



Royal Berkshire
NHS Foundation Trust

Radiotherapy for breast cancer

Information for patients on
radiotherapy treatment

What happens next?

In the clinic today, you and your doctor have decided that you will have radiotherapy treatment for your cancer. This booklet discusses what you can expect during and after your treatment and gives some general advice and information.

If you have any questions or concerns that aren't answered in the booklet, don't hesitate to contact one of the breast care nurses on 0118 322 7420 / 0118 322 8598. Leave a message on the answer phone if the nurses are unavailable.

Planning treatment

You will be contacted by telephone with a planning appointment. Your treatment will be scheduled to start approximately 2-3 weeks after this date.

If you have not been called by the Radiotherapy Planning Department by then please contact us on the number below:

Telephone: 0118 322 7872

Monday-Friday 8.30am-9.30am

3.30pm-4.30pm

You have been given this booklet about your radiotherapy treatment which will explain what radiotherapy is, how it is given and the side effects that may occur during or after treatment has finished. You will be given time to discuss these issues with a person trained to give radiotherapy - the radiographer - at your planning appointment.

What are the benefits of radiotherapy?

The benefits of radiotherapy are due to its effect against any residual cancer cells remaining in the area being treated. Radiotherapy uses high energy x-rays to kill cancer cells.

After surgery for breast cancer there remains a risk of a recurrence of the cancer in the breast over subsequent years, even when the surgeon has completely removed the cancer that can be seen. Giving a course of radiotherapy after surgery reduces this risk. (If chemotherapy is also recommended then radiotherapy is usually given after the chemotherapy has been completed.) Without radiotherapy, trials have shown a risk of recurrence in up to 40% of women by 12 years after surgery. If radiotherapy is given, this is reduced to approximately 2-3% of women.

Depending on the results of your surgery, you will have been prescribed between 12 and 15 treatments. You may have radiotherapy treatment daily or three times a week - your oncologist will discuss this with you and will also discuss if they wish to prescribe three further treatments at the end of your course. These 'boost' treatments will be to the area around your scar, where the lump was removed but these boost treatments are not usually required for patients who have had a mastectomy.

A member of the radiotherapy staff will telephone you with an appointment to attend the department to have your treatment planned. If you have any problems with travel or appointment times, please mention these when you are contacted about your planning appointment - we will do our best to help you.

People having radiotherapy are entitled to a parking permit for their treatment sessions. Please ask the Cancer Centre receptionist or the radiographers for a parking permit which you can use whilst undergoing radiotherapy treatment at the Cancer Centre.

Please allow 45 minutes to an hour for the first planning appointment.

Pregnancy

Female patients must not be pregnant or become pregnant at any time during a course of radiotherapy as radiation can be harmful to the unborn child. It is important to let the radiographers know if you have missed a period or suspect that you may be pregnant, before you are exposed to any radiation.

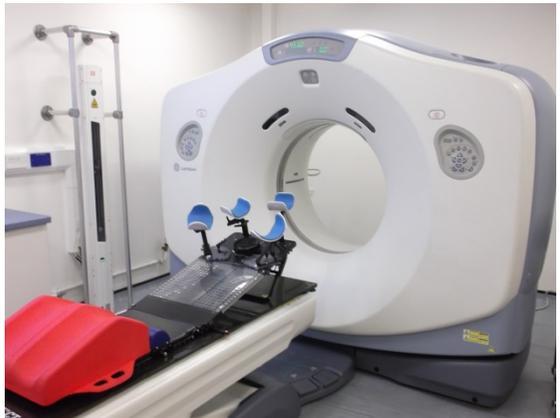
Female patients will be asked to confirm their pregnancy status prior to planning the radiotherapy and again on the first day of radiotherapy treatment. This applies to all women between the ages of 12-55 years and is a legal requirement.

Your planning appointment

The treatment is planned individually for each patient to make sure that the cancer cells are destroyed with the least amount of damage to normal tissues. Your planning takes place in the CT (computed tomography) scanner. Your actual treatment will start approximately 2-3 weeks after this when the treatment has been planned and all the dose calculations have been completed and checked.

When you attend your planning appointment, you will be asked to remove all your clothes from the waist up and to change into a gown.

The planning radiographers will then help to position you on a breast board. (A breast board is a device which allows your arms to be supported in a position raised above your head, to ensure your arms are clear of the treatment area, pictured right.)



Please tell the radiographers if you are uncomfortable as you will need to stay in this position for up to 30 minutes.

You may be stiff after your operation, but the arm exercises given to you by the physiotherapist/ breast care nurse at the time of your surgery, should help to improve your arm movement.

Once you are positioned comfortably on the breast board the radiographers will feel for some bones in your chest to make you are straight. They will then draw some temporary pen marks on the skin. Be aware these marks will be drawn on both sides of your chest as the marks are used to check you are in the same position when you return for treatment.

You may be asked to control your breathing during your radiotherapy. If your Oncologist decides this technique is suitable for you, this will be discussed when you attend the appointment.

Either before or after the scan is complete we will take a series of measurements and record all of the information on a set up sheet. This set up sheet will go to treatment with you so that the radiographers can set you up in the same position.

When the radiographers are moving you into the correct treatment position and recording the measurements it may appear like they are talking over you. Do not hesitate to ask questions at any point during this time.

During the CT scan the radiographers will leave the room, however they are watching you all the time through a window at the bottom of your feet. During this time we will ask you to lie still but breathe normally. You will not see or feel anything at all while the scan is taken.

The final part of the planning procedure is to tattoo 3 points. This involves pricking the skin with a needle, which you may find a bit uncomfortable. This will produce very small pinpoint-sized permanent

black marks, which when used with the breast board, will allow the radiographers to make sure exactly the same area gets the treatment each time. Occasionally, more points may need to be tattooed. Please be aware that although we try to keep the tattoos as small as possible there are occasions where the ink can spread slightly under the skin making the mark slightly larger.

Before you leave your planning session you will be given the date and time for your next appointment to actually start treatment. This will be approximately 2-3 weeks after your first appointment. This allows us to check the data from your first planning appointment and to produce a computerised plan of your treatment, ensuring an even dose to all the breast tissue and minimizing the dose to surrounding tissues and organs – e.g. heart and lungs.

You will not receive any results from the scan today as it is not a diagnostic scan.

If the consultant has discussed having a boost treatment with you, this will generally be planned at the same appointment but it may require you to come back for an extra planning appointment during your radiotherapy treatment. During this appointment marks will be drawn around the scar and a photo and tracing will be taken to define this area.

Your first radiotherapy treatment

When you arrive for your treatment, please put your appointment card in the box on the wall in your treatment waiting area. A member of the radiotherapy team will call you in for your treatment.

On your first treatment day you will have a chat with one of the team of radiographers who will be treating you. They will:

- Check your details (see below).
- Give you the first week of appointment times.
- Discuss the treatment procedure.

- Outline the potential side effects.
- Inform you the day of the week your review radiographer will see you during your course of treatment.
- Answer any questions you may have.
- Show you where to go, and where to wait for your appointments.

External radiotherapy treatment does not make you radioactive. It is perfectly safe to be with other people, including children during your treatment.

What happens during the treatment?

Each time you attend the department for treatment we need to ensure we are treating the correct person. As you enter one of the treatment areas we will ask you to identify yourself by telling staff your name, date of birth and first line of your address. The staff will check this information against the treatment sheet that has the doses for your radiotherapy.

You will be positioned on the breast board, as you were for your CT session. The radiographers will then line up the tattoo marks. All the measurements for your treatment will then be set and checked. The machine will then move to the first treatment position. A monitor will be attached to your skin to check your treatment dose. The radiographers then leave the room to take an image of treatment area and then deliver your treatment. This is so they don't get exposed to too many high-energy rays, as they will treat many patients during one day.

It is very important you remain still, as during the CT session.

Although you are alone in the room, you will be monitored on a TV monitor during your treatment. If you need a radiographer during the treatment, raise your hand clearly and a radiographer will stop the treatment and come into the room. You will not feel anything during the treatment but you will hear a buzzing noise as the treatment is

delivered. The radiographers will then come back in to the treatment room and move the machine to the next treatment position and the process will be repeated. Each treatment position takes between one and two minutes to treat, but the total time of your first treatment will be up to 20 minutes. Subsequent treatments should take between 10 and 20 minutes.

Once we have started treatment we aim to go through it without any breaks or days off. However, we know that circumstances do sometimes arise where either you cannot come for treatment or for technical reasons (e.g. a machine breakdown) we are not able to deliver to the original schedule. If any treatments are missed then they will be added on to the end of the course. This will not affect the effectiveness of treatment and in the event of repeated delays you will be given more information. If there are any short notice changes of appointments times we ask for your understanding while the staff work hard to rearrange your appointment.

Please note you will be given a list of your appointments on a weekly basis to try and avoid as many changes to appointment times as possible.

Side effects of radiotherapy

While radiotherapy can destroy cancer cells it may have also have an effect on some of the surrounding normal cells.

Radiotherapy affects people in different ways so it is difficult to predict exactly how you will react to your treatment. Most side effects are temporary and will disappear over a few weeks or months.

Possible side effects

Side effects and their intensity will vary from patient to patient – everyone is different and reacts differently to the treatment. It is important you keep the radiographers informed of any side effects that you experience.

Side effects can be broken down into two phases. Early side effects slowly build up during the radiotherapy; get worse the week after it has finished and then settle back down to normal 4 to 6 weeks after the treatment is completed. Late side effects may occur many months to years after the treatment.

Early effects:

Early side effects will gradually start from approximately 1-2 weeks into your course of treatment and may continue for 2-3 weeks after your treatment is completed.

Skin reaction: The main side effect you may experience from the treatment is a skin reaction on the breast we are treating. This begins as a mild reaction similar to sunburn and may become dry and itchy. The reaction may become more severe, like very red sunburn, and may occur especially in the fold of skin under your breast or in your axilla (armpit).

Please continue washing as normal, using your usual soap or shower gel, during your radiotherapy. Rinse your skin well and pat gently dry with a soft towel. Avoid rubbing the skin.

If you already use a moisturiser, then continue as normal, but please avoid applying it within one hour of your treatment.

You may continue to use your usual deodorant unless you find this irritates your skin during the radiotherapy.

Your radiographer will monitor your skin each time you have your radiotherapy and will advise you if you need to change anything.

Additional hints and tips to help your skin

- Avoid applying hot or cold heat sources to the treatment area.
- Avoid direct sunlight exposure in the treatment area for the first year following radiotherapy. After this time, a very high factor sun block cream should be used on any exposed skin which was previously treated.
- Try to keep natural fibre clothing against your skin.
- Try to leave your bra off when at all possible, to avoid friction.
- Avoid swimming whilst on treatment.
- Don't shave under the arm on the side being treated
- Avoid talcum powder in the treatment area.

If you experience any itching in the treatment area please let the radiographer know and he/she will advise you further. If your skin becomes more reddened and tender, you may be able to see one of the review radiographers prior to your scheduled weekly review appointment. They will be able to give you some advice and, if needed, dressings. If you experience any pain or discomfort, you can take painkillers, such as paracetamol, following the dosage instructions on the packaging.

A small number of patients may develop what we call "moist desquamation". This is where the skin surface comes off and leaves a superficial graze. It is like a "burn" and can be quite uncomfortable. If this happens you will be advised on how to help it settle down and given appropriate dressings to apply to the sore area. Like the other

skin changes it settles down within a couple of weeks of the radiotherapy finishing.

Pain: Some women do experience discomfort within the breast which occasionally becomes a little swollen during treatment. This is usually a mild symptom and seldom troublesome enough to need any painkillers, although these can be used if necessary.

Tiredness: Your body will use a lot of energy over the course of the treatment and added to the travelling and anxiety of this you may feel tired. The tiredness will start whilst you are on treatment and could continue for up to 6-8 weeks after treatment has finished. You should try and pace the activities that you do during the day and have a sleep or nap if needed. There is no reason why you shouldn't continue with your usual daily activities as you feel able.

Eating and drinking: You may find that you have less interest in food during your radiotherapy treatment and that your eating habits change. It is important to keep up a healthy diet and drink plenty of fluids whilst you are having your treatment. If large meals become difficult to face, eat smaller amounts at more times during the day.

If eating and drinking becomes a problem and you feel you are losing weight then please let one of the staff know and they may be able to refer you to a dietitian.

Nausea: A few women experience nausea during this treatment, but it is usually mild and manageable. Please tell your radiographers if you have nausea as we will be able to recommend ways of dealing with this and an anti-sickness tablet may be given to you.

Cough: sometimes part of the lung behind the breast becomes inflamed and can cause a dry cough or slight shortness of breath. This usually heals by itself.

If you are concerned about any effects the treatment may cause please speak to the radiographers treating you.

Late effects:

Late effects are those which may show up months to years after radiotherapy treatment and are then permanent effects. In most people these effects are mild and do not interfere with everyday activities or lifestyle. However, a small proportion of people (less than 1 in 10) develop more marked effects which can be troublesome.

Breast appearance: Radiotherapy may make the breast tissue feel firmer and over the months/years the breast may shrink slightly. Some degree of breast shrinkage is expected in about 30% of women over 5 – 10 years. The changes are marked in less than 10% of women.

The breast may become tender, swollen and pinker in colour several months after treatment. There may also be short shooting pains and twinges. They are usually mild but can continue for a while after treatment. Some changes are notice by about 30% of women. Discomfort is marked in less than 10% of women.

Rarely, some women experience small red marks on the skin – this is due to small burst blood vessels. This is called telangiectasia. It can be unsightly but doesn't cause problems. This occurs in less than 10% of women.

Shoulder movement: Some restriction in the range of shoulder movement may occur on the side which has been operated on or

received radiotherapy in about 10% of women. This is marked in less than 5% of women.

Lung: Damage to lung tissue may cause some degree of breathlessness in up to 5% of women, although it is only likely to interfere with everyday activities in less than 1% of women. Every effort is made during the planning process to limit the amount of lung included in the treatment area to minimise this risk.

Bones: Radiotherapy can make bones brittle and more likely to fracture (break). With treatment for breast cancer the bones at risk are ribs and collarbone. Rib fracture is painful and may occur in less than 2% of women. Fracture of the collarbone is rare, occurring in less than 1% of women. A fracture usually heals without any treatment. Occasionally, healing is delayed and pain persists. This happens in less than 1% of women.

Heart damage: This may make a woman who has had radiotherapy to the left breast more susceptible to heart disease. The risk of a heart attack due to a late effect from radiotherapy treatment is estimated to be less than 1%.

Nerve damage: Damage to the nerves supplying the arm (brachial plexus neuropathy) is a rare and serious side effect. It can cause pins and needles, numbness, pain and weakness (paralysis) in the arm and hand. These changes occur in less than one in 1000 women.

Only a small percentage of women will develop even one of these side effects and it would be extremely rare for someone to develop several. In theory, any exposure to radiation can very slightly increase the risk of developing a cancer years later in the area exposed.

In a person being treated for a tumour, these risks are negligible when compared to the risk of not treating adequately the tumour that they have had.

If you have any further questions about the information contained in this booklet please speak to one of the members of the specialist team who are treating you.

Further information about cancer, its treatments and living with cancer can be obtained from the Macmillan Cancer Information Centre situated in the reception area of the Berkshire Cancer Centre. Please drop in Monday – Friday 10.00am -2.00pm or call 0118 322 8700.

Contact details

The breast care nurses are contactable on:

Telephone: 0118 322 7420 / 0118 322 8598

Hours: Monday to Friday 8.00am – 4.00pm.

Further information

For information on any aspects of your breast cancer please contact:

Macmillan Cancer Support

0808 808 2020

www.macmillan.org.uk

Breast Cancer Care

0808 800 6000

www.breastcancercare.org.uk

Royal Berkshire NHS Foundation Trust

Patient Relations Team

0118 322 8338 or email talktous@royalberkshire.nhs.uk

For more information about the Trust, visit our website at

www.royalberkshire.nhs.uk

Notes

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This information can be made available in other formats and languages upon request.

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