

## Stereotactic Ablative Body Radiotherapy (SABR) For limited spread of cancer

# For limited spread of cancer (oligometastases)

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Department

Radiotherapy

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## Introduction

Your oncologist has recommended that you have a course of radiotherapy. This leaflet gives you information about the radiotherapy and what will happen during treatment.

Please be aware that radiotherapy centres are training centres for doctors, nurses and radiographers. Students may be present in the department but they are supervised at all times. If you would prefer not to have students present during your treatment, please let a member of staff know.

You may find it useful to write down some questions before you start your treatment. A space is provided towards the end of this leaflet for you to do so.

## **Useful contacts**

Radiotherapy appointments: \_\_\_\_\_

Radiographers: \_\_\_\_\_

Clinical Nurse Specialist: \_\_\_\_\_



# What is meant by limited spread of cancer and why is this important?

Limited spread of cancer means that your cancer has spread from its original location (metastasised), but is only visible at three or less sites on CT, MRI or PET scans. Current research suggests that people with this low number of metastases may have benefit from Stereotactic Ablative Body Radiotherapy (SABR) treatments. SABR can be used to treat metastases if they are found in the lungs, bones (including the spine), lymph nodes, adrenal glands or liver.

## What is radiotherapy?

Radiotherapy is the use of radiation to treat a disease, most commonly cancer. Radiotherapy uses high energy X-rays, to treat cancer. Radiotherapy itself is painless and does not make you radioactive. It is perfectly safe for you to be with other people, including children and pregnant women, during the course of your treatment.

Your treatment will be divided evenly into a number of sessions (fractions), usually given on alternate days, with a rest at the weekend. Some departments work at weekends, or weekend treatments may be given around bank holidays or in the event of a machine breakdown. The treatment delivered will be exactly the same every day. The number of sessions you have will vary depending on a number of factors. For this reason, each patient's treatment is specially tailored to them, and even those with the same type of cancer as you may receive different treatments.

The treatment will cause damage to the normal cells in the area too, they can repair themselves much more effectively than the cancer cells. This damage is what causes the side-effects you are likely to experience during the treatment.



## What is SABR?

Stereotactic ablative body radiotherapy is a radiotherapy technique used to deliver a high dose of radiotherapy to a small area of the body where there may be cancer.

Radiotherapy is delivered using a special type of X-ray machine called a linear accelerator, or 'Linac'. The staff operating these machines are therapeutic radiographers and have specialist training to carry out your SABR treatment.

SABR is an effective way of accurately targeting these areas while reducing the radiation dose to surrounding healthy tissues. This means that a higher dose of radiotherapy treatment can be given to a smaller treatment area in relatively few sessions or fractions.

The aim of SABR is to destroy (or ablate) the treated tumour. The potential benefits of this type of radiotherapy treatment are to reduce pain or other symptoms in the area to be treated and to prevent further spread of cancer to other areas of the body.

## Who will I see during my treatment?

The radiotherapy will be delivered by a team of Therapeutic Radiographers who will see you every day and can answer any questions you may have about radiotherapy, as well as help look after you during your treatment.

You may regularly see other professionals during your treatment, these may include:

- Specialist Therapeutic Radiographers
- Dosimetrists and Medical Physics Experts
- Mould Room Technicians
- Clinical Oncologists
- Oncology Doctors/Registrars
- Clinical Nurse Specialists
- Cancer Support Workers

There is a space at the front of this booklet to write down their contact numbers should you need them.



## Planning your treatment

At your planning appointment you may be asked sign a consent form giving your consent to go ahead with the radiotherapy treatment, if this has not already been completed. It is a good idea to bring a list of any questions you may have and an up-todate list of all your current medications. This visit may take up to 1 to 2 hours to complete, so you may wish to bring something to read, eat and drink, unless advised otherwise.

During this appointment you will need to have a scan taken on a machine called a CT simulator. The team will work on the best treatment position for you at this appointment. This may mean using a wing board, creating a custom bag which supports your back and arms with your arms up or a mask. Some patients find having their arms up uncomfortable, especially if they have arthritis. If you think that you might have difficulties keeping your arms above your head, please discuss this with your oncologist.

If you regularly take pain relief, please take this at least 30 minutes before your scan to make the experience more comfortable. Once you are in a suitable position the radiographers will take the required CT scans to accurately plan your radiotherapy treatment.

You may be asked to have a special contrast agent injected into a vein in your arm, commonly referred to as a dye. The contrast agent is used to make specific organs, blood vessels and/or tissue types 'stand out', to assist the doctor when planning your treatment. You should let the radiographer know if you have any allergies, but they will go over this before they use any dye. The most common side-effects of the dye are; a warm or hot 'flushed' sensation during the injection, feeling like you need to urinate and a 'metallic' taste in the mouth. These do not last and there is no treatment necessary.

After the scan, and with your permission, tiny permanent skin marks (tattoos) may be made, using a pinprick needle and permanent black ink. These permanent skin marks will be no bigger than a freckle, as shown in the image.





These marks will be used by the radiographers to get you into the right position for your treatment.



## **Radiotherapy treatment**

A team of radiographers will see you at each treatment appointment and ask how you are feeling.

The radiographers work together in the treatment room to position you accurately, moving the treatment couch, you and the machine. You will hear them giving each other instructions and information relating to your treatment.

During treatment the machine will move around you but the machine will not actually touch you. It is important for you to stay as still as possible but to breathe normally unless asked to breath-hold or follow a breathing pattern.

Once you are in the correct position the radiographers will leave the room to switch on the machine. The radiographers will be watching you on a closed-circuit TV monitor (CCTV) to ensure your safety during the delivery of the radiation.

The CCTV allows the radiographers to see that you are keeping still and are not experiencing any distress during your treatment. The CCTV camera is not recording or saving any images.

Each session takes about 30 to 45 minutes. During this time the radiographers may re-enter the room a number of times to move the treatment couch or the machine.



Some treatment machines make a high-pitched noise when delivering X-rays. This is the only way that you will know that the machine is switched on. You will not feel pain, heat or any other sensation.

Some days the radiotherapy department may be very busy and your appointment time may be delayed. We will keep you informed of any delays. Each of your treatment appointments for radiotherapy may not be at the same time and are subject to change. It is possible that during your course of treatment you may miss a day's treatment due to planned machine maintenance or bank holidays. It is therefore important to speak to a healthcare professional before booking a holiday immediately following your radiotherapy.



## Side-effects of treatment (short-term)

Potential side effects will depend on the area of the body being treated.

Your doctor will discuss the relevant side effects for your particular treatment as the list below covers side effects for all treatment sites. In general, current research shows that side effects are uncommon but may include the following:

#### Skin reaction

The skin in the area being treated may become red, itchy and sore. Moisturisers can be used to relieve dry, itchy or red skin caused by treatment. Please ask your radiographers for further advice about skin care.



#### Tiredness and fatigue

You may find that you feel tired and lack energy during treatment. If you are able to carry out gentle exercise this can help to ease fatigue. Gentle exercise includes walking, gardening and housework. If you feel that tiredness is affecting your quality of life, please let the radiographers know who can complete a referral to the fatigue clinic for you.

#### • Sore throat

If you are having treatment to your upper chest or neck you may experience some discomfort in your throat.

Eating soft food and taking pain relief can help to ease this discomfort. Pease let the radiographer know if you are experiencing a sore throat or are struggling to eat and drink as normal.

#### Nausea and vomiting

If you are having treatment to your abdomen, pelvis, or lower spine you may experience nausea or vomiting. This can happen just a few hours after treatment or at any time during the treatment course. The consultant will prescribe antisickness medication for you to take before each treatment if necessary.

A full explanation on how to take this medication will be given to you by the team.

#### Change in bowel habit

Your bowel habit may change if you are having treatment to your abdomen, pelvis or lower spine. Drinking plenty of fluids to replace those lost if you experience diarrhoea will help to prevent dehydration. Reducing the amount of fibre in your diet may also help to ease the symptoms of diarrhoea.

Please inform the radiographers if you experience changes in your bowel habits, as advice regarding diet and medications is available.

#### Increased pain

You may experience a temporary increase of pain in the area treated. The pain is usually mild and can be relieved by taking simple pain relief medication such as paracetamol. Please speak to the radiographers for advice regarding pain relief.

Patient



## Side effects of treatment (long-term)

## Information

#### • Bone fracture (break)

If you are having radiotherapy to an area of bone, you may experience a higher risk of bone fractures in the future in the area that has been treated. These fractures can cause pain and discomfort, the commonest example is a rib fracture when a lung metastasis is treated.

#### • Liver/kidney damage

If you are having SABR to your abdominal area there may be an increased risk of damage to your liver and kidneys. If this is the case, it can be assessed by taking regular blood tests.

#### • Damage to bowel

Rarely, radiotherapy can cause damage to the bowel which may lead to a blockage or perforation. To repair this, you may require an operation.

#### • Damage to nerves and the spinal cord

If the treatment is to your spine or close to the spine there is a risk that the radiotherapy may cause some damage to the nerves or the spinal cord in the treatment area. Treatment to these areas are carefully planned and monitored to make sure that the dose is as low as possible while delivering an effective treatment.

Your consultant will explain these long-term side effects in detail when you speak to them at your clinic appointment but please ask the treatment Radiographers or your specialist Radiographer if you have any questions.

## Self-care during radiotherapy

Try to allow time for rest. Everyone reacts differently, and as treatment progresses you will get an idea of the effect it is having on you.

#### Skin care in the treatment area

- Moisturise frequently; gently smooth it onto your skin until it is absorbed. Do not rub.
- Continue to use the moisturiser you prefer and like to use if you do not currently use one, speak with your radiographer or CNS and they will be able to suggest some options.



- Do not apply moisturiser immediately before treatment.
- If a moisturiser is causing irritation, stop using it and discuss with the radiographer or your CNS.
- If your skin blisters or peels, stop using moisturiser in that particular area and ask the radiographer or your CNS for advice.
- Avoid sun exposure to the treatment area wear a brimmed hat and/or cover up with clothing.
- Please avoid rubbing the treatment area, using sticky tape, wet shaving, wearing make-up and using wax, hair removal cream or lasers.

#### Health and wellbeing

- Keep well hydrated aim to drink 2 litres (4 pints) of water a day.
- Avoid drinking alcohol.
- Eat a nutritionally well-balanced diet. If you are struggling to eat, a dietitian can advise you on how to add extra nourishment to your food, adapting the texture of your diet and high energy and high protein options. They can also arrange a prescription for nutritional supplements, such as high calorie drinks to help keep your weight up.
- It is important to try to maintain your weight during treatment. This will help to make sure that your mask fits well and should minimise any interruptions to your treatment.
- Keep active if you can activity helps to improve outcomes. It will also help you cope better with side-effects.

# What can I expect after treatment has finished?

Radiotherapy has a delayed effect in which the side-effects will continue even after your treatment has finished. They tend to reach their peak around 7 to 14 days after your last radiotherapy session, so do not be alarmed if they worsen.

Recovery times vary from person to person, but side-effects should gradually improve over the following 6 to 12 weeks.

Gloucestershire Hospitals

## Patient Information

In the weeks following your treatment, you will be reviewed by the specialists that have been looking after you. This will vary depending on your diagnosis and treatment regimen, but you will be advised about this.

Everyone is different and may react differently to treatment. If at any point, after you have finished treatment, you are concerned about anything, please contact your radiotherapy team or GP.

You will be given contact details for the radiotherapy department. It is not unusual for people to be anxious and it might be better to seek advice rather than worry.

If you need urgent help out of normal working hours, please contact NHS 111 for advice:

## What support is available?

Many people, quite naturally, feel emotionally upset and frightened following the diagnosis of cancer. It may be difficult to adjust to what is happening. Finding out as much as you can, about your treatment, may help to calm your fears and help you to cope better.

The therapy radiographers and other healthcare professionals you may meet, will be willing to listen to your worries and support you in any way they can. They may be able to refer you to support services offered in your hospital.

## Questions

Please use this space to write down any questions you have, to help you remember to ask them at your first radiotherapy appointment.



## **Further information**

Further information is readily available online; we would recommend beginning with:

#### Macmillan Cancer Support

Website: <u>www.macmillan.org.uk</u>



Cancer Research UK Website: <u>www.cancerresearchuk.org</u>



The QR codes above will direct you to further resources relating to your radiotherapy treatment. You can use your smartphone camera to scan the codes.

Further support will be available locally, please speak to your oncology team who can advise what local charities are there to help you, and which support groups are available near you.

## Your data

All personal images and photographs taken during your radiotherapy will be used in accordance with the local Trust policy on the protection and use of patient information.

Please visit the Gloucestershire Hospitals NHS Foundation Trust's 'Privacy notice' at <u>www.gloshospitals.nhs.uk/privacy-notice/</u> for more information.

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ons: A cross-over trial

#### Patient Information

## Making a choice

## **Shared Decision Making**

If you are asked to make a choice, you may have lots of questions that you want to ask. You may also want to talk over your options with your family or friends. It can help to write a list of the questions you want answered and take it to your appointment.

## Ask 3 Questions

To begin with, try to make sure you get the answers to three key questions if you are asked to make a choice about your healthcare.

- 1. What are my options?
- 2. What are the pros and cons of each option for me?
- 3. How do I get support to help me make a decision that is right for me?

These resources have been adapted with kind permission from the MAGIC Programme, supported by the Health Foundation
\* Ak 3 Questions is based on Shepherd HL, et al. Three questions that patients can ask to improve the quality of information physicians give about the
Patient Structure and Conventing, 2011;34::37-86.

AQUA https://aqua.nhs.uk/resources/shared-decision-making-case-studies/