



Royal Free London
NHS Foundation Trust

Radiotherapy for prostate cancer

Information for patients

This leaflet provides information regarding the use of external beam radiotherapy in treating prostate cancer, including details of the procedure and side effects that you may experience.

Although you may have heard about radiotherapy from friends, relatives and/or other patients, it is important to remember that their experience may not be the same as yours. In all cases, a doctor will explain your radiotherapy treatment to you and answer any questions you may have.

We are here to help, so if you would like further information or have any particular concerns, please do not hesitate to ask your radiographer or a member of the radiotherapy review specialist team.

In most cases, a friend, relative or carer may accompany you to your appointments. Please ask your doctor or a member of the radiotherapy team if this is possible.

What is radiotherapy?

Radiotherapy uses precise, carefully measured doses of high energy x-rays to treat cancer. Cancer cells are more sensitive to radiation than normal cells, so the aim of treatment is for the x-rays to either destroy the cancer cells or stop them from growing, whilst avoiding and protecting the normal cells as much as possible.

Radiation also damages normal cells in or around the area being treated which causes side effects, but these will usually recover and heal after treatment.

Why use external beam radiotherapy to treat prostate cancer?

Radiotherapy may be given to treat and attempt to cure prostate cancer (radical radiotherapy) as an alternative to surgery.

Surgery may be reconsidered at a later date if the cancer returns, so you will be monitored after the radiotherapy treatment course finishes.

Radiotherapy is sometimes also used after surgery if this becomes necessary due to your tests, usually a PSA (Prostate Specific Antigen, a tumour marker for prostate cancer) blood test, showing you will benefit from it, known as prostate bed radiotherapy or salvage radiotherapy.

It can also be used in conjunction with a type of internal radiotherapy treatment known as brachytherapy. If you require any of these types of radiotherapy, your doctor will explain them to you.

You will need to attend the radiotherapy department as an out-patient for a course of daily treatments (Monday to Friday) over a period of four to seven and a half weeks.

Radiotherapy may also be used to relieve symptoms from prostate cancer when the cancer has spread outside the prostate to other parts of the body (palliative radiotherapy). This would be a shorter course of treatment, with the aim of controlling symptoms and minimising side effects.

Your radiotherapy planning appointment

Prior to your radiotherapy treatment starting, you will need to attend the radiotherapy department for a CT planning scan. Before the scan, you will be asked to ensure your bowels are empty and your bladder is full, according to the preparation schedule you are given.

This is important as both the bowels and bladder are immediately next to the prostate inside the pelvis (between the stomach and the thighs). If they are different sizes each day then the prostate can move inside the pelvis, meaning that treatment would not be as accurate.

Bowel preparation

We would like you to make changes to your diet starting one week prior to your planning CT scan (or as outlined in the information given to you) and to continue during your treatment. This is to avoid excessive gas production. An additional information leaflet with specific information on this will be provided to you.

We will also ask you to ensure your bowels are empty each day before your scan and treatment. This will typically be done using a micro-enema (a liquid inserted into your bottom) but may also require the use of laxative medication. You will be given an additional information leaflet “Bowel preparation before radiotherapy” which will inform you about this.

Steps to reduce intestinal gas:

- ensure regular meals
- eat slowly and chew food well
- drink approx. 1.5 - 2 litres of fluid a day (8-10 glasses)
- keep active.

Bladder preparation

One to two weeks before your planning CT scan appointment (which is approximately one week after gold seeds/fiducial markers have been placed if these are required), you will be contacted to have a pre-radiotherapy information session. At this session, the preparation process will be discussed and explained to you.

It is important that your bladder is full as this minimises the amount of your bladder which is near to the area we are directing the treatment at. This means that less of the bladder will be affected by the treatment, reducing your side effects.

Your radiotherapy treatment appointments

Radiotherapy treatment is similar to having an x-ray or scan. You will need to follow your specific bowel and bladder preparation schedule prior to each appointment. Each session takes approximately 15 minutes in total, most of which is spent ensuring you are in the correct position, although the actual delivery of the radiation lasts only a few minutes.

Sometimes it can take longer if your internal organs are not in the correct position. On rare occasions we may not be able to proceed with your treatment if we cannot be confident that it is going to be as accurate as needed.

Side effects of radiotherapy treatment

Short term side effects

Some side effects only last for a short time, usually peaking about two to three weeks after you finish your treatment and then taking a further two to three weeks to improve. However, this will not be the case for all patients. Possible short term side effects from radiotherapy for prostate cancer are:

- **Bladder irritation:** Radiotherapy may cause part of the bladder to become irritated. This may cause you to want to pass urine more frequently and experience a burning sensation while doing so. Please aim to drink plenty of fluids (two litres/three pints, per day) but avoid acidic drinks (e.g. fruit juices and sugary drinks), alcohol, fizzy drinks or drinks with caffeine (e.g. tea, coffee) that can make these side effects worse. Drinking more through the day and less in the evening may help you to pass less urine at night.

- **Bowel irritation:** The bowel may become irritated, and you may experience some diarrhoea. Please let us know if this happens, so we can help you manage this effectively. This may include adjusting your radiotherapy preparation or using some medications.
- **Loss of pubic hair:** You may lose some pubic hair. This often grows back, but may be thinner and/or a different texture than before.
- **Discolouration of skin:** Your skin may become discoloured in the treated area. We advise you not to soak in hot baths, to use a mild, non-perfumed soap and to pat the area dry rather than rubbing. Please do not use talcum powder or any lotions and creams other than those advised by us. Please ask one of your radiographers for information on this.
- **Tiredness:** You may become tired. Gentle exercise may help but save your energy for activities you enjoy doing.

You may experience some or all of these side effects. Please always let the radiotherapy team know of anything worrying you, as we want to help you recover as soon as possible.

Long term side effects

Some side effects are long term. These usually occur around three months after finishing your course of treatment but can sometimes start much later.

Bladder and bowel function

There is potential risk of permanent damage to the bladder and bowel, for example:

- The bladder may not hold as much urine as before, so you may need to pass urine more frequently.

- Bowel movements may become more loose or frequent than before. Rarely, you may experience diarrhoea.
- Blood vessels in the bladder or bowel may become more fragile and you may notice blood in your urine, or poo.

Please let your doctor know if you experience any of these side effects as you may require additional tests. There may also be treatments that can help.

Fertility and sexual function

Common side effects are listed below, but please discuss your individual experience with your doctor or radiotherapy review specialist:

- Men may lose their ability to have an erection. There are different treatments available which may help.

Radiotherapy to the prostate is likely to make you infertile (not be able to have children). We do not recommend that you try to have children during your radiotherapy. You should use barrier contraception during treatment and for three months afterwards. Your doctor will discuss this with you before you start treatment.

After your treatment

You may be referred back to your surgeon for follow up care or have a follow up with your radiotherapy doctor, depending on the treatment you have received.

Usually, you should expect an out-patient appointment to be arranged for four to six weeks after completing your treatment. This may sometimes be a telephone appointment. Out-patient appointments will then continue initially on a three to six monthly basis, or more frequently if required.

Who to contact for support

We have a number of support services available. If you would like to know more about these, please read our leaflet titled: 'A patient's guide to radiotherapy' or ask a member of the radiotherapy team.

Radiotherapy department reception

Telephone: 020 7830 2919, Monday-Friday 8:45am to 5pm.

Radiotherapy review specialist

Telephone: 020 7830 2919, Monday-Friday 8:45am to 5pm.

Macmillan cancer support and information specialist

Telephone: 020 7794 0500 extension: 31337, Tuesday-Friday 10am to 4pm.

Maggie's at the Royal Free Hospital

Telephone: 020 3981 4840, Monday to Friday, 9am-5pm

Radiotherapy and oncology counsellors

Telephone: 020 7472 6739, Monday-Friday 9am to 5pm.

Urology clinical nurse specialist

Telephone: 020 7794 0500 extension 38509 or 020 7472 6299, Monday-Friday, 9am to 5pm.

More information

For more information about the radiotherapy service at the Royal Free London, please visit our website:

www.royalfree.nhs.uk/services/services-a-z/cancer-services/radiotherapy-services

Your feedback

If you have any feedback on this leaflet or for a list of references for it, please email: rf.communications@nhs.net

Alternative formats

This leaflet is also available in large print. If you need this leaflet in another format – for example Braille, a language other than English or audio – please speak to a member of staff.

© Royal Free London NHS Foundation Trust

Service: Radiotherapy

Leaflet reference: RFL900

Version number: 14.1

Approval date: July 2022

Review date: July 2024

www.royalfree.nhs.uk

world class expertise  local care