



**University Hospitals Birmingham**  
NHS Foundation Trust



# Palliative Radiotherapy Treatment

**Building healthier lives**

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## Introduction

This leaflet is for people who have been recommended to receive palliative radiotherapy to shrink a cancer, slow down its growth or control symptoms. It will highlight the important details that you will have already discussed with your doctor. This leaflet is intended to be a guide as details and side effects of treatment are likely to vary from one patient to another.

## What is radiotherapy?

Radiotherapy uses high energy X-rays in the treatment of cancer. Radiotherapy is similar to having a scan, it is painless, and you will not see or feel anything. You do have to lie still for a few minutes.

Radiotherapy treatment is sometimes called external beam radiotherapy and is carried out on a machine called a linear accelerator.

Treatment is normally given in daily sessions, Monday – Friday. Your consultant will discuss this with you in more detail as the number of treatments that you will receive depends on the area being treated.

You are most likely to have a short course of treatment given over a few days.

Unfortunately some normal healthy cells within the treated area can also be affected, resulting in some side effects. These side effects will be discussed at a later point in this leaflet.

The treatment will not make you radioactive so it is safe to be around children and other people after your treatment.

We are a teaching hospital and have student radiographers in the department everyday who are supervised by trained staff. Your radiotherapy is delivered by both male and female radiographers.

## Pregnancy

It is extremely important that you are not pregnant or become pregnant during your course of radiotherapy. If you think there is even a small possibility that you may be pregnant before being exposed to any radiation on the CT scanner or treatment machine, please inform your doctor or a radiographer.

## Pacemakers

It is important that you inform your doctor or a radiographer if you have a pacemaker. Radiation may affect your pacemaker so checks will need to be organised through your treatment.

## Why do I need radiotherapy?

Palliative radiotherapy can be used to shrink a cancer, slow down its growth or control symptoms. It does not aim to cure the cancer. Doctors use palliative radiotherapy to help shrink an advanced cancer or to control symptoms of a cancer that has spread to give the patient a better quality of life.

## What are the benefits of radiotherapy?

Radiotherapy can help to improve the control the symptoms of cancer. Palliative radiotherapy is used for various reasons including:

- To relieve bone pain
- Treat spinal cord compression (pressure on the nerves of the spine)
- Shrink a tumour to relieve pressure or a blockage
- Treat symptoms of cancer in the brain
- Treat symptoms of cancer in the lungs
- Control ulcerating (red or blistered) tumours and reduce bleeding
- Treat a blood vessel blockage called SVCO

Palliative radiotherapy is not suitable for all types of cancer. It depends on the particular type you have as not all cancers respond well to radiotherapy.

Your doctor will discuss this with you in more detail at your consultation appointment in clinic.

## Are there any alternative treatments to radiotherapy?

Other treatments such as surgery, chemotherapy, hormone therapy or biological therapy may be more help.

You will need to talk to your own specialist to find out the best choice of treatment.

## What will happen if I do not have treatment?

If you choose not to have radiotherapy, your symptoms could get worse and the cancer may grow and spread. Please discuss this with your doctor.

## What happens before my radiotherapy begins?

Radiotherapy treatment has to be carefully planned and your first appointment will be for a computed tomography planning scan (CT scan). You will be sent an appointment to attend the CT scanner in the Radiotherapy Department, The Cancer Centre, Heritage Building, Queen Elizabeth Hospital Birmingham.

This CT scan enables your radiotherapy treatment to be planned and the scan needs to be carried out regardless of any other scans you may have had recently.

To ensure we can make you as comfortable as possible during the CT scan we recommend you bring any pain control medication you are required to take regularly, to this appointment.

In the CT scanner the radiographers will ask you to lie down on the couch in the position for treatment.

Pen marks will be drawn on your skin which will help the radiographers to plan your radiotherapy treatment. Sometimes these pen marks are useful positioning aids for your radiotherapy treatment. The radiographers may ask to keep them on until the end of your treatment.

After the scan the radiographers will ask permission to make three to four tiny permanent dots, called tattoos, which are the size of a small freckle. The tattoos do not indicate where you need treatment or the position of the tumour but are used to ensure you lie in the correct position each day.

If you decide that you really do not want these tattoos, please discuss other alternatives available with the radiographers at the time of your CT scan.

The appointment will take approximately 40 minutes and once completed you will be given an appointment for your first radiotherapy treatment. There will be a time delay between your CT planning scan and the start of your radiotherapy treatment because your treatment now needs to be planned and this can be a complex process, involving your doctor and a team of other professionals.

The routine hours of the radiotherapy department are 08:00–18:00. If you require a certain appointment on a specific day, you should request this at the earliest available opportunity once you have started radiotherapy to avoid disappointment. It may not always be possible to accommodate all patient requests as we are a very busy department, with approximately 250–300 patients on treatment each day. If you require hospital transport for your radiotherapy treatment, please discuss this with the radiographers at CT.



Linear accelerator

## What happens when I come for my first treatment?

Your treatment will be carried out on a machine called a linear accelerator. These are located on the ground floor of the Radiotherapy Department. You will be shown where to find your treatment room at the end of your CT planning session. On your first day of treatment you can go directly to your allocated treatment room. If you cannot remember where it is, please ask at the radiotherapy reception desk or any member of staff. Place your appointment card in the box outside the room so that the radiographers know that you have arrived.

When the radiographers are ready to start your treatment they will come and talk to you and explain the procedure. Please feel free to ask any questions that you may have about your treatment and ask any questions you may have regarding the treatment, side effects and appointment times.

When you go into the treatment room you will be asked to remove the same pieces of clothing you did in the CT scanner and lie down in the same position. It is important that there is no clothing in the treatment area so that the radiographers can see your tattoos.

The treatment couch will be moved closer to the radiotherapy treatment machine. They will then move you to line up your tattoos and get you into the correct position for treatment and put some pen marks on your skin. The marks do not indicate where you are having treatment but are used to check your position during treatment and monitor if you have moved.

When you are in the correct position the treatment machine will move around but will not touch you at any point during your treatment. The radiographers will inform you when they are leaving the room to commence treatment and you will hear an alarm sound, which is part of the safety procedure. The radiographers will operate the machine from the control area and they can hear and see you at all times. If you

need assistance just call out or raise your hand. For your own safety, please do not try to get off the bed as it is raised up off the floor.

For some treatments the radiographers may move the machine around you to perform a scan of the area being treated before starting treatment. This allows us to look at more pictures to ensure you are in the correct position. These pictures cannot be used to assess your response to radiotherapy. If this scan is part of your procedure it will be explained to you at your first treatment.

When the machine switches on you may hear some noises, such as buzzing and beeping. This is normal and they are the noises that the machine makes whilst delivering the treatment. When the treatment has finished please remain in position until the radiographers enter the treatment room and tell you that everything is finished. This is for your safety.

Your first treatment appointment normally takes around 20 minutes. If you have been prescribed medication to take before treatment such as pain control or anti-sickness medication, please bring this with you to your appointment each day.

## **What happens at my other treatment appointments?**

After your first treatment the process is very similar for your following appointments. When you arrive please put your appointment card in the box outside the room. Appointments generally take around 15 minutes.

If you have been prescribed medication to take before treatment such as pain control or anti-sickness medication, please bring this with you to your appointment each day.

## **CCTV monitors**

The treatment rooms are monitored during your preparation for treatment, positioning and treatment delivery by television cameras.

This is part of ensuring the accuracy of your treatment and your safety and wellbeing in the rooms at all times. We assure you that the camera image feed is live and it is not possible to make a recording.

The images are viewable on screens situated in the machine control areas. The control areas are only accessible by authorised radiotherapy staff, some who may not be directly involved with your care at that time.

If you have any concerns about your privacy or dignity that you have not already discussed then please do not hesitate to highlight your concerns during the information discussion with the radiographers at your first treatment appointment.

## **Is there anything that I need to do whilst receiving my radiotherapy treatment course?**

Whilst receiving radiotherapy treatment it is important to make sure that you keep hydrated and drink plenty of fluids, especially if you are also receiving chemotherapy.

It is important to keep your skin clean and maintain good levels of hygiene as this can help reduce skin soreness.

If you are diabetic please ensure you bring your insulin and some food each time you attend in case there are any delays.

We also recommend you bring any medication you are required to take regularly, for example painkillers etc.

## **Will I see a doctor during my treatment course?**

You may or may not see a doctor during your treatment. It depends on how many treatments you are having, which body part is being treated and whether you have medication that needs reviewing. The treatment radiographers will let you know if you need to see a doctor.

Please make sure you tell your consultant or their team about any

side effects or problems that you are having. If you need any repeat medication that you have been given from your consultant it is a good idea to mention it during your clinic appointment.

It is a good idea to bring a list of current medications with you to your radiotherapy appointments.

## Are there any side effects?

Palliative radiotherapy aims to make you feel better. So your doctor will try to choose treatments that have as few side effects as possible. Most people have few side effects but you may experience the following:

**Lethargy and tiredness:** You may feel increasingly tired during the treatment and for a few days or weeks afterwards.

**Nausea:** If you have radiotherapy to the pelvic area, stomach, tummy (abdomen) or brain. To help control sickness, your doctor can give you anti-sickness medicines (antiemetics). You may find that taking an anti-sickness tablet an hour before your treatment helps.

**Swallowing:** Treatment can cause soreness when you swallow after radiotherapy to the lung, the head and neck area, or the top of the spine.

**Bone pain:** The radiotherapy can cause any bone pain to get worse due to inflammation in the area. This should settle down within a fortnight.

**Headaches:** When the brain is treated, radiotherapy can cause headaches and sickness due to the swelling.

**Chest symptoms:** Radiotherapy to the chest can make any cough or shortness of breath worse in the short-term. Treatment can also make you cough up more phlegm, and this will last for a few weeks after treatment has finished.

**Diarrhoea:** Treatment to the pelvis can sometimes cause you to have diarrhoea due to your bowels being irritated by the radiation.

**Bladder:** You may find you need to empty your bladder more frequently. This is because treatment to the pelvis may cause irritation to the bladder.

**Hair loss:** Radiotherapy can cause hair loss in the area being treated. Most hair loss is temporary and will start to grow back within two to three months of finishing treatment.

## Skin care during your radiotherapy

During your radiotherapy and for a while afterwards, you may develop a skin reaction in the area being treated. You may notice:

- Your skin gradually becoming pinker or darker, depending on your skin colour
- The skin may feel dry or tight, and sore
- A rash may also appear and feel itchy
- Sometimes the skin may blister or peel. If this happens you will be given further help as you may need dressings

A skin reaction may appear at any time but usually begins around 10 days after starting treatment.

## What can affect my skin reaction?

- Having treatment to areas where there are skin folds can make your skin reaction worse. This includes the groin, breast, buttocks or armpit because they can be warm, moist and rub together causing friction
- Having chemotherapy alongside radiotherapy can make your skin reaction worse
- Smoking can make your skin reaction worse – if you need help to stop, please ask for advice

Your treatment team will talk to you about your usual daily skin care routine. They will let you know if any changes are advised. Please talk to them about any worries you have.

## How can I help myself?

It may not be possible to stop a skin reaction but by following the advice below you may feel more comfortable. This only applies to the skin in the area being treated.

- Wash the skin gently with soap and water and gently pat dry
- Wear loose fitting, natural fibre clothing next to the skin
- Avoid rubbing the area
- Avoid extremes of temperature such as heating and cooling pads
- Avoid sticky tape on the area (such as Elastoplast™ or Micropore™)
- Use a moisturiser: it may also help to reduce irritation to the treated area if you use a moisturiser. Please continue to use the moisturiser you normally use. Use it frequently and gently smooth it into your skin

If you do not currently use a moisturiser ,speak with the radiographers who give you your treatment and they will be able to suggest a few options for you.

If your skin breaks, blisters or peels , stop using moisturiser . Inform your treatment team and they will advise you further.

After your treatment has finished, your skin will continue to be more sensitive. Your reaction may worsen 10–14 days after treatment has finished before starting to improve. Most patients find their skin has healed around four weeks after treatment finishes. If the skin has broken, healing may take longer than this.

## What do I need to do once I have finished my treatment?

Once you have completed your treatment, any side effects you experience may continue for a few weeks even though you are no longer receiving treatment. If the side effects persist then continue with the advice that was given to you during your radiotherapy until the side effects stop. If you are unsure of what to do, please ask a radiographer or your doctor before you finish your treatment.

You will be seen by your doctor when you have completed your treatment and this will be four–twelve weeks after the end of your treatment. If you do not receive an appointment in the post within this time then please contact the secretary of your doctor who will be able to check this for you.

During follow-up appointments it is important that you mention any side effects or problems that have occurred since completing your treatment. This enables your medical team to optimally manage any late side effects. You can also talk to your GP or specialist nurse who can advise and arrange for you to see the oncology team.

### **If you develop any symptoms below please seek advice immediately:**

- Back pain lasting more than one to two weeks. Pain may feel like a band around the chest or abdomen and can sometimes radiate over the lower back into the buttocks or legs
- Numbness or pins and needles in toes, fingers or over buttocks
- Feeling unsteady on feet, weakness, legs giving way, difficulty walking
- Problems passing urine, including difficulty controlling your bladder, or passing little or no urine
- Problem controlling your bowels

If you experience any of the above you should contact the hospital team where you usually go for your cancer follow–up clinics, your GP or your Macmillan Nurse (key worker).

You should contact someone the same day even if it is a weekend or holiday period. If you are unable to contact any of the above, please visit your nearest Emergency Department.

Do not wait for further symptoms to develop. The earlier treatment takes place the more effective it is likely to be.

## Further information

The Cancer Centre has an information room called the Patrick Room. Here, staff can provide information and support.  
Telephone: **0121 371 3539**

### **You may also find this organisation helpful:**

#### **Macmillan:**

Visit the Macmillan website: [www.macmillan.org.uk](http://www.macmillan.org.uk) or  
Telephone: **0808 8080000**

## Attending for treatment

**Train:** University Station is the closest train station to the hospital and is only a 5–10 minute walk away. There is also a shuttle bus running from the train station to the Cancer Centre, Heritage Building, Queen Elizabeth Hospital for those patients who have difficulty walking.

**Driving:** Car parking in Car Park D is free for patients attending for daily radiotherapy treatment. Car Park D is located directly opposite the doors to the Cancer Centre. The postcode for your satellite navigation device is B15 2GW.

If you do drive, please bring in the ticket you have taken to access the car park and the radiographers will exchange this for a prepaid one so you may exit the car park without charge.

### Hospital transport

Hospital transport is only provided if you have a medical need that stops you from using private or public transport. If you need any help/ advice please contact: Patient Transport Services on **0800 035 6511** (Monday–Friday, 08.00–18:00).

If you use hospital transport it can mean spending many hours away from home and travelling long distances (you will be collected/returned on a schedule) therefore we recommend you use other transport if you can. Please ask a member of staff for details.

### Bromley Wing accommodation

Patients who live some distance away can stay at the Bromley Wing located in Nuffield House. It is comfortable accommodation with meals from Monday– Friday for people who are able to look after themselves. Outside treatment times, patients can entertain themselves, have visitors or go out. Accommodation here is free and can be arranged by contacting the Bromley Wing on 0121 371 4506.

## Radiotherapy contact numbers

**Patrick Room–Cancer Centre, Heritage Building, Queen Elizabeth Hospital Birmingham**

Information and support for people with cancer and their families:  
Tel: **0121 371 3537/9**

### **Radiotherapy Review radiographers**

For information and advice about side effects from radiotherapy.

Telephone: **0121 371 3553**

Monday to Friday, 08:00–17:00

### **Oncology hotline**

The oncology hotline should be used for urgent medical problems out-of-hours when attending for treatment and up to six weeks after radiotherapy or chemotherapy has finished

Tel: 07789 651543

### **Radiotherapy treatment rooms– direct telephone numbers**

Room 1: **0121 371 5703**

Room 2: **0121 371 5076**

Room 4: **0121 371 5090** (tomotherapy)

Room 5: **0121 371 5085**

Room 6: **0121 371 5098** (tomotherapy)

Room 7: **0121 371 5084**

Room 10: **0121 371 5079**

Room 11: **0121 371 5080**



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## **Radiotherapy**

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