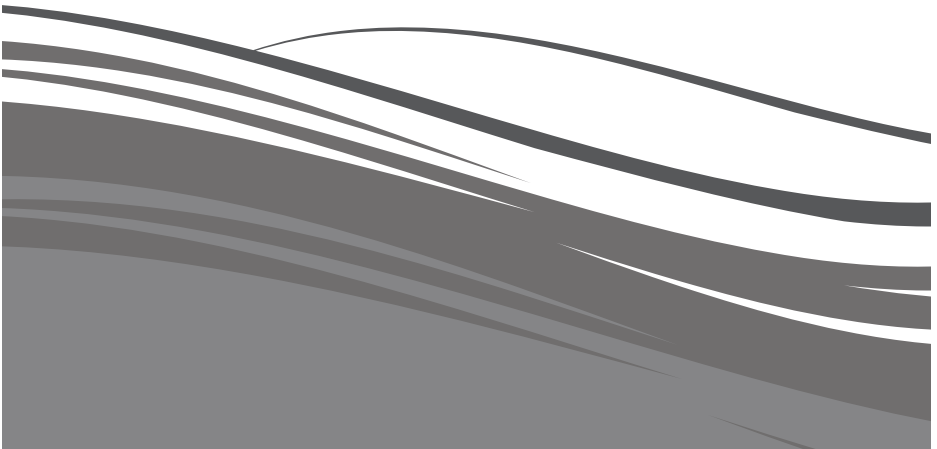


Patient Information for

Radiotherapy to the Bladder



This leaflet is for patients receiving radiotherapy to the bladder. It describes:

- What is radiotherapy?
- Your radiotherapy planning and treatment.
- The effects you may experience during and after treatment, and how best to cope with them.
- Who to contact if you have any questions or concerns.

Your doctor, radiographer, and clinical nurse specialist will explain specific aspects of your treatment.

What is Radiotherapy?

Radiotherapy is the use of carefully measured doses of radiation to treat cancer. It damages the cells and stops them dividing and growing. Most patients having radiotherapy are treated using a high energy beam of X-rays delivered to a precise area, by a machine called a linear accelerator.

Radiotherapy is often given in several small doses over a specified period of days or weeks. Most people attend for radiotherapy as an outpatient.

You will receive a list of appointments which will include planning and treatment dates and times.

Therapy radiographers are specially trained staff who operate the radiotherapy planning and treatment machines. We have male and female staff.

If you are in doubt about anything or have any questions or problems, please let us know as soon as possible.

Treatment planning- CT simulator

Before your course of radiotherapy can begin, the treatment must be carefully planned. You will have an appointment at the CT simulator to have a CT scan. The images from this scan are used to plan your treatment. There are no results from it.

Sometimes your doctor **may** request for you to have 2 scans at this appointment. The second scan is done 30 minutes after the first scan. It is important that you don't go to the bathroom or drink any fluids between these 2 scans. Your radiographers will explain this to you.

Picture 1: CT Simulator



When you arrive in the department, your radiographers will explain the procedure to you. They will ask you to empty your bladder before showing you into a changing room. They will give you a gown to wear and ask you to remove your trousers or skirt. You can keep your underwear on.

Your radiographers will then help you to lie on the CT couch in the correct position for your scan and treatment. Usually this is lying flat on your back with a special rest placed under your legs. It is very important that you stay as still as you can and breathe normally. You will have to slip your underwear down slightly. Your radiographers will maintain your dignity by covering you whenever possible.

Your radiographers will put some pen marks and stickers on the skin on your pelvis. Once everything is in the correct position, they will leave the room and start your scan. This will only take a few minutes.

When your scan is finished, they will replace the pen marks and stickers with 3 permanent marks called tattoos. They look like tiny freckles.

Contrast injection

You **may** need to have an injection of contrast (dye) for this scan. It helps us to see the area we want to treat more clearly. Your doctor or radiographer will put a small hollow tube (cannula) into a vein. It is inserted using a fine needle which is removed once the cannula is in place. It will be kept in place with some tape during the scan. We inject the contrast (dye) through this. It may feel a little cold but you should not feel any discomfort. You may need this dye for the CT planning process, but not for treatment appointments.

Some people can have an allergic reaction to the dye. This is rare but we will ask some questions before beginning to ensure it is unlikely to happen to you. Your radiographers will keep a close check on you during the injection and scan. If you feel anything unusual please tell us.

Treatment

Your radiographers will explain the procedure before treatment starts. They will check you know what to expect and will be happy to answer any questions you might have.

Most people will receive 20 treatments over 4 weeks. Treatment is delivered Monday-Friday.

The machine used to deliver your radiotherapy is called a linear accelerator.

Picture 2: Linear Accelerator



Each day you come for treatment your radiographers will ask you to empty your bladder before taking you into the treatment room. They will position you just as you were in the CT scanner. The lights in the room will dim for a few minutes while they do this. The machine will move round about you but it won't touch you. It is important that you stay as still as you can during your treatment and breathe normally. Your radiographers will leave the room before switching the machine on. They will monitor you closely on CCTV while your treatment is being delivered.

Your radiographers may also take some X-ray pictures or a scan before your treatment starts. You may feel the couch move slightly while they do this. These are used to check your position and there are no results from them.

The whole procedure takes 10-20 minutes. The treatment is painless and you will feel no differently immediately afterwards. Please speak to your radiographers if you have any questions or problems.

Chemotherapy

Some patients will have chemotherapy and radiotherapy at the same time. Your doctor will discuss this with you if appropriate and provide you with the relevant information.

General advice during treatment

There is no reason to change your lifestyle during treatment but it may help to:

- Keep to a normal diet at the start of treatment, although it is best to avoid foods that you are sure make your bowels move unduly, for example prunes, rhubarb, hot spicy food, etc.
- You will need to be well hydrated before coming to these appointments. Try to drink at least 2 litres of fluid every day.
- Avoid caffeinated drinks- tea, coffee, energy drinks and some fizzy juices. Try decaffeinated options.
- Limit your alcohol intake.
- The radiation from radiotherapy does not stay in your body so it is safe to be near other people, including children and those who are pregnant.

Early effects of radiotherapy

During radiotherapy, the area being treated will gradually respond in a way similar to an 'inflammation'. This area will include the bladder, part of the back passage (rectum/anus) and the skin between your legs and around your back passage- particularly between the buttocks. This usually starts a few weeks into treatment and settles a few weeks after treatment ends. All patients are different and the following is a general guide to some of the effects you **may** experience.

- **Tiredness:** Try to get enough rest and sleep, especially when the treatment begins to make you feel tired. However, it is also important that you try to continue with some of your normal daily activities. A sensible balance between rest and activity may be most beneficial. Research has shown that gentle exercise is also beneficial for people who have had a cancer diagnosis both in the short and longer term. There are programmes available that can help with this. Please let us know if you are interested in finding out more.
- **Bladder:** The inside of the bladder becomes inflamed like cystitis. You may need to pass urine more often than usual, and you may have a burning sensation. Let your doctor or radiographers know if this is a problem. They may want to check for a urinary infection. You may also be offered pain relief medication. Drinking plenty of water will help. Some people find a daily glass of cranberry juice helpful, however this cannot be taken if you are on anti-coagulants.
- **Vagina:** You may develop a mild clear discharge. If you have a heavy, creamy or discoloured discharge (yellow, green or brown) you should let your doctors or radiographers know.
- **Bowel:** You may notice a change in your bowel movements. You may need to move your bowels more frequently and the stools you pass may be softer. This may be accompanied by colicky or wind pains. Your doctor can prescribe medication to help this. A few patients may develop diarrhoea and pass mucus which is a clear jelly-like discharge. You should drink plenty of fluids and try to avoid foods that are likely to make these symptoms worse.
- **Rectum (back passage):** The wall of your back passage may become inflamed. You may feel the urge to go to the toilet more often during the day and perhaps at night.

- If you have piles (haemorrhoids) or have had these treated in the past, they may get a little worse during treatment. Let us know and your doctor can prescribe something to help.
- **Sexual intercourse:** The side effects of radiotherapy can cause temporary discomfort in the pelvic area. The tissues of the vagina and anus may be tender and inflamed. We generally recommend that during treatment you avoid having sexual intercourse. You may prefer to wait until any inflammation or discomfort has settled. This is usually 3-4 weeks after treatment ends. If appropriate you will need to take adequate contraceptive precautions.

Intercourse may also be uncomfortable as you may be a little drier than before. You may find it useful to use a lubricant. There are several brands available in the chemist such as KY jelly or Replens. It is a matter of finding the one that suits you best. Help and advice is available, please speak to your nurse specialist, doctor or radiographer.

- **Skin:** The skin in the treated area will be more sensitive and may become pink or red. Again this tends to be a couple of weeks into treatment. Some people develop an irritation of the skin or itch. This can be most noticeable between the legs and buttocks above the back passage (anus) especially towards the end of treatment. This can be treated with creams; however it is very important that you use only those recommended to you by Beatson staff.
- **Hair:** There will be a loss of hair **only** in the treated area. This is **usually** temporary, although in some patients it may not regrow.

You will be seen during your treatment by a radiographer, nurse or doctor. They will assess and treat any side effects, give advice and answer any questions you may have.

Late effects of radiotherapy

We believe that the benefit of your radiotherapy treatment outweighs any longer term risks involved. However you should be aware of these **potential** long-term effects which **may** affect a small number of people. The following effects are a general guide:

- Occasionally, diarrhoea or the slight discharge of mucus that can occur during treatment does not settle. Long term medication may be needed to control it. Some people may notice an urge to move their bowels more often, particularly in the morning.
- About a year after treatment has finished, small blood vessels can form in the lining of the bowel and bladder. These vessels are more delicate than normal and may break causing bleeding from the back passage or in the urine. It may seem very frightening at first but is not usually serious. You should let your GP or specialist know as they may wish to arrange some special tests. In **very rare** occasions, if the bleeding from the back passage is persistent, bowel surgery may be required.
- A very small number of patients may develop uncontrolled leakage of urine (urinary incontinence) after treatment. If you have any concerns about this, please discuss it with your medical team.
- After radiotherapy to the bladder there is a small risk of a narrowing of the tube that takes urine from the bladder. If this develops, the flow of urine will be reduced and there may be dribbling or spraying. A small operation may be needed to correct it. In some cases, you may notice your bladder holds less urine causing more frequent visits to the toilet.
- Following your treatment there is a possibility of loss of sexual function. This may occur as a result of radiotherapy, surgery, or a combined effect of both.

Vaginal intercourse may be uncomfortable as you may be a little drier than before. You may find it helpful to use a lubricant. Help and advice is available so please speak to your doctor if you have issues or concerns.

The radiotherapy can also affect the muscles of the vagina. They can become stiff and not stretch, so the vagina feels smaller and tighter. This may lead to discomfort during intercourse. Your doctor or nurse specialist may discuss vaginal dilators with you if they think you may be at risk of this.

Radiotherapy can damage the nerves that control getting an erection. You may therefore find it difficult to get and keep an erection. If you develop problems, you can be referred to a specialist who may be able to offer help and advice. Please let your doctor know if this becomes a problem, even if we do not ask specifically.

- Some patients notice firmness in the area treated by radiation. This is called fibrosis and is like scar tissue. This can cause narrowing of the bowel which usually causes few problems, but occasionally an operation is needed to correct it.
- A very rare but potential effect is that radiation can cause tumours. Although this is a serious possible consequence of your radiotherapy, it is important to bear in mind that the effect is **very rare**. If it does happen it is likely to arise years after treatment.

Remember that any of these risks should be considered against the problems of not treating the tumour with radiotherapy.

After treatment ends

Most symptoms that can develop during treatment will improve a few weeks after treatment has finished; however tiredness may take a little longer. Your radiotherapy doctor will arrange to see you about 6 - 8 weeks after treatment ends either at the Beatson or at the hospital where you first met them.

If on completion of treatment you are experiencing any ongoing symptoms (late effects) and feel they are not improving, please speak to your oncology team or GP.

Sometimes these symptoms can be a result of pelvic radiation disease (PRD). If your oncology team think you have PRD, you will be referred to the PRD late effects team at The Beatson West of Scotland Cancer Centre. If this is not offered to you, please ask your team to refer you.

You can find out more about the PRD late effects clinic here-
<https://www.beatson.scot.nhs.uk/patients-and-visitors/information-support-services/late-effects-pelvic-radiation-disease/>

The Pelvic Radiation Disease Association (PRDA) is a charity which provides useful information, including:

- What would be considered a late effect?
- How can I manage these effects?
- When should I seek help or support?

Please visit their website for more information:

 www.prda.org.uk

Where can I get help?

Information and support

All our staff are here to make sure your treatment goes as smoothly as possible and will try to help with any questions or problems you may have. Further specialist help is available from:

- **Information and Support Radiographer**
☎ 0141 301 7427
- **The Macmillan Information & Support Centre** is on Level 1 at the main entrance of the Beatson. They offer emotional support, information and signposting to services within and near to the Beatson and in your own local area. Open Monday to Friday 8:15am to 4:15pm.
☎ 0141 301 7390

The Beatson Cancer Centre has a **Radiotherapy Advice Line** available for patients who have completed treatment. This is an answer phone service, available Monday – Friday. Please leave your name, date of birth and telephone number and a radiographer will call you back as soon as possible.

☎ 0141 301 7432

The Cancer Centre also has a **Cancer Treatment Helpline** for urgent calls. This is for patients on or within 6 weeks of treatment who have urgent or severe symptoms such as:

- Shivering or flu-like symptoms.
- Temperature greater than 37.5°C.
- Gum/nose bleeds or unusual bruising.
- Worsening or sudden breathlessness.
- Leg weakness/difficulty walking.

- Severe nausea/vomiting/diarrhoea/constipation.
- Sudden increased or uncontrolled pain.
- Other concerning symptoms associated with your cancer treatment.

The line is available 24 hours for emergencies, although it would be helpful if you called early in the day if this is at all possible.

For Urgent Calls:

Beatson 8am-8pm ☎ 0141 301 7990

National 8pm-8am ☎ 0800 917 7711

Counselling and Clinical Psychology

This leaflet deals with the physical aspects of your treatment, but your emotional well-being is just as important to us. Being diagnosed with cancer can be a deeply distressing time for you and those closest to you. Within the department we have a counselling and clinical psychology service that can help with worries and difficulties you might be having. If you think this may be helpful to you, please ask staff to put you in touch.

There are also voluntary organisations providing information and support. These include:

Macmillan Cancer Support:	 0808 808 0000  www.macmillan.org.uk
Providing practical, medical, emotional and financial advice for those affected by cancer.	
Maggie's Gartnavel Maggie's Lanarkshire, Monklands Hospital Maggie's Forth Valley	 0141 330 3311  01236 771 199  01324 868 069  www.maggies.org
Provides information and support with a regular programme of courses. Counselling service available.	
Cancer Support Scotland – The Calman Centre, Gartnavel Complex.	Freephone  0800 652 4531  www.cancersupportscotland.org
Provides emotional and practical support on a one-to-one basis and through community based groups. Complementary therapies available.	

Fight Bladder Cancer

Provides support for anyone affected by cancer and their families.

 www.fightbladdercancer.co.uk

Macmillan Benefits Team
(within the Beatson)

 **0141 301 7374**

Provides free and confidential advice for people affected by cancer and their carers.

If you are interested in finding out about becoming more active, please visit:

 www.nhsggc.org.uk/getactive

**Beatson West of Scotland
Cancer Centre**

 www.beatson.scot.nhs.uk

If you want to find out more about our Centre please visit our website.

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You may find some useful information on the websites listed above. However, it is important to note that The Beatson West of Scotland Cancer Centre cannot accept responsibility for the quality and content of any information provided by other organisations.

Care Opinion

We welcome your comments and feedback about our service.
If you would like to give us feedback please go to:

🌐 www.careopinion.org.uk or telephone:

☎ 0900 122 3135 or scan the QR code:



Original Leaflet prepared by L Webster

Revised by H. Reid and C. Lamb October 2023

Leaflet QA approved by H. Reid October 2023

Review: October 2025

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