Oxford University Hospitals NHS Foundation Trust

Stereotactic Ablative Body Radiotherapy (SABR) to the Prostate

Information for patients and their families

Introduction

This leaflet is for people with prostate cancer who are having stereotactic ablative body radiotherapy (SABR) treatment to the Prostate and outlines what to expect in the preparation for, during and immediately after radiotherapy treatment. Family members may also find it helpful. We hope it will help to answer some of the questions you may have. Your clinical oncologist (specialist doctor) will discuss in detail your treatment with you.

What is stereotactic radiotherapy?

Radiotherapy is the use of high energy X-rays (radiation) to treat cancer. It damages cancer cells (sometimes also called tumours) to stop them from growing or causes them to die. The purpose of radiotherapy is to destroy the cancer cells while causing as little damage as possible to normal cells.

Stereotactic Radiotherapy or SABR is an effective way of giving focused radiotherapy, increasing the chance of controlling the tumour while sparing normal tissue.

It does this by using:

- fewer treatment sessions (5 sessions for Prostate Cancer)
- smaller more precise radiation fields
- higher doses of radiation.

SABR is different from conventional forms of prostate radiotherapy which usually involves either 20 or 37 treatment sessions but is just as effective with similar effects on your body.

Radiotherapy itself is painless. It does not make you radioactive. It is perfectly safe for you to be with other people, including children and pregnant women during your treatment.

The medical X-ray imaging you will require as part of your radiotherapy treatment will give you a small additional amount of radiation. This will be in addition to the radiation received during your radiotherapy treatment as part of your cancer treatment. Although there are risks and side effects, it is felt that the advantages for you outweigh the disadvantages.

Preparation and planning for your treatment

Before starting your treatment, you will need to come for a planning CT appointment in the Radiotherapy Department, this will involve a CT scan and small tattoos.

You will need to have a comfortably full bladder for the CT scan, to check this, when you arrive you will need to drink the equivalent of 3 to 4 cups of water and have a bladder ultrasound scan. You will also need an empty rectum (back passage), to do this you will need to give yourself an enema at home each day for the two days before your CT planning scan, and a further enema in the radiotherapy department, just before your CT scan.

Further detailed written information will be provided in the preparation for planning and treatment leaflet when you consent or when you receive details of your planning CT scan.

If during planning your bowels/bladder do not meet the necessary criteria for SABR, you may need to come back for a repeat planning CT after additional intervention. The radiographers are on-hand to advise you of this.

Radiotherapy planning CT scan

This CT is used to plan how we will deliver your radiotherapy treatment so a CT scan will be taken of your pelvis. You will be given permanent tattoos around your pelvis (3 small dots). There will be one on the lower part of your abdomen and one on each side by your hips. These are used to make sure that the therapy radiographers treating you can put you in the same position you were in when you had your CT scan.

It is important to have a comfortably full bladder and empty rectum during your planning and treatment, as this allows us to plan to deliver a lower dose of radiation to these organs and reduce the chance of side effects.

Having your treatment

During your treatment, you will be required to have a comfortably full bladder and an empty rectum, just the same as for your planning CT scan, to allow us to deliver a lower dose of radiation to these organs and reduce the chance of side effects. When you arrive, you will need to drink the equivalent of 3 to 4 cups of water.

You will also need an empty rectum (back passage), to do this you will need to give yourself an enema at home each day for the two days before your treatment, and a further enema in the radiotherapy department, just before your treatment. You will need to arrive in time to do this, about an 1 hour before your planned treatment time. It will take approximately 30 minutes for each treatment.

Prostate SABR is given as 5 treatments on alternate days (for example 5 treatments would be given on days: Monday, Wednesday, Friday, then the next Tuesday and Thursday).

At each session, your therapeutic radiographers will position you accurately, moving the treatment couch and machine to direct the treatment at the tumour. Scans are taken before each treatment to ensure your internal organs are all well positioned for the treatment. The machine will not touch you. During treatment it is important that you to stay as still as possible and breathe normally.

Once you are in the correct position and all the checks are completed the therapeutic radiographers will leave the room to switch on the machine. The therapeutic radiographers will be watching you on a closed- circuit TV monitor (CCTV) to ensure you are safe during the delivery of the radiation. They need to see you are keeping still and check you are not experiencing any problems during your treatment. They will be able to hear you and talk to you via an intercom during treatment.

Your therapeutic radiographers will monitor you for any side effects throughout your treatment and arrange for you to see a doctor if necessary.

Some days the Radiotherapy Department may be very busy and your appointment time may be delayed. We will keep you informed of any delays. Your appointment times for radiotherapy may not be at the same time each day. They may also be subject to change. We will give you as much notice as possible of any changes.

If during treatment your bowels/bladder do not meet the necessary criteria for SABR, you may need to come back for treatment on another day after additional intervention. The radiographers are on-hand to advise you of this.

It is possible that during your course of treatment you may miss a day's treatment due to machine maintenance or bank holidays. This will not cause you any harm. It is therefore important to speak to a health care professional before booking a holiday immediately following your radiotherapy.

What are the potential side effects of treatment?

Your Clinical Oncologist will go through the risk of potential side effects with you in detail. You will go through and sign a Royal College of Radiologists (RCR) radiotherapy consent form for prostate cancer during your Clinical Oncology clinic appointment before you are planned for treatment. The following information is adapted from that consent form.*

If you are a smoker, it is important to stop smoking as it can increase the risk of side effects. We can offer you help with this and your radiotherapy doctor will discuss this with you.

If you have a Permanent Pace Maker or an implantable cardioverterdefibrillator (ICD) it is important for us to know as we may need to organise additional procedures and monitoring, or appointments with the Cardiac Rhythm Management (CRM) Department before, during or after your treatment. Page 7

Side effects can vary from patient to patient. Not everyone will experience all of the side effects below but it is important for you to be aware of them.

It is important to tell your radiotherapy team how you are feeling, particularly if your symptoms worsen, so that you can get the care you need.

*Royal College of Radiologists – Radiotherapy Consent form for Prostate Cancer. www.rcr.ac.uk/media/jyxjxy10/rcr-prostate-cancer-radiotherapy-consent-form.pdf, accessed 4/9/24

Early side effects:

Start during radiotherapy or shortly after completing radiotherapy and usually resolve within two to six months of finishing radiotherapy - as described in the Royal College of Radiologists Radiotherapy* consent form for prostate cancer, these include;

- Tiredness, hair loss (in the treatment area) and skin change: redness in white skin tones and subtle darkness, yellow/purple/ grey appearance in brown and black skin tones
- **Bladder changes:** Expected (50 to 100%); passing water more often, with more urgency and slower flow. Less common (<10%); pain or discomfort when you urinate or passing blood (usually mild). Rarely (less than 1 in 100 men); not being able to pass urine which may result in needing a urinary catheter or urinary incontinence including leaking.
- **Bowel changes:** Common (10 to 50%); opening your bowels more often than normal, sudden urge to open your bowels, Looser stools with more mucous or wind compared to normal. Less common (<10%); Rectal pain/discomfort due to inflammation, feeling of not completely emptying your bowels, bleeding from your bowel (usually mild).

Possible late or long-term side-effects:

May happen many months or years after radiotherapy and may be permanent, and will be discussed in detail with you by your Clinical Oncologist, these include;

- Infertility (50 to 100%), Changes in sexual function (10 to 50%).
- Bladder changes: Common (10 to 50%); Long-term mild urinary symptoms of passing urine more often and with more urgency. Less Common (<10%); pain, incomplete emptying or reduced bladder capacity, a narrowing of the water pipe (urethra), and bleeding. Rare (<1%); Urinary Incontinence and Leaking, risk of damage requiring surgical intervention.
- Bowel Changes: Common (10 to 50%); sudden urge to open bowels, looser stools with more wind or mucous. Less common (<10%); opening your bowels more often than normal, swelling in the back passage, causing discomfort when passing, bleeding, and intermittent discomfort in the abdomen. Rare (<1%); risk of damage requiring surgical intervention.
- Thinning of the bones and risk of second cancer in the treatment area (Rare <1%).

After treatment:

Radiotherapy takes time to work. After your treatment has finished you will be asked to return to the Outpatient Clinic for follow-up with your oncologist usually within 6 to 8 weeks. At this point your doctor will assess and discuss your progress, talk with you about any continuing side effects and plan future appointments.

Long-term follow-up consists of regular (6 monthly) PSA blood tests for 5 years then a further 5 years of annual PSA follow-up and clinical reviews as and when they are required.

How to contact us

If you have any questions during your radiotherapy, please do not hesitate to ask the therapeutic radiographers treating you.

You can also contact us on the two numbers below:

Radiotherapy Review Team (Oxford)

Telephone: 01865 235 465 (8am to 6.30pm, Monday to Friday)

Radiotherapy Review Team (Swindon)

Telephone: 01865 220 680 (8.30am to 5pm, Monday to Friday)

Emergency Assessment Helpline (Oxford Oncology and Haematology Triage)

Telephone: 01865 572 192 (24 hours a day, 7 days a week)

Notes

Further information

If you would like an interpreter, please speak to the department where you are being seen.

Please also tell them if you would like this information in another format, such as:

- Easy Read
- large print
- braille
- audio
- electronic
- another language.

We have tried to make the information in this leaflet meet your needs. If it does not meet your individual needs or situation, please speak to your healthcare team. They are happy to help.

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