

Patient information

Radiotherapy to the breast or chest wall

Important: Please tell us if you have a pacemaker as we will need to monitor your heart during your treatment.

**Please let us know if you are pregnant
or think you might be pregnant.**

It is important to remember that you need to use contraception whilst receiving treatment for cancer in order to prevent pregnancy – please see our leaflet ‘Avoiding pregnancy during radiotherapy and chemotherapy’



Introduction

You will have been provided with this booklet following a discussion with your Clinical Oncologist about receiving radiotherapy to the breast or chest wall area.

This booklet describes;

- What radiotherapy is
- How your treatment is planned and delivered
- Potential side effects of treatment and how to manage them.

When recommending radiotherapy, your doctor will have taken into consideration the risk of the cancer returning or growing if no radiotherapy is given. Although there will be some side effects, the advantages will outweigh the disadvantages for you.

We understand that this can be an anxious time for patients. You may feel overwhelmed with lots of information in a short period of time. We hope that this booklet answers some of your questions about the radiotherapy and your care during this time.

What is radiotherapy?

Radiotherapy is treatment using high energy X-rays (radiation), aimed specifically at the site of the cancer. The radiation damages the cells in the treatment area, killing the cancer cells, but normal cells are able to recover. Although surgery will have removed all the visible cancer cells there is a small risk that some cells may remain. The radiotherapy will destroy these cells helping to reduce the risk of the cancer coming back in the same place.

Radiotherapy is a quick and painless procedure. It does not leave you radioactive-therefore you are safe to be around children and pregnant women and carry out your daily routine without worry.

Radiotherapy is given daily, Monday to Friday, with breaks at the weekend. The treatment will take around 15-30 minutes each day. Your radiotherapy course can vary from three weeks up to six weeks. This is decided by your consultant and would have been explained at your initial consultation.

Please also note that the radiotherapy team work in pairs and is comprised of both male and female staff, therefore we cannot guarantee that a 'female or male staff only' request can be met. Unfortunately, we do not have chaperones available, if you feel you need gender specific staff, it is likely that you will have to wait until after your appointment time for us to accommodate your request.

You can bring someone with you to your appointments who can come into the treatment room with you but please understand they will have to wait outside in the waiting area while your treatment is being delivered.

We also have students within our department that may be present during your treatment. They will be present in addition to the radiographers who are there to deliver your treatment.

Radiotherapy planning appointment

The radiotherapy department can be found in the **basement** of the **King George V Wing (KGV)** at **St Bartholomew's Hospital**.

On your arrival to radiotherapy please check in at the radiotherapy reception desk. You will be given a questionnaire to fill in while you wait (it should take 5-10minutes to complete), please complete this as it provides staff with important information about you. A radiographer will come and collect you from the waiting room when they are ready for you, and will go through the questionnaire with you.

At this planning appointment the radiographers will explain to you in more detail what is going to happen. They will also give you the opportunity to ask any questions or discuss any issues that may have arisen since your initial appointment. They will ask you to confirm your name, address and date of birth. **You will be asked for this information before every procedure or treatment undertaken in the department.**

They will also discuss with you;

- **Confirmation of consent** - A radiographer will talk you through the side effects and confirm that you are still in agreement to go ahead with the intended treatment.
- **Pregnancy** - All female patients under the age of 55 will be asked to confirm their pregnancy status before the first planning session starts.

It is very important that you are NOT and DO NOT become pregnant while undergoing radiotherapy planning and treatment as the treatment would be harmful to the unborn child.

You must let the radiographers know immediately if you think you may be pregnant at any time during your course of treatment.

- **Pacemaker** - If you have a pacemaker, please tell the doctors' team as soon as possible. We can deliver radiotherapy to people that have pacemakers but we need to take appropriate precautions.

Please bring your pacemaker ID card with you to your planning appointment.

During the planning scan

Your planning scan will take place in the CT (computerised tomography) scanner.

For this appointment you will be asked to change into a gown and remove all of your clothes from the waist up. We do provide the gown, but please be aware that it will have to be removed for the scan and treatments.

You will need to lie face up on the CT scanner table, on a piece of specialist equipment, with your arms above your head. The radiographers will make you as comfortable as possible, as it is important that you are able to lie very still.

Once you are lying on the couch the radiographers will take some measurements and draw some pen marks on your skin.

You may be given some breathing instructions whilst in the scanning room. These are for a technique called deep-inspiration breath hold (DIBH). Your doctor or team will have spoken about this to you if it is appropriate for your treatment and will have provided you with an additional information booklet at the time you are asked to give consent for radiotherapy.

The radiographers will leave the room and the scan will then take place. The bed will move in and out of the machine a few times during the scan. You will hear a buzzing noise, but the scan is not painful at all.

Once the scan has been completed the radiographers will, with your permission, make some very small, permanent marks on your skin (tattoo). One in the centre of the chest, and one on either side of the chest. These marks are necessary to ensure that you are positioned correctly when you attend for your treatment appointments.

The radiographers will then provide you with an appointment card with the time and date of your first radiotherapy treatment. This is usually about 2-3 weeks after your planning scan, as we need to allow time for your individual treatment plan to be created and checked.

What is a radiotherapy plan?

The radiotherapy plan is a tailor-made plan for you as an individual, based on the planning CT scan. The planning team will create a plan that will provide you with the best possible treatment to the treatment area whilst sparing as much healthy tissue as possible.

What will happen on my first day of radiotherapy treatment?

Please make your way to the radiotherapy reception and check in at the desk. You will then be directed to the waiting area for your treatment.

Before your first treatment one of the radiographers will discuss your treatment with you and how to minimise and manage the associated side effects. It is also an opportunity for you to ask any questions that you might have. The radiographer will provide you with a list of all your further appointment dates and times.

When the radiographers are ready to treat you they will ask you to get changed in one of the changing cubicles. Please remove all of your clothing from the waist up and put on a gown provided. They will then take you into the treatment room where you will meet other members of the treatment team who will introduce themselves to you.

Radiotherapy treatment is given on a machine called a linear accelerator- often known as a linac.

The couch will be set up for you as it was at your planning CT scan. The radiographers will ask you to lie down on the couch and they will then position you in the correct position for treatment. During this time try your best to just relax, breathe normally and let the radiographers move you without helping them.

If you were asked to hold your breath during the planning CT scan the radiographers will then ask you to do this again in the room, and will give you guidance and instructions on what to do throughout the treatment.

Once you are in the right position the linac will then move around you. It can come close to you, but it will not touch you.

The radiographers will leave the room at this point; you will hear an alarm noise as they leave. Although you are in the treatment room on your own there is CCTV in the room so that the radiographers can see you and the machine at all times. If you need the radiographers at any point during your treatment we ask that you remain lying but raise your hand clearly and the radiographers will stop the treatment and come to check that you are alright. The radiographers may also need to come in and out of the treatment room a couple of times during your treatment session. Please stay lying in the same position until they let you know that treatment has been completed.

You are then free to get changed and leave the department and attend again on the next time and date on your list.

What side effects can I expect?

Below are the details of some of the **possible** side effects that the treatment may cause you. The side effects and their intensity varies from patient to patient, therefore we provide you with all of the information to allow you to make an informed decision. Side effects are usually split into early and long-term effects.

Early side effects

These side effects usually start to appear one to two weeks into the treatment and can last for several weeks after. Please follow the advice given below to help **reduce** the side effects as much as possible.

Skin reaction

You may notice a very gradual change in the skin in the treatment area. The skin will often go pink/red or darker if you have dark skin. The skin can feel dry, flaky, itchy and sore. Sometimes the skin may blister and peel away in small areas. This will return to normal, usually within 8 weeks after treatment.

How to look after your skin

Washing

It is important to keep the treatment area clean. Shower or bathe using lukewarm water and your usual soap or shower gel. Avoid extremes of hot or cold water and use a soft towel to pat the area dry rather than rub.

Hair removal

We recommend that you avoid shaving where possible. If this is unavoidable we would recommend an electric razor **not** a wet shave. No hair removal creams or waxes to be used in or around the area of treatment.

Moisturising

Using a moisturiser regularly on the treatment area can help to reduce the irritation.

You may continue with your normal moisturiser, if you are choosing a new moisturiser we recommend one that is sodium lauryl sulphate (SLS) free in the ingredients list. Your treatment team can help advise you if you are unsure what moisturiser to use.

Apply moisturiser sparingly, twice a day.

Do NOT use the moisturiser on broken skin. Please check your skin daily before applying cream. If your skin breaks, special dressings will be given to you to use instead.

We will provide you with Enopen cream on your first day. Please see our leaflet 'Looking after your skin during radiotherapy' for a list of other moisturisers that are safe to use during radiotherapy.

Deodorant

You may use deodorant unless it irritates your skin. Please don't use deodorant if the skin breaks. Avoid using products containing alcohol on the skin, e.g. perfumes/aftershave.

Clothing

Wear loose, comfortable clothing next to the skin. Clothes made from natural fibres such as cotton are ideal.

Bras should not be underwired, too tight or too lacy. Many patients find camisoles and older looser bras best at this stage.

Sun

Avoid sun exposure to the treatment area during your radiotherapy. The treatment area will need to be protected with a high sun protection factor (SPF) sunscreen or sunblock for at least a year after treatment (SPF30 or higher).

Swimming

You may swim if your skin is not red, sore or broken and only in chlorinated pools (not natural lakes/ponds). Shower immediately after swimming to wash off the chlorine and apply your moisturiser to prevent the skin becoming dry. If any irritation occurs to skin after swimming, please stop until after your treatment has finished and your skin has returned to normal.

Heat/ice packs

Avoid extremes of temperatures to the treatment area such as hot water bottles or ice packs, as these will cause further irritation.

Please be aware that this advice is for the treatment area specifically- the rest of your skin will not be affected by the radiotherapy.

Tiredness

Towards the end of your treatment you will probably feel more tired than usual. This is often a combination of the travelling for treatment and anxiety taking its effect. This lack of energy can continue for 6-8 weeks after treatment, but will gradually improve.

Swelling (oedema)

There may be some slight swelling of the breast during the radiotherapy due to an inflammatory response, it is usually mild but may continue for several months for some women. If you notice any changes in the size or shape of the breast during your radiotherapy, let your radiographers know.

Pain

Some patients have some discomfort, pain (shooting pain or dull pain) or tenderness in the treated area. These are usually a mild symptoms and will usually settle with time but can

continue for some patients. If you are able to, take regular painkillers such as paracetamol and ibuprofen to help this.

Late side effects

These side effects can sometimes start during your radiotherapy, soon after treatment, or occur months to years after radiotherapy.

Fibrosis/shrinkage

After treatment you might find that the breast may feel firmer and could reduce in size causing changes to the breast's appearance.

Tenderness

The area that has been exposed to radiation may feel tender for several months after treatment. You may also experience sharp shooting pains and twinges in the area of treatment. This is normal and this usually settles with time.

Impact on reconstruction

Treatment can cause scar tissue to form, which may affect the cosmetic result of the reconstruction.

The following side effects are also late side effects, but are very rare:

Telangiectasia

Sometimes the tiny blood vessels in the treatment area can dilate causing them to be visible under the skin. This can cause a red/darker look to the area. It is not painful or harmful.

Rib pain

Less than 5 per cent of women may develop weakening of the underlying ribs on the treated side. This may increase the risk of a fracture years later.

Lung reaction

As a very small portion of lung has to be included in the treatment field, the radiation can cause this part of the lung to be inflamed (pneumonitis) and potentially scarred (fibrosis). This could lead to a cough or shortness of breath on exertion. It is rare for this to cause any problems for the majority of patients.

Cardiac (heart) effects

Treatment to the left breast/ chest wall may involve treating a very small part of the heart. In the past it was associated with a very small increased risk of heart problems. However with the improved planning techniques that are being used, this has reduced the risk to the heart to a negligible level.

Stiff shoulder

The shoulder joint may get stiff after surgery and/or radiotherapy to the axilla (armpit) area. Continuing the arm exercises given to you after surgery should help to reduce this. You may be referred to see a physiotherapist if your shoulder movement is severely limited.

Lymphoedema (swelling of arm)

There is a risk of lymphoedema if you have received surgery and/or radiotherapy to the axilla (armpit). If you notice any swelling in the arm or hand please let the team looking after you know.

Late malignancy

Treatment with radiotherapy could cause a second primary cancer in the body. This is very rare (about 1 in 1000) and, if it was to occur, it would usually be 10-20 years after treatment.

This list may seem daunting, but please bear in mind that despite these potential risks, the indication is still that the benefits provided for you in reducing the risk of recurrence with this treatment far outweigh the disadvantages.

We will support you and help you to manage these side effects if they arise, with advice and medications where necessary.

Review during treatment

You will be reviewed by our radiotherapy nurses during your first week of treatment. They will provide you with skincare advice, lifestyle advice and help to set up any other additional support that you may need.

The treatment team of radiographers will look after you on a daily basis and are there to support you through your treatment, help you manage your side effects and answer any questions that you may have during your treatment.

In your final week you will be reviewed by the Breast Advanced Practitioner Radiographer. This appointment is to check how you are managing with the treatment and side effects; provide any additional support and information you may need; and discuss with you the arrangements of when you will be seen again after your treatment has finished.

When radiotherapy has finished

You will have a follow up appointment for around 6 weeks after your radiotherapy. This appointment is to check that you are recovering well and will be back in the clinic that you were originally seen in.

Radiotherapy side effects can continue and your skin reaction may get worse for up to 10 days after your treatment has finished. This is normal, but if you do need further support or advice please contact the department by phone or come in to see the nursing team in radiotherapy between 9am-5pm (Monday-Friday). There is no need to make an appointment for this.

If you have a non-radiotherapy problem or concern related to the breast area please contact your breast care nurse in the first instance.

Useful Contacts

Radiotherapy

Radiotherapy Basement, King George V Wing (KGV), St Bartholomew's Hospital, West Smithfield, London EC1A 7BE

Radiotherapy Reception **020 3465 5222**

Emergency Hotline (when the department is closed) **07917 093 738**

Radiotherapy Nurses (Mon-Fri, 9am-5pm)

020 346 55230/56230

Advanced Practitioner Breast Radiographer, (Victoria Curran)

020 3465 6219

Macmillan Cancer Information Centre

Vicky Clement-Jones

Ground Floor, West Wing, St Bartholomew's Hospital.

Just drop in Monday to Friday 10am-12noon and 2-4.30pm. Or call on **020 346 56611** If calling outside working hours, ring Macmillan free on 0800 808 00 00 or visit the Macmillan website.

Maggie's Centre at St Barts

St Bartholomew's Hospital, West Smithfield, London, EC1A 7BE

Tel: 0203 904 3448

References & Further information

<https://www.cancerresearchuk.org/about-cancer/breast-cancer>

Patient Advice and Liaison Service

If you need general information or advice about Trust services, please contact the Patient Advice and Liaison Service (PALS) on 020 3594 2040 or visit www.bartshealth.nhs.uk/pals. Alternatively please contact staff who are providing your care if you require clinical advice.

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For this leaflet in large print, please speak to your clinical team.

For help interpreting this leaflet in other languages, please ring 020 8223 8934.

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