

PATIENT INFORMATION

**STEREOTACTIC ABLATIVE
RADIOTHERAPY (SABR) TO THE
CHEST/LUNG AREA**





Worcestershire Oncology Centre
Improving cancer services in Worcestershire

Introduction

This booklet aims to help you understand more about the proposed radiotherapy treatment for the cancer in your lung. The treatment technique is called stereotactic ablative body radiotherapy (SABR).

The booklet describes:

- What stereotactic ablative body radiotherapy is
- How your treatment is planned and delivered
- The side effects you may experience during and after treatment

Consent to treatment

Before you start your treatment, your consultant or a member of their team will discuss your treatment options with you. Together you will consider the risks and benefits of the different treatment options available, and decide how to proceed. You will be asked to sign a consent form stating that you understand what SABR involves, that the risks, benefits and possible side effects of SABR have been explained and that you have been given the opportunity to ask any further questions

What is SABR?

Radiotherapy is the use of high energy X-rays or other types of radiation to treat cancer. SABR is a way of giving focused radiotherapy, increasing the chance of controlling the tumour whilst sparing normal tissue.

SABR is usually given as an outpatient in three, five or eight treatments on alternate working days (for example Monday, Wednesday and Friday). The number of treatments you have will depend on the position of your tumour/s and can often not be determined until after you have attended for your first planning appointment.

If you are on any pain medication – please ensure that you have taken it prior to your appointments, as well as bringing with you in case of any delays

Planning your treatment

SABR needs to be delivered accurately so careful planning is required. Treatment is individually planned for your site and extent of disease.

You will need 2 appointments in the radiotherapy department to plan your treatment these include:-

Appointment 1 – CT scan – this will take approximately 1 hour

At your CT scan we aim to position you in the ideal position both for your treatment and what is comfortable for you to manage. For most patients this will be on your back with both your arms raised above your head. If you are not able to manage this position, then you may be treated with your arms by your sides. If your tumour is close to the upper part of your lung (apex), then you may be required to have a plastic face and shoulder mask made with your arms by your sides.

If your tumour is in part of the lung where there is a lot of organ movement we may need to scan and treat you using an abdominal compression device. If we plan to use this the radiographers will explain more about this at your appointment.

During the CT appointment you will be required to breathe in and out in a relaxed and comfortable way that is close to your normal breathing rate. If you are unable to manage this, we may ask you to breathe in time to a metronome, a recording which prompts you to breathe in and out at regular intervals.

2 CT scans will be performed one after the other. You may notice the bed moving in and out of the scanner, which is normal. It is important that you lie still throughout the scan process, breathing regularly.

For the CT scan the doctor may have requested that you are given a contrast agent commonly known as a dye. This is given intravenously, into your veins. A needle will be inserted into one of your veins and the contrast injected. The most common side effect of this is a warm sensation as the dye is injected. This does not last and there is no treatment necessary. People can have an allergic reaction to the contrast, but this is rare.

Once the scan has been completed the radiographers, with your permission, will make up to 4 small permanent marks on your skin to help accurately position you for your treatment.

Following your CT, it will take a few weeks for your consultant and the planning technicians to design and approve your personalised treatment plan.

Appointment 2 - Dry Run – this will take approximately 1 hour

This is the final check before treatment can begin. It is carried out on the treatment unit that you will be having your treatment on.

A team of radiographers will set you up in the position that you were in for your CT scan. During this appointment it is important to remain as still as possible and breathe normally.

The radiographers and physicists will carry out some scans and other measurements to ensure that there have been no changes to your tumour position since your planning scan. One of the doctors may also be present for this appointment.

The radiographers will put some pen marks on you during this appointment – these can be washed off before the next appointment.

Having your SABR treatments

Treatment will usually start within a couple of days of the dry run.

As mentioned previously SABR is given over 3-8 treatments, usually on alternate working days and will last about an hour.

A team of radiographers will position you in the same way as you were in for your CT scan and dry run. During the treatment it is important to remain as still as possible and breathe normally.

For the treatment the radiographers will leave the room. They will be watching you on a closed circuit TV monitor (CCTV). The camera is not recording or saving images. There is also a two-way intercom system.

During treatment the machine will move around you but it will not touch you. You will not feel anything during the treatment. This type of treatment will not make you radioactive, so it is safe to mix with other people, including children.

The radiographers will put some pen marks on you during this appointment – these can be washed off before the next appointment.

Early side effects – during radiotherapy and up to 12 weeks after

Your consultant will have discussed with you in clinic the specific risks for your treatment. The Radiographers will go over your possible expected side effects in more detail and answer any questions you may have before you start treatment. They will also give you lots of support and advice to care for and manage side effects throughout your treatment. Please do try to stop smoking as if you continue to smoke the side effects are likely to be worse.

Fatigue

This can be a common effect of radiotherapy. If you feel tired you should listen to your body and rest at regular intervals if you need to, but also try to continue your normal activities if possible. Research has found that gentle exercise such as a short daily walk can help the symptoms of tiredness and fatigue. Some people are able to continue working throughout treatment but others find that they are too tired.

Skin reaction

You may notice possible reddening of skin or warmth in the treatment area. The treatment radiographers will be able to advise you further on skin care. The skin reaction can actually peak 5-10 days after the end of treatment. Please ask for our General Skin Care Advice leaflet.

Cough

You may experience an increase in a dry or productive cough and possibly cough up sputum (spit) which could contain a little blood.

Chest pain

You may develop aches and discomfort in your chest area while on treatment. The pain is usually mild and can be relieved by simple analgesia such as paracetamol.

Breathlessness/ raised temperature

Occasionally, radiotherapy can cause inflammation of the lung, called pneumonitis. This causes increased shortness of breath, temperature and cough. This typically occurs six to 12 weeks after completion of radiotherapy. If you develop these symptoms, you should contact the acute oncology service (contact details on page 6). If pneumonitis is suspected, you may need to be treated with steroid tablets.

Hoarse voice

You may also experience a sore throat and/or hoarseness (a gruff sounding voice), particularly if the treatment area is close to the throat.

Hair loss

You may lose chest hair in the area being treated. The hair may or may not regrow.

Other possible side effects

You may also experience the following side effects:-

Loss of appetite

Nausea / sickness

Difficulty swallowing

These are rare and are usually mild.

If you experience any of these possible side effects your Radiographers' will be able to give you advice, information, support and medicines that can help.

If you have completed treatment, please telephone the Macmillan Review Radiographers (contact details on page 6).

Late Side Effects – months or years after radiotherapy

Scarring/collapse of lung tissue

Lung SABR will cause scarring in the lung in the area treated. This scarring is permanent and can cause a portion of the lung to collapse. Rarely, this scarring can cause you to be more short of breath. Very occasionally this can require the use of oxygen therapy which can be permanent. Very rarely a larger portion of the lung can collapse, and this can sometimes be life threatening.

Symptoms will vary depending on how well the rest of your lungs are working.

Chest Pain / Rib fracture

Radiotherapy can weaken the ribs and cause pain or fracture. For most patients this does not cause any symptoms and is only discovered on follow up CT scans. For a small number of patients, a rib fracture can cause pain which requires painkillers, occasionally for a long period of time.

Narrowing food pipe (oesophagus)

Narrowing of the food pipe is called a stricture, which can cause difficulty swallowing. The stricture can usually be relieved by a small procedure to stretch the narrowing and allow food to pass through easily again.

Nerve damage

For tumours close to the top of the lungs, there is a very small risk of the radiotherapy treatment damaging the nerves going to the arm. Some patients may develop weakness or numbness in part of the arm. The chances of this happening are very small. Great care is taken when planning your treatment to avoid or minimise the doses of radiation to these nerves.

Heart damage

Occasionally, radiotherapy to the chest can cause tightening of the covering of the heart (the pericardium). The tightening may need surgery to reduce it.

Second cancer

Very rarely, people who have received treatment for one particular tumour may develop another type of tumour in the radiotherapy field some years later.

Useful telephone numbers

Radiotherapy Department

01905 761400

Acute Oncology Service

01905 760158

Macmillan Information and Support Radiographers

01905 761420

If your symptoms or condition worsens, or if you are concerned about anything, please call your GP, 111, or 999.

Patient Experience

We know that being admitted to hospital can be a difficult and unsettling time for you and your loved ones. If you have any questions or concerns, please do speak with a member of staff on the ward or in the relevant department who will do their best to answer your questions and reassure you.

Feedback

Feedback is really important and useful to us – it can tell us where we are working well and where improvements can be made. There are lots of ways you can share your experience with us including completing our Friends and Family Test – cards are available and can be posted on all wards, departments and clinics at our hospitals. We value your comments and feedback and thank you for taking the time to share this with us.

Patient Advice and Liaison Service (PALS)

If you have any concerns or questions about your care, we advise you to talk with the nurse in charge or the department manager in the first instance as they are best placed to answer any questions or resolve concerns quickly. If the relevant member of staff is unable to help resolve your concern, you can contact the PALS Team. We offer informal help, advice or support about any aspect of hospital services & experiences.

Our PALS team will liaise with the various departments in our hospitals on your behalf, if you feel unable to do so, to resolve your problems and where appropriate refer to outside help.

If you are still unhappy you can contact the Complaints Department, who can investigate your concerns. You can make a complaint orally, electronically or in writing and we can advise and guide you through the complaints procedure.

How to contact PALS:

Telephone Patient Services: 0300 123 1732 or via email at: wah-tr.PET@nhs.net

Opening times:

The PALS telephone lines are open Monday to Thursday from 8.30am to 4.30pm and Friday: 8.30am to 4.00pm. Please be aware that a voicemail service is in use at busy times, but messages will be returned as quickly as possible.

If you are unable to understand this leaflet, please communicate with a member of staff.