Palliative radiotherapy for advanced prostate cancer

This fact sheet is for men with advanced prostate cancer who would like to know more about treatment with palliative radiotherapy. Palliative radiotherapy will not cure your cancer but can help slow down its growth and relieve symptoms such as pain. This fact sheet describes the different types of palliative radiotherapy and the possible side effects. Each hospital and specialist team will do things slightly differently so use this fact sheet as a general guide and ask your specialist team for more details about the care you will receive. This sheet does not describe the type of radiotherapy used to treat cancer that is in the prostate gland (localised) or just outside the prostate gland (locally advanced). For more information on this type of radiotherapy please read our fact sheets External beam radiotherapy and Brachytherapy.

Who can have palliative radiotherapy?

Palliative radiotherapy is one of the treatments used to slow down the growth of cancer and control symptoms in men with advanced prostate cancer. Advanced prostate cancer is not curable but treatment can keep it under control for months or years. Having advanced prostate cancer means that the cancer has spread from the prostate, to other parts of the body. Prostate cancer can spread to any part of the body, but most commonly to the bones or lymph nodes. 'Bone metastases' or 'bone secondaries' are the terms used to describe cancer that has spread to the bone. This can cause pain and problems with moving around. In some cases, men with advanced prostate cancer may also experience painful lymph nodes or blood in their urine, caused by bleeding from the prostate. These symptoms can sometimes be relieved with palliative radiotherapy.

Palliative radiotherapy may not be suitable for every man with advanced prostate cancer. This will depend on where your cancer has spread to, whether it is causing symptoms and what treatment you have already had. Your specialist team will help you to decide whether palliative radiotherapy may benefit you.

You may be offered other treatments to help control the symptoms of advanced prostate cancer. These include pain-relieving drugs, hormone therapy, chemotherapy and drugs called bisphosphonates. You can read more about this in our fact sheet **Pain and advanced prostate cancer**.

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How does palliative radiotherapy treat advanced prostate cancer?

The aim of all types of radiotherapy is to destroy cancer cells in the treated area, while trying to avoid damage to normal cells. Radiotherapy damages cells and stops them from dividing and growing. Cancer cells are not able to recover from this damage and die of but normal healthy cells can repair themselves more easily. Palliative radiotherapy uses lower doses of radiation than radiotherapy to treat localised or locally advanced prostate cancer and the course of treatment is shorter.

The aims of palliative radiotherapy are:

- To shrink the cancer cells in the bones. This may stop them pressing on the nerves and causing pain.
- To slow the growth of the cancer giving your bones time to repair and strengthen.

Sometimes men with advanced prostate cancer may have palliative radiotherapy to help relieve other symptoms such as blood in their urine caused by bleeding from the prostate or painful lymph nodes.

There are two types of palliative radiotherapy:

- External beam radiotherapy
- Internal radiotherapy (radioisotopes)

Your specialist team will help you to decide which type of palliative radiotherapy is best for you.

What are the advantages and disadvantages?

The benefits and risks of radiotherapy depend on your age, general health, past treatment and how far your cancer has spread. Your specialist team will discuss your individual situation and options with you.

Advantages

- Palliative radiotherapy may improve your quality of life by controlling symptoms such as pain.
- It may slow the growth of the cancer in the down area you are having treated.
- Treatment works quite quickly. Within a few weeks you should have some pain relief.
- You should not need to stay in hospital overnight.

Disadvantages

- Like most treatments, palliative radiotherapy may cause side effects in some men. Generally, most men find that palliative radiotherapy does not cause them too many side effects. There is more information about side effects on pages 3 and 4 of this factsheet.
- Radiotherapy may help relieve your symptoms for several months, but the pain might come back. If this happens you may need further treatment.

If you are thinking about having radiotherapy, you will be referred to a specialist who treats cancer with radiotherapy, known as a clinical oncologist or radiotherapist. They should discuss with you whether you will benefit from palliative radiotherapy, which type of radiotherapy you may have, how long the treatment may take and possible side effects.

External Beam Radiotherapy (EBRT)

External Beam Radiotherapy (EBRT) is a short course of radiotherapy that is an effective and common way of relieving pain from bone metastases. EBRT uses high energy X-ray beams directed at a specific area from outside the body (see below). You may notice your pain starts to reduce within a few days of treatment but sometimes it can take a few weeks to have an effect. The pain-relieving effect usually lasts for an average of four to six months, but can vary from person to person. Around seven out of ten men (70 per cent) will get some pain relief from this treatment.

External Beam Radiotherapy is also a way of treating a condition called spinal cord compression. This means that the cancer is pressing on the nerves in the spine. Symptoms include pain in your back or neck, weakness or numbness in your arms or legs and problems with your bladder or bowels. Spinal cord compression is a serious condition. If you have advanced prostate cancer and any of these symptoms you should contact your specialist team straight away. If you do not have any particular contact details, go to the accident and emergency (A&E) department at your local hospital.

You can read more about spinal cord compression in our fact sheet **Pain and advanced prostate cancer**.

What does treatment involve?

Preparing for External Beam Radiotherapy (EBRT)

Before starting EBRT you will go to a 'planning session.' This is to work out how much radiation you will need to treat the cancer and where you need it. Your radiotherapy is planned using a machine called a simulator. This shines lights at your body so that your specialist team can see where to position the radiotherapy machine.

The simulator takes X-ray pictures so that your specialist team can find the correct position for your treatment. Some simulators use CT (Computerised Tomography) scans instead of X-rays to plan your treatment. Your skin may be marked with permanent dots so that the staff can position you correctly for radiotherapy each time you are treated. The planning session should last 15 to 30 minutes, but may take longer.

If you are having radiotherapy to treat spinal cord compression you will need treatment quite quickly. This means that you will only have a short time to discuss your treatment with your specialist team and the planning session will take place just before you have your treatment. Ask your specialist team if you have any questions before your treatment starts.

Treatment with EBRT

You will have your treatment in the outpatient radiotherapy department at the hospital. This means that you will not need to stay overnight. You may have one single dose to a specific area or you may have a series of smaller doses spread out over one or two weeks. If you are having more than one dose, you will normally have a few days rest between treatments.

When you arrive at the radiotherapy unit, you will be asked to lie on your back underneath the radiotherapy machine. The staff will leave the room but they will be able to see and hear you at all times. The treatment starts and the machine will move around your body. The machine will make a slight noise but it does not touch you and you will not feel anything. You will need to lie still but the treatment only lasts a few minutes. You should be able to go home after the treatment has finished.

If you have cancer in several areas of your body you may benefit from having treatment called hemi-body radiotherapy. This can be either to the upper half or the lower half of your body depending where you have pain. Your specialist team will assess your general health and fitness for this treatment, as it can be quite tiring. If you have hemi-body radiotherapy, you may need to stay in hospital overnight.

What are the side effects?

Like all treatments, external beam radiotherapy may cause side effects in some men. The most common side effects are described here but there is no way of knowing which of these you will get, or how bad they will be. Ask your specialist team for more information on the risk of side effects.

Because you only have a few doses of treatment, there are usually few side effects from EBRT. Hemi-body radiotherapy may have more severe side effects because a larger area of the body is treated. If you do have any side effects they will depend on which part of your body is treated. They may include:

- Feeling tired for a week or two after treatment finishes.
- Redness or darkening of the skin in the area treated (similar to sunburn). Your skin may also itch in this area.
- Feeling sick if you have had radiotherapy to your ribs or back bone. You may be able to take anti-sickness medication to help with this.
- A higher risk of anaemia or infection because of a decrease in your red or white blood cells count. This is rare with a short course of radiotherapy, but more likely if you are having hemi-body radiotherapy.

- Some men may find that their pain increases slightly during the treatment course or for a few days after it has finished. The pain should soon get better but you may need to take pain-relieving drugs for a few days. Speak to your specialist team if you are worried about this.

Internal radiotherapy (radioisotopes)

Another way of treating advanced prostate cancer is with internal radiotherapy. This is an injection of a very small amount of a radioactive substance called strontium-89 (Metastron). Strontium-89 targets the cancer cells with a high dose of radiotherapy, without having too much of an affect on the healthy tissues. Research shows that internal radiotherapy can be an effective way of relieving bone pain and preventing new pain from occurring. It can take between one and two weeks to start working and lasts around four to six months.

What does the treatment involve?

Preparing for internal radiotherapy

Before having internal radiotherapy you should let your specialist team know if:

- You are taking prescription or over-the-counter medicines. For example, you may need to stop taking anti-inflammatory drugs such as aspirin before having strontium-89. This is because strontium-89 can affect the way your blood clots.
- You have a history of blood disorders, bone marrow problems or kidney disease. You may not be able to have treatment with strontium-89 if your cancer or previous treatment has damaged your bone marrow.
- You are planning to father a child within four months after your treatment. If this is relevant to you talk to your specialist team for further information.

Treatment with internal radiotherapy

If you have internal radiotherapy you will have an injection of strontium-89 into a vein in your arm. The treatment is not painful but some people may find that having the small tube (cannula) put into the vein is uncomfortable. Some men describe being able to feel the liquid going into their vein when they have the injection. This might feel strange, but will only last a short time and is not dangerous.

After you have had the injection, your urine and blood will be slightly radioactive. It will be safe for you to be around other people, including children, but your specialist team should let you know what precautions you should take. They may tell you to:

- Make sure that you use a toilet that can flush rather than urinal and flush the toilet twice after use.
- Wipe away any urine or blood spills with a tissue and then flush it down the toilet.
- Wash your clothes or bed covers and separate them from other laundry if you get urine or blood on them.

Most of the strontium-89 will be gone from your urine and blood within one to two days.

What are the side effects?

The side effects of strontium-89 are more common than with external beam radiotherapy, but most of them only last a short time and are not severe. They may include:

- An increase in pain a few days after treatment, but after that the pain should begin to improve.
- An upset stomach (diarrhoea).
- A fever, chills, bruising, bleeding or severe tiredness. Let your specialist team know about this straight away as this may mean you have an infection that needs treating.

What happens afterwards?

Your specialist team will monitor you and your symptoms. With both types of radiotherapy, the pain can sometimes get worse in the first two or three days after treatment before it gets better. You may need to take some pain-relieving drugs during this time or increase the dose that you may already be taking.

The pain relief from radiotherapy usually lasts for several months. However, if your pain or symptoms do not improve then talk to your specialist team. If your pain has come back your specialist team may suggest another course of radiotherapy. It is possible to give a repeat course of EBRT to the same area of the body. This will depend on the dose already given. If you have a lot of bone pain in many new areas, a further course of external hemi-body radiotherapy or internal radiotherapy may help. If you have had internal radiotherapy first you may also be able to have repeat doses if necessary. You should speak to your specialist team to discuss your options.

If more radiotherapy is not an option there will usually be other treatments that can help reduce or control any symptoms you have. Read our **Pain and advanced prostate cancer** fact sheet for more information.

Where can I get support?

If you would like to speak to someone with personal experience of palliative radiotherapy, call our free and confidential Helpline on 0800 074 8383 and ask to be put in touch with a Support Volunteer.

You may also find it helps to talk to your specialist team or a specialist cancer nurse such as the Macmillan or Marie Curie nurses. These nurses can offer emotional support and information. You can ask your GP or specialist team to refer you to these nursing services.

Questions to ask your specialist team

- How will palliative radiotherapy help me?
- What other treatments are available to help me with my pain?
- Which type of radiotherapy would be most suitable for me?
- How long will the treatment last?
- Will there be any side effects from the treatment?
- Are there any precautions that I need to take during treatment?
- How long will I need to have treatment?
- What happens if the radiotherapy does not work? Are there other treatments I can have?
- Who should I contact if I have any questions at any point during my treatment? How do I contact them?
- Will I still need to see my specialist team after my treatment has finished?
- Will having this treatment prevent me from having other types of treatment (for example, chemotherapy) later on?

More information

This fact sheet is part of the Tool Kit. Call our Helpline on 0800 074 8383 or visit our website at www.prostate-cancer.org.uk for more Tool Kit factsheets, including an A to Z of medical words which explains some of the words and phrases used in this sheet.

Macmillan Cancer Support
www.macmillan.org.uk
89 Albert Embankment, London SE1 7UQ
Macmillan Cancer Support has merged with Cancerbackup.
Practical and financial support for people with cancer, their family and friends.
Free and confidential nurse information helpline 0808 800 1234 (9am-8pm, Mon-Fri).
Information on coping with cancer and treatment.
Free and confidential helpline 0808 808 2020 (9am-8pm, Mon-Fri)

Marie Curie Cancer Care
www.mariecurie.org.uk
89 Albert Embankment, London SE1 7TP
Telephone: 020 7599 7777
Marie Curie run hospice centres throughout the UK and provide a nursing service for patients in their own home day and night, free of charge.

'Going for a' website
www.goingfora.com
Virtual hospital from the Royal College of Radiologist. Interactive information on cancer treatment and scans. Includes descriptions from both staff and patients.

The Prostate Cancer Charity makes every effort to make sure that its services provide up-to-date, unbiased and accurate facts about prostate cancer. We hope that these will add to the medical advice you have already been given and will help you to make any decisions you may face. Please do continue to talk to your doctor if you are worried about any medical issues.

The Prostate Cancer Charity funds research into the causes of, and treatments for, prostate cancer. We also provide support and information to anyone concerned about prostate cancer. We rely on charitable donations to continue this work. If you would like to make a donation, please call us on 020 8222 7666.

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Telephone: 0141 314 0050

Website: www.prostate-cancer.org.uk

Free and confidential Helpline
0800 074 8383*
Mon - Fri 10am - 4pm, Wed 7pm - 9pm

Email: helpline@prostate-cancer.org.uk

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*Calls are free of charge from UK landlines. Mobile phone charges may vary. Calls may be monitored for training purposes. Confidentiality is maintained between callers and The Prostate Cancer Charity.

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References to sources of information used in the production of this fact sheet are available on our website.

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