NHS
Lancashire Teaching Hospitals
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Information for patients and carers

Radiotherapy for Primary Breast Cancer

Details of your treatment

This leaflet has been written for people who are having radiotherapy to the breast, chest wall and/or adjacent lymph nodes. Being diagnosed with breast cancer can be overwhelming. It is normal to experience a range of emotions.

You may have questions or concerns about your treatment. We hope this leaflet will help you understand what to expect during your radiotherapy journey. Your partner, family members and/or friends may also find this information helpful. Understanding your treatment and experience can help them provide support and reassurance throughout your care.

What is radiotherapy?

Radiotherapy is a treatment that uses carefully targeted doses of radiation to treat cancer. The treatment is planned specifically for you to target the area being treated while reducing the effect on nearby healthy tissues as much as possible.

Your radiotherapy will be delivered by a team of specially trained radiographers using advanced treatment machines called linear accelerators. The radiographers work closely with your Consultant, Advanced Clinical Practitioner (ACP) and the treatment planning team to make sure your treatment is planned and delivered safely, accurately, and effectively.

How does radiotherapy work?

Radiotherapy uses high-energy X-rays to treat breast cancer. These X-rays are carefully aimed at the area being treated, where they damage the cancer cells.

While both healthy cells and cancer cells can be affected by radiotherapy, healthy cells are much better at repairing themselves. Cancer cells are less able to recover from the damage and gradually die.

Radiotherapy is used to destroy any remaining cancer cells and to reduce the risk of the cancer coming back. In some situations, it may also be used to slow the growth of cancer and help control symptoms.

The treatment itself is painless. You will not see or feel the radiation while it is being delivered; and you will not become radioactive during or after your treatment. It is safe to be in close contact with people, including pregnant people, babies and children.

When will my radiotherapy start?

After you have discussed your treatment options with your consultant or ACP, you will be given an appointment for your radiotherapy planning scan. This appointment will either be sent to you by post or arranged with you by telephone.

The planning scan is an important part of your treatment. It allows us to create a personalised radiotherapy plan that is tailored specifically to you.

At your planning scan appointment, you will usually be given the date and time of your first radiotherapy treatment.

There is often a gap of a few days to up to three weeks between the planning scan and the start of treatment. This is because your treatment plan needs to be carefully designed and checked by a team of specialists to make sure it is safe, accurate, and as effective as possible. If the wait between appointments feels longer than expected, please do not worry. This is a normal part of the planning process and does not mean that there is a problem with your treatment.

If you need appointments at certain times of the day, or require hospital transport, please let a member of staff know before your treatment starts. The radiotherapy appointments team will do their best to accommodate your needs, although this cannot always be guaranteed.

Pre-treatment

Before your radiotherapy starts, you will attend a planning appointment, where you will have a CT scan of your chest. This scan helps the team create a personalised treatment plan that targets the treatment area while protecting nearby healthy tissues as much as possible.

Some patients may need an injection of a special dye called contrast to help the scan images show more detail. If this is needed, your radiographer will discuss it with you. After the injection, you may be asked to stay in the department for up to 30 minutes so we can make sure you feel well before you leave. The contrast dye is only used for the planning scan and is not needed for your treatment.

Some patients may also be offered a technique called deep inspiration breath hold (DIBH), which involves holding a deep breath for short periods during the scan and treatment. This can help reduce the amount of radiation reaching nearby organs, such as the heart. If this is suitable for you, the team will explain everything in detail.

Occasionally, a planning scan may need to be delayed allowing more time for a surgical wound to heal or after chemotherapy. This is a normal part of making sure treatment is safe and appropriate.

If you have any questions or concerns, please contact the radiotherapy department, your Advanced Clinical Practitioner (ACP) or your specialist nurse.

During the scan

For the planning scan, the radiographers will position you in the same way that you will be treated. This usually involves lying on your back with one or both arms raised above your head.

It is important that you can stay in this position for around 15 to 20 minutes, as you will need to do the same for each treatment session.

You will need to uncover your chest for the scan, but the radiographers will always respect your privacy and dignity and make you as comfortable as possible

Treatment

Before your first treatment, a radiographer will explain what to expect; answer any questions you may have; and give you a schedule of your appointments.

For each treatment session, you may be asked to change into a gown in a private changing cubicle. You will be positioned in the same way as you were for your planning CT scan. Your chest area will need to be uncovered so that the radiographers can check your position accurately, but your privacy and dignity will always be respected.

The radiographers will carefully position you and carry out several checks before treatment begins. They will then leave the room to operate the machine. Although they are not in the room during treatment, they can see, hear and speak to you at all times.

Radiotherapy is painless. You will not see or feel the radiation being delivered, although you may hear the machine and see it move around you.

Treatment appointments usually last 15 to 30 minutes, although the actual treatment only takes a few minutes. The exact length of each appointment will depend on your individual treatment plan.

It is important that you attend all your radiotherapy appointments, as missing treatments can make radiotherapy less effective. If you feel unwell or are unable to attend, please contact the radiotherapy department as soon as possible so that we can advise and support you.

Surface Guided Radiotherapy (SGRT)

To help deliver your treatment as accurately as possible, we use a technique called Surface Guided Radiotherapy (SGRT).

SGRT uses cameras to monitor your position throughout treatment. The cameras do not touch you and do not use any radiation. They create a 3D image of your body surface, allowing the radiographers to check that you remain in the correct position.

If you move during treatment, the system alerts the radiographers so that treatment can be paused and your position checked before continuing. This helps ensure that the radiation is delivered accurately while minimising the dose to nearby healthy tissues.

If SGRT is being used for your treatment, your radiographers will explain the process and answer any questions you may have.

Treatment reviews

Depending on your treatment plan, you may have a review appointment with your Consultant, ACP or a member of the review team. These appointments may take place in the radiotherapy department or over the telephone.

Review appointments give you the opportunity to discuss how you are feeling, ask questions, and talk about any side effects or concerns you may have during your treatment.

If review appointments are planned for you, the date and time will be included on your treatment schedule. If you have any concerns during your treatment, please speak to a member of the radiotherapy team, who will be happy to help.

Staff you will meet

The radiotherapy department is staffed by both **male and female** healthcare professionals; and your treatment may be carried out by any member of the team.

Royal Preston Hospital is a teaching hospital, which means we help train the next generation of healthcare professionals, including **radiotherapy students and medical students**. Students may be involved in your care and treatment as part of their training, always under the close supervision of qualified staff.

If you have any questions or concerns about student involvement in your care, please speak to a member of the team.

Side effects

Most people experience some side effects from radiotherapy, but these vary from person to person. Some people have only mild side effects, while others may notice more significant changes.

Side effects do not usually start straight away. Early side effects often begin about one week after treatment starts and may gradually become more noticeable. They usually reach their peak around 2 to 3 weeks after treatment has finished before slowly improving.

The radiotherapy team will support you throughout your treatment and after it has finished. You will be given advice on how to manage any side effects, along with contact details should you need help or have any concerns. Please let the team know about any side-effects you experience so that we can support you and provide appropriate advice.

Common short-term side effects – early reactions

You may experience:

- **Skin reactions in the treatment area**, such as colour changes, dryness, itching, or soreness
- **Tiredness (fatigue)**, which can build up during treatment
- **Breast swelling or discomfort**
- **Shoulder discomfort or stiffness**
- **Lymphoedema** (swelling caused by a build-up of fluid), particularly if lymph nodes are being treated or have been removed

Please tell the radiotherapy team about any side-effects you experience so that we can offer advice and support.

For more information on how to manage your skin please scan the QR code or ask your health professional for a paper copy:

SoR Skin Care Advice
Advice from the Society of Radiographers for managing skin during radiotherapy

Long-term/Late Effects

Some side effects can develop months or years after radiotherapy has finished. These are known as **late effects**. The type of late effects that may occur depends on the area being treated and your individual treatment plan.

Your healthcare team will discuss any relevant long-term side effects with you and monitor you at your routine follow-up appointments. If you have any concerns after treatment, support and advice will continue to be available.

After your treatment

Towards the end of your treatment, you will be provided with a summary letter and a leaflet 'After radiotherapy to the breast and chest wall' which contains useful information and contact details.

This leaflet is available in the Radiotherapy section of the Lancashire Teaching Hospitals website: www.lancsteachinghospitals.nhs.uk/cancer-patient-information-leaflets or scan this QR code:

When you have completed your course of radiotherapy, your Consultant, ACP or a member of the review team will explain what happens next and discuss your follow-up care.

It is important to remember that side effects can continue to develop for a short time after treatment has finished. In many cases, they may become worse before they start to improve. Most people find that their side effects have begun to settle by their follow-up appointment, which is usually 6 to 8 weeks after treatment ends.

You will receive an appointment by post to see your Consultant or ACP approximately 6 to 8 weeks after completing your radiotherapy. This may be in person or via telephone.

Please remember that support is available if you need it. If you have any questions or concerns after your treatment has finished, you are welcome to contact the radiotherapy department at any time. Towards the end of your treatment, you will be given a summary letter and access to an information leaflet containing useful information and contact details.

Returning to normal activities

Recovering from cancer treatment takes time, and everyone's experience is different. It is normal for getting back to everyday life to be a gradual process. Give yourself time to adjust and recover at a pace that feels right for you.

You can return to work when you feel well enough to do so. The timing varies from person to person and may depend on how physically demanding your job is. If you are unsure, speak to your healthcare team, who can offer advice and support.

Smoking

Smoking during radiotherapy can make side effects worse and may reduce how effective your treatment is. For this reason, it is strongly recommended that you cut down or stop smoking while you are having radiotherapy.

We understand that stopping smoking can be difficult, especially at what may already be a stressful time. Please do not hesitate to speak to a member of the radiotherapy team. We are here to support you and can offer advice and information about the help available.

Contact details for Smokefree Lancashire can be found at the end of this leaflet. They can provide free support to help you reduce or stop smoking.

Looking after yourself

It is important to continue checking your breasts/chest area and armpits regularly for any new lumps, swelling, or changes, including changes to the nipple.

If you notice anything unusual or have any concerns, please make an appointment to see your GP.

You should also contact your GP if you develop:

- New or worsening **shortness of breath**
- A persistent **cough**
- New or unexplained **bone pain**

Most changes are not serious, but it is always best to get any new symptoms checked promptly.

Useful Resources

Resources designed to prepare patients who have been referred for radiotherapy to the breast or chest wall following a breast cancer diagnosis can be found on the RESPIRE website:
https://www.respire.org.uk/

Contact details

If you are worried about side effects or need further advice, please contact the Radiotherapy Review Team:

Telephone: 01772 522905
Please leave a message on the answerphone and a member of the team will contact you.

Email: Radiotherapy.ReviewTeam@lthtr.nhs.uk
We aim to get back to you by the next working day.

Alternatively, you can also contact your Breast Care Nursing Team for support and advice.

Should you require further advice or information please contact:
Radiotherapy Reception **(01772) 522900**
Appointments **(01772) 522752**

If you would like to watch a short radiotherapy information video, please scan the QR code.

All our patient information leaflets are available on our website for patients to access and download:
www.lancsteachinghospitals.nhs.uk/patient-information-leaflets

Sources of further information

www.lancsteachinghospitals.nhs.uk
www.nhs.uk
www.accessable.co.uk
www.patient.co.uk
www.lancsteachinghospitals.nhs.uk/veteran-aware
https://bepartofresearch.nihr.ac.uk/

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All our patient information leaflets are available on our website for patients to access and download:

http://www.lancsteachinghospitals.nhs.uk/patient-information-leaflets

Lancashire Teaching Hospitals is a smoke-free site. Smoking is not permitted anywhere on any of our premises, either inside or outside the buildings. Our staff will ask you about your smoking status when you come to hospital and will offer you support and advice about stopping smoking this will include Nicotine Replacement Therapy to help manage your symptoms of withdrawal and the opportunity to speak to a nurse or advisor from the specialist Tobacco and Alcohol Care Team.

If you want to stop smoking, you can also contact Smokefree Lancashire on Freephone **08081962638**

Please ask a member of staff if you would like help in understanding this information.
This information can be made available in large print, audio, Braille and in other languages.

Our patient information group review our leaflets regularly, if you feel you would like to feedback on this information or join our reading group please contact on email address: patientexperienceandinvolvem@LTHTR.nhs.uk

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