mask

You may have a mask of your head/neck made if the treatment area is in the top part of your oesophagus. A mask may be required so that you are in the same position at each treatment appointment and the position of your head and neck is kept still throughout each treatment. The mask is made with you lying in the treatment position. A support is put under your head that tilts your head to the correct

position. A plastic mesh material will be heated up in water until it is flexible. This will be placed over your face and head and gently moulded around you. You will need to lie still for a few minutes until it has set and can be lifted off. The mask should be quite a tight fit to ensure that you cannot move your head during treatment, but it should not be uncomfortable. Some pen marks will be drawn on the mask.



If the treatment area is in the lower part of the oesophagus, you will need to lie with your arms supported above your head. After the scan, with your permission, 3 tiny permanent skin marks (tattoos) will be made on your chest. These will be made using a pinprick needle and permanent black ink. The permanent skin marks will be no bigger than a freckle, as show in the image. These marks will be used by the radiographers to get you into the right position for your treatment.

What does my treatment involve?

The radiographers will position you on the couch of the machine using the tattoo dots on your skin or the pen marks on the mask. It is important for you to stay relaxed and still. A team of radiographers work together in the treatment room and you will hear them giving each other instructions and information relating to your treatment. The radiographers will leave the room to switch on the machine. You will only be alone for a few moments at a time. The radiographers will be watching you on a closed circuit TV monitor.

Side-effects

The ticked boxes below are potential side-effects that will arise from your radiotherapy treatment. This is to be taken as a guide, and will not be experienced by all patients.

Frequently occurring short term side-effects

- ☐ Fatigue
- ☐ Oesophagitis/Dysphagia (Difficulty swallowing)
- ☐ Loss of appetite
- ☐ Skin irritation – similar to sun burn
- ☐ Cough/increased breathlessness

Long term side-effects

These may occur many months to years after treatment

- ☐ Lasting fatigue / somnolence (sleeping more than usual)
- ☐ Oesophageal stenosis (narrowing) / perforation
- ☐ Pneumonitis (inflammation of the lung)
- ☐ Spinal bone/cord damage
- ☐ Damage to the heart
- ☐ A radiation induced malignancy (very rare)

You will be having _____ treatments' over _____ days, not including weekends.

There is a two-way intercom system enabling the radiographers to talk to you and you can talk to them.

Please remember to stay still at all times so that your treatment is in the right place. If you need the radiographers you can move your hand to alert them and they can stop the treatment machine and be with you in seconds. Treatment only takes a few minutes. The machine may move around you while the radiographers are outside of the room. This is perfectly normal and they are watching you and the machine the whole time.

Routine blood tests, requested by your doctor, may be taken during your course of treatment.

Who will I see and when?

You may see a Clinical Oncologist (doctor), either a consultant or a specialist registrar. Therapy radiographers are specially trained to use the equipment required to plan and deliver radiotherapy. You will see a team of therapy radiographers at each treatment session.

You may have review appointments during your treatment; the frequency of these depends on the number of treatments you have. These appointments provide an opportunity for you to discuss your side effects and your wellbeing during treatment. You will still have the opportunity every day to discuss any side effects that you

Radiotherapy summary

This page is intended for your health care professional to use when they talk to you about your radiotherapy. It is not an official document or consent, but to help summarise everything in one place for you.

You are having radiotherapy delivered to:

_____

Your radiotherapy consultant is:

_____

Treatment intent

☐ Radical radiotherapy – aiming to give long term benefits and cure in some patients – and may be in combination with chemotherapy given before, during or after the radiotherapy	☐ Palliative radiotherapy – aiming to improve symptoms. Whilst a cure is not likely palliative radiotherapy may also prolong life

have with the radiographers who treat you, so please do not feel that you have to save up your concerns for the review appointments.

Side-effects of radiotherapy to the oesophagus

The majority of side-effects from radiotherapy are predictable, expected and temporary (short term side effects), while other side-effects can be chronic (long term). Everyone's healing is different so you may find you experience some or all of these symptoms. Likewise, you may recover very quickly over a few weeks or it may take a several months.

Short-term side-effects
The radiotherapy has a delayed effect; this means that you usually do not notice any side effects until the end of the second week of treatment. Side effects usually start off mild and slowly build up during the course of your treatment. They most commonly include:

- **Tiredness/Fatigue**
  Some patients may find that they feel more tired than usual during treatment (often after 2 to 3 weeks). Travelling to your radiotherapy appointments may also add to this. It is important that you continue with your normal activities and routines as much as possible. Try to find a sensible balance between rest and activity.
- **Cough and breathlessness**
  Occasionally, radiotherapy can cause a dry cough. Simple over the counter remedies can help with this. You may become slightly breathless; if this happens should improve over a 3 to 4 week period.

of normal working hours please contact NHS 111 for advice.

What support is available?

Many people, quite naturally, feel emotionally upset and frightened following the diagnosis of cancer. It may be difficult to adjust to what is happening. Finding out as much as you can, about your treatment, may help to calm your fears and help you to cope better.

The therapy radiographers and other healthcare professionals you may meet will be willing to listen to your worries and support you in any way they can. They may be able to refer you to support services offered in your hospital.

Questions

Please use this space to write down any questions you have, to help you remember to ask them at your first radiotherapy appointment.

your diet and high energy and high protein options. They can also arrange a prescription for nutritional supplements, such as high calorie drinks to help keep your weight up.

- It is important to try to maintain your weight during treatment. This will help to make sure that your mask fits well and should minimise any interruptions to your treatment.
- Keep active if you can – activity helps to improve outcomes and help you cope better with side-effects.

What can I expect after treatment has finished?

Radiotherapy has a delayed effect in which the side-effects will continue even after your treatment has finished. They tend to reach their peak around 7 to 14 days after your last radiotherapy session, so don't be alarmed if they worsen.

Recovery times vary from person to person, but side-effects should gradually improve over the following 6 to 12 weeks.

In the weeks following your treatment, you will be reviewed by the specialists that have been looking after you. This will vary depending on your diagnosis and treatment regimen, but you will be advised on this by your treatment team.

Everyone is different and may react differently to treatment. If at any point, after you have finished treatment, you are concerned about anything please contact your radiotherapy department or GP - you will be given contact details. It is not unusual for people to be anxious and it might be better to seek advice rather than worry. **If you need urgent help out**

- **Loss of appetite**
  Eating small amounts at regular intervals may help overcome this, try to eat some higher calorie nutritional foods. If you have lost weight or have problems swallowing it may be helpful for you to see a dietician and we may be able to arrange this for you. It is very important to maintain your nutrition during and after treatment to allow the normal tissues damaged by radiotherapy to heal.
- **Discomfort on swallowing**
  You may need medicines to relieve this. A softer diet or liquid foods can be easier to swallow. Try eating smaller amounts more regularly with plenty of fluid/sauces. Let food and drinks cool down before you eat/drink. Avoid hot spicy food as this can cause irritation. Smoking and alcohol can cause soreness; it is advisable to avoid both alcohol and smoking during treatment.
- **Skin reaction**
  Moisturisers can be used to relieve dry, itchy or red skin caused by treatment. Please ask the radiographers for advice on skin care.

Long-term side-effects

These depend on which organs are close to the area being treated and can occur despite our efforts to minimise the radiation dose that they receive. They are less common but can be permanent due to scar tissue forming from the radiotherapy.

- **Oesophageal stricture (narrowing)**
  This is caused by scarring and thickening of the oesophagus after radiotherapy and can cause difficulty swallowing. Your oesophagus may need stretching if swallowing becomes too difficult (dilation). This would be a short procedure. There is a small risk of oesophageal perforation and rarely this can be fatal.
- **Pneumonitis (inflammation of the lung)**
  This is usually temporary but can sometimes lead to permanent shortness of breath and a persistent cough.
- **Spinal bone/cord damage**
  The oesophagus lies close to the spine and the spinal cord (nerves), which will receive a small dose of radiotherapy. This can cause weakening and fracture of the vertebrae (spine). In extremely rare cases this could lead to damage of the spinal cord years after treatment.
- **Heart**
  Radiotherapy may cause a slightly increased risk of angina and heart attacks in the long term. The risk is small, and every effort is made to reduce the risk as much as possible with the radiotherapy planning.

As the treatment involves using radiation, there is a very rare risk that it may cause another cancer within the area treated in the future.

Self-care during radiotherapy

Try to allow time for rest. Everyone reacts differently, and as treatment progresses you will get an idea of the effect it is having on you.

Skin care in the treatment area

- Moisturise frequently; gently smooth it onto your skin until it is absorbed. Do not rub.
- Continue to use the moisturiser you prefer and like to use – if you do not currently use one, speak with your radiographer or CNS and they will be able to suggest some options.
- Do not apply moisturiser immediately before treatment.
- If a moisturiser is causing irritation, stop using it and discuss it with a radiographer or your CNS.
- If your skin blisters or peels, stop using moisturiser in that particular area and seek advice from a radiographer or your CNS.
- Avoid sun exposure in the treatment area – wear a brimmed hat and/or cover up with clothing.
- **Please avoid rubbing the area, using sticky tape, wet shaving, wearing make-up and using wax, hair removal cream or lasers.**

Health and wellbeing

- Keep well hydrated – aim to drink 2 litres (4 pints) of water a day.
- Avoid drinking alcohol.

- Eat a nutritionally well-balanced diet. If you are struggling to eat, a dietitian can help to advise you on how to add extra nourishment to your food, adapting the texture of