NHS
Lancashire Teaching Hospitals
NHS Foundation Trust

Information for patients and carers

Stereotactic Radiotherapy to the Lung

Details of your treatment

This leaflet is designed for patients who are receiving stereotactic radiotherapy to the lung. If you have recently been diagnosed with lung cancer, it is normal to experience a wide range of emotions.

Your partner, family and/or friends might also find this leaflet useful to understand what you are currently experiencing so that they can help to support you.

What is radiotherapy?

Radiotherapy is a specialist treatment that uses precise, carefully measured doses of radiation to treat cancer.

Treatment is given by highly trained radiographers, using specialised machines known as linear accelerators. The radiographers and planning staff work closely with your consultant to plan and deliver your treatment.

How does radiotherapy work?

Radiotherapy uses high energy x-rays to treat lung cancer. The X-ray beams are directed at the treatment area and cause damage to cells in the treatment area.

Normal healthy cells can recover from this damage; however abnormal cancer cells cannot.

Radiotherapy is therefore given to kill the cancer cells in the targeted area and reduce the chances of your cancer recurring or delay its progression. The treatment itself is painless and there is nothing to feel.

Stereotactic radiotherapy (SABR) is a very precise form of radiotherapy for early stage lung tumours where an operation is not recommended. It delivers high doses of radiotherapy to the lung, while reducing side effects as much as possible.

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Will I be radioactive?

If you are having external beam radiotherapy you **will not be radioactive**. It is safe to be in close contact with people, including pregnant people, babies and children.

When will my radiotherapy start?

After your consultant has discussed your treatment options with you, you will receive an appointment to attend your radiotherapy planning scan appointment. You will be given your first treatment appointment when you attend for your planning scan.

The planning scan appointment is used to plan your radiotherapy treatment; this can take anywhere from a few days up to 3 weeks. Please do not be alarmed if you feel there is a long time between these appointments, this is due to the complex nature of the planning process.

If you require certain times and/or hospital transport, please let a member of staff know before you start treatment. The radiotherapy appointment team will do their best to accommodate your request; however, this cannot always be guaranteed.

Before your treatment

Pre-treatment

At the planning appointment you will have a CT scan of your chest. The treatment planning team use this scan to accurately plan your radiotherapy treatment, whilst ensuring that surrounding areas close to the treatment area do not receive more radiation than necessary.

During the scan

For the scan, radiographers will position you as required for treatment, which may include having one or both arms raised above your head. It is important that you manage this position for 20 to 30 minutes as this will be required for each treatment. If you cannot tolerate having your arms above your head, you may be scanned with your arms by your side. Some patients may require a cushion to support their head and arms (called a Vac Bag); the radiographers will explain this if it is suitable for your

treatment. You will have to be uncovered for your scan, but radiographers will always maintain your dignity.

You may need to have a dye injection for the scan, known as contrast. Your radiographer will discuss this with you if it is required. Please note that if you need to have the dye injection, we ask that you stay in the department for up to 30 minutes afterwards. This is to ensure you are fine after the dye injection. This will not be required for treatment.

Some patients may also be required to attend for a second planning appointment which is called “SABR verification” on your appointment list. This appointment is to carry out the final checks to ensure that you are as comfortable as possible in the treatment position; and to check the radiotherapy plan on the treatment machine.

Treatment

Before your first radiotherapy session, a radiographer will discuss the treatment process and answer any questions you may have, as well as giving you your full list of appointments.

It is very important that you do not miss any of your radiotherapy treatments, as it can make the treatment less effective. If you are feeling too ill to attend your treatment, please call the department and speak to a member of the team to see if we can assist.

For your radiotherapy treatment, you will lie down in the same position as when you came for the planning scan. For some techniques, your body contour may need to be monitored during treatment. This means you will need to be uncovered for your treatment, but the team will ensure your dignity is always maintained.

The radiographers will then make sure you are in the correct position for treatment. Once the radiographers have completed their checks, they leave the room to start the treatment. Only the patient can be in the

treatment room when the machine is delivering treatment, but staff will monitor you via CCTV.

The radiographers will firstly complete CT scans to verify your position and you may feel the treatment couch move as they make minor adjustments.

The radiographers will then begin treatment from outside of the room, this will only take several minutes and there is nothing to see or feel during treatment. The time taken for treatment appointments can vary, but you can expect them to last approximately 20 to 30 minutes.

Treatment reviews

Depending on your treatment regime, you may have scheduled review clinics with your consultant or the review team, within the department or over the phone.

These review clinics are for you to discuss any concerns or side effects that you may be experiencing from treatment.

The review clinics are scheduled on specific times and days and will be scheduled on your treatment appointment list.

Staff you will meet

We are a mixed gender department, and treatment will be given by male and female staff members.

Royal Preston Hospital is a teaching hospital which means that we train and support undergraduate and postgraduate radiotherapy students and medical students. Students take an active part in treatments and are closely monitored by qualified staff.

Side effects

Most people will experience side effects of radiotherapy, although the severity will vary from person to person.

Side effects do not usually happen straight away but start to develop around a week into your treatment, and they will continue after treatment finishes.

You will be given advice by the review team and treatment radiographers on how to manage any side effects.

Short term side effects

- Tiredness
- Mild, temporary shortness of breath and cough
- Mild nausea
- Inflammation of the lung
- Shortness of breath (moderate/sever)
- Skin soreness or itching in the treatment area
- Coughing up small amounts of blood

Late side effects

The late or long-term effects of radiotherapy can occur several months and years after the radiotherapy has finished. This is dependent on your treatment site and will be monitored and managed at your routine follow-up appointments. Long term side effects also vary in frequency, and this will also be explained during the consent process.

- Lung fibrosis
- Long term shortness of breath or coughing
- Mild to moderate chest wall/rib pain
- Risk of damage to nerves/hands
- Risk of damage to heart
- Airway narrowing

After your treatment

After you have completed your course of radiotherapy, your consultant or review team will explain your follow-up procedure. It is important to be aware any side effects can continue to worsen after treatment but should have improved by your follow-up appointment which is usually 6 - 8 weeks after treatment finishes.

You will receive an appointment through the post to see your consultant around 6 - 8 weeks after completion of your radiotherapy.

Please remember that you are free to contact the department at any time after your treatment has finished should you have any concerns or questions. You will be given a summary letter towards the end of your radiotherapy treatment containing contact information for the department.

Returning to normal life takes time and it is a gradual process which involves a period of readjustment, all of which will be individual to you. It is not possible to be specific about the amount of time it will take each person. You can return to work as soon as you feel well enough. This can vary between patients depending on how physically demanding your job is.

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.

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.

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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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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