

Radiotherapy to the bladder

Information for patients

The aim of this leaflet is to provide you with information about the use of external beam radiotherapy in treating bladder cancer, including details of the procedure and side effects that you may experience.

Although you may have heard about radiotherapy from other patients it is important to remember that their experience may not be the same as yours. If you have any questions please let us know. We are here to help and are happy to talk through any concerns.

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. The x-rays either destroy the cancer cells or stop them from growing.

Radiation also damages normal cells in or around the area being treated causing side effects, but these will usually recover and heal after treatment. The aim of treatment is to destroy the cancer cells while avoiding and protecting the healthy cells as much as possible.

The specialist team looking after you will help you to understand the treatment and answer any questions you may have. If you have any doubts or concerns, please do not hesitate to speak to a member of your healthcare team, however insignificant it may seem.

Using external beam radiotherapy to treat bladder cancer

Radiotherapy may be given to treat and try to cure bladder cancer (radical radiotherapy) when surgery to remove the bladder is not possible for medical reasons, or as an alternative to surgery. This may be because you wish to try to keep your bladder or, in men, to try to preserve the ability to have an erection. You may still need to have your bladder removed if the cancer comes back and so will need to be closely monitored after radiotherapy treatment.

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 six and a half weeks.

Radiotherapy may also be used to relieve symptoms from bladder cancer when the cancer has spread outside the bladder to other parts of the body. This is called palliative radiotherapy. It is a shorter course of treatment with the aim of controlling symptoms and minimising side effects.

Chemotherapy

Some patients may receive a course of chemotherapy prior to radiotherapy (neo-adjuvant chemotherapy). Chemotherapy may also be given during radiotherapy (chemoradiation) to try to make cancer cells more sensitive to radiation. It is given as an out-patient treatment.

Chemotherapy may increase the risk of side effects, particularly infection and bleeding, and so will not be recommended for all patients. We will give you specific information leaflets on chemotherapy if it is recommended.

Preparing for your treatment

Before your treatment can start we need to tailor it to your specific needs. You will need to attend the radiotherapy department for a planning scan. This is a different scan from your previous ones and is needed to design your treatment around you.

We will ask you to empty your bladder directly before the scan. This is to reduce the treated area and minimise side effects. Please let us know if you already have a catheter in and inform us if anyone suggests one during your treatment.

At the end of the scan, three permanent ink markings are made on your skin using a pinprick of ink. These are used to make sure that you are accurately positioned for your treatment each day.

Treatment

The treatment itself is like having an x-ray or scan. It will not make you radioactive and it is safe for you to be with other people including small children afterwards.

You will need to empty your bladder directly before each treatment session.

Each session takes about 15 minutes. Most of this time is spent making sure you are in the correct position. The actual treatment lasts a few minutes, during which you will be alone in the room. You will be asked to lie still on a couch while the radiotherapy machine moves around you, giving treatment from different directions. The radiographers will be observing and, if necessary, will be able to talk to you from the next room where they will be able to hear you at all times. You will not feel anything and the machine will not touch you.

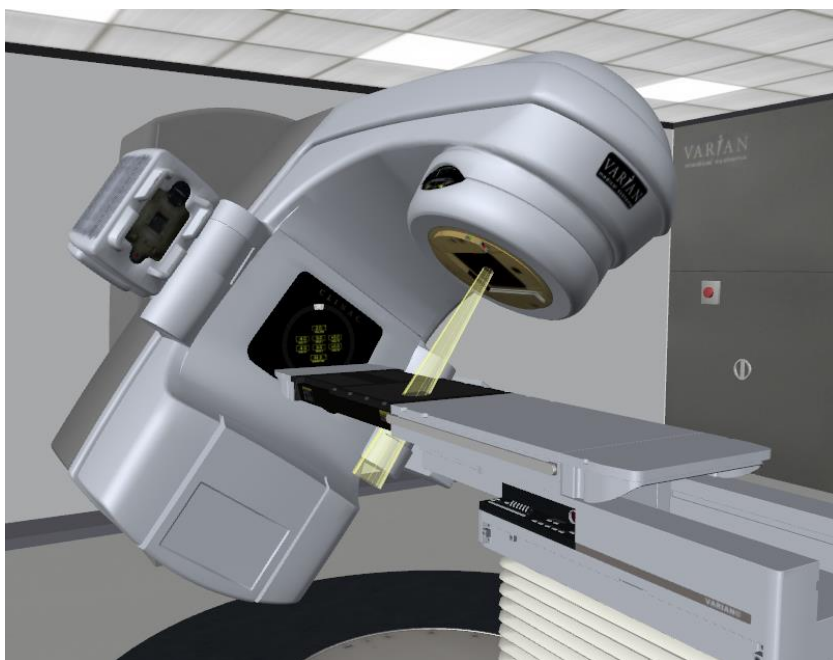


Figure 1. Virtual image of a radiotherapy linear accelerator treatment machine

We may perform a scan as part of your treatment. This is to check your bladder, as well as the accuracy of treatment. Treatment on these days may take a few minutes longer.

Side effects of radiotherapy treatment

You may develop side effects as you go through the treatment. Most of the side effects begin about half way through the course of treatment and continue for a short while afterwards. The radiotherapy review specialist will see you regularly during your treatment. They will ask you about any symptoms you may be experiencing and also take a blood and urine sample.

Possible side effects include:

- Radiotherapy can cause part of the bladder to become inflamed making you want to pass urine more frequently and may cause a burning feeling when you pass urine. It is important to keep drinking fluids. Aim to drink two litres (three pints) a day but avoid acidic drinks (eg fruit juices, sugary drinks), alcohol, fizzy drinks or drinks with caffeine (eg tea, coffee, cola) that can make the symptoms worse. Drinking more through the day and less in the evening may help you to pass less urine at night. Unsweetened cranberry juice may also help.
- The bowel may become irritated and you may have diarrhoea. Please let us know so we can help you manage this in the best way.
- You may lose some pubic hair. This often grows back but may be thinner than before.
- Your skin may become discoloured over the treated area. We advise you not to soak in hot baths. Use a mild, non-perfumed soap and pat the area dry rather than rubbing it. Do not use talcum powder or any lotions and creams other than those advised by us.
- You may become tired. Gentle exercise can help, but save your energy for activities you enjoy doing.

You may experience some or all of these side effects. They may continue for 10-14 days after treatment, but should then begin to improve. Always let the radiotherapy team know of anything worrying you. We want to help you recover as soon as possible.

Possible long-term side effects

In most patients symptoms return to near normal about four to six weeks following radiotherapy, but some may experience long-term side effects.

Bladder and bowel function:

There is a risk of permanent bladder and bowel side effects in some patients.

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

Please let your doctor know if this happens – you may need tests and treatment.

Fertility and sexual function:

The long-term side effects are summarised below, but please discuss your individual circumstances with your doctor or radiotherapy review specialist.

- Women may find their vagina becomes dry and tight. We can advise you about ways to minimise this. They are also at risk of early menopause. Please talk to your doctor if this is a concern for you.
- Men may lose their ability to have an erection. There are different treatments available that may help.
- Radiotherapy to the bladder is likely to make you infertile (not be able to have children). We do not recommend that you conceive children during your radiotherapy. You should use barrier contraception during treatment and for three months afterwards. If you have any concerns, please discuss these with your doctor before you start treatment.

After treatment finishes

Side effects may get worse for two weeks after your radiotherapy treatment has finished but will then start to improve. If you have any concerns please contact the radiotherapy review specialist.

An out-patient appointment will be arranged for four to six weeks after completing your treatment. Out-patient appointments will then continue initially on a three to six monthly basis, or more frequently if required.

Support available at the Royal Free Hospital

We have a number of support services available for you to access. If you would like to know more about them, please read our leaflet: '[What support is available to you on a diagnosis of cancer?](#)' or pick up a copy in the Macmillan cancer information and support centre at the Royal Free Hospital.

We are here to help, and if you have any questions or concerns, please do not hesitate to speak to a member of staff.

Our contact numbers

- Radiotherapy review specialist: 020 7830 2919
- Radiotherapy department reception: 020 7830 2919
- Radiotherapy information service: 020 7472 6739
- Radiotherapy and oncology counsellors: 020 7472 6739

- Urology clinical nurse specialist: 020 7794 0500 ext 38509 or 020 7472 6299

Other useful contacts and websites

Macmillan Cancer Support

- Macmillan cancer information and support centre at the Royal Free Hospital: 020 7794 0500 ext 31337
- Macmillan cancer information and support centre at Barnet Hospital: 020 8216 4142
- Macmillan cancer information and support centre at the Whittington Hospital: 020 7288 5305 or 07881 834433
- Macmillan's support line: 080 8808 0000
- Website: www.macmillan.org.uk

More information

For more information about cancer services at the Royal Free London, please visit our website: www.royalfree.nhs.uk/services/services-a-z/cancer-services

Your feedback

This booklet was written by staff from the radiotherapy department. If you have any comments on this leaflet please call 020 7472 6739 and leave a message for the information officer.

Alternatively, 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.

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