

A large, stylized teal graphic on the left side of the page, composed of several concentric, curved segments that resemble a stylized 'C' or a partial circle.

Treatment of Prostate Cancer with High Dose Rate (HDR) Brachytherapy

Radiotherapy

A guide for patients and carers

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Introduction

Your oncologist (specialist cancer doctor) has recommended HDR Brachytherapy for your treatment. This information booklet will tell you about this combined treatment, your Brachytherapy treatment plan, what to expect when you attend, what to expect after treatment and any long term side effects.

Your brachytherapy treatment plan

After your appointment with the Oncologist, we will look at your scans to begin to design the brachytherapy treatment which will then be 'fine-tuned' during the actual procedure.

Brachytherapy will be done in our Brachytherapy Suite at Clatterbridge Cancer Centre - Liverpool.

Pre-operative assessment

In preparation for your visit to theatre you will need to attend a pre-assessment clinic at Clatterbridge Cancer Centre - Liverpool. We will contact you by letter to arrange this appointment. We will do blood tests, take a medical history, explain the procedure and answer any questions you have. You can drive unaccompanied to this appointment. Please allow 1 hour and bring a list of your medications with you. N.B. Those people attending from the Isle of Man will be admitted on the day of the procedure instead.

You will be given a separate appointment time for the actual brachytherapy treatment which is usually about two weeks after this pre-operative assessment.

Advice re: medication taken to thin the blood

Warfarin should be stopped 5 days before the visit to theatre unless your oncology doctor advises against it. Restart Warfarin at your usual dosage the day after the procedure.

Clopidogrel should be stopped 7 days before a visit to theatre; restart Clopidogrel at your usual dosage the day after the procedure.

If you take Aspirin, this should be continued. If you have any concerns prior to commencing treatment, please contact Brachytherapy on **0151 556 5342**.

What to expect when you attend

Brachytherapy is given as a single treatment requiring a stay overnight. All being well, you will be able to leave early afternoon the day after your treatment.

More about prostate brachytherapy

Prostate brachytherapy delivers radiation into body tissues using fine, hollow needles.

The treatment involves temporary placement of needles into the prostate. This, and the actual delivery of brachytherapy, are done under general anaesthetic in our Brachytherapy Suite at Clatterbridge Cancer Centre – Liverpool.



The radiation comes from a small solid radioactive source that is stored in a specialised brachytherapy treatment machine. To deliver the treatment, flexible tubes from the brachytherapy treatment machine are attached to each needle in order to send the radioactive source into the needles. You do not become radioactive as a result of this type of brachytherapy and so it is safe to be with children and pregnant women.

About the brachytherapy procedure

You will be admitted onto the ward the morning of the procedure. You will have a general anaesthetic, so will be advised to stop eating and drinking at least 7 hours before the procedure. You will be given an enema shortly before going to theatre. Once under general anaesthetic in the brachytherapy suite, a catheter will be placed into the bladder to drain any urine. Then the needles will be passed through the skin behind your scrotum (perineum), guided by an ultrasound scan, into the prostate gland. Usually approximately 14 -18 needles are required. When the number and position of the needles is satisfactory, a treatment plan will be calculated. You will stay under anaesthetic for around 3 to 4 hours; the actual radiation delivery time is about 15 minutes. The machine will automatically remove the radioactive source when the treatment is finished and the needles will be removed before you wake. We will put a cold compress next to the perineum to help reduce swelling and the catheter will remain in place overnight.

What to expect after the brachytherapy procedure

On returning from theatre your visitors may be concerned at your appearance. It is normal to look “washed out” and pale after an anaesthetic, but after short sleep we expect you to look much better! The nurses on the ward will check on you regularly and give you painkillers, if required. Because of the duration and position we place you in to be able to complete the procedure you will be given an injection to reduce the risk of a Deep Vein Thrombosis (DVT) a few hours after the procedure. The ward staff will talk to you about the risk etc. of DVT.

It is usual to see blood in your urine. This may be quite heavy for the first few hours following the procedure but usually settles quickly after that. Occasionally, it may persist for longer. The catheter will be removed before you go home.

As there is a small risk of infection, antibiotics will also be given; first by injection while you are in theatre and then a short course of tablets which will be supplied before you go home. It is important to complete the course of antibiotics and seek help if you feel unwell; our nurse practitioners will give you contact details.

Once home, take plenty of rest for the first few days. The procedure is generally well-tolerated with few problems. You should be able to return to normal activities within 7-14 days.



However, the effect of the procedure (both physical and radiation induced) can result in the prostate swelling a little, sometimes causing pressure upon the urethra (tube from bladder to body surface) which passes through the prostate.

As a result you may notice that you:

- Have a weak flow when you empty your bladder
- Get an urgent need to empty your bladder
- Have difficulties starting to pass water
- Get a stinging sensation when you pass urine

We will give you a 28 day supply of tablets (Tamsulosin (Flomaxtra)) to reduce these symptoms. A repeat prescription should be obtained from your GP. You may need to take it for 6-12 months. **In the unlikely event that you are unable to pass urine, you should seek urgent medical attention.**

You may also:

- Get bruising beneath your scrotum that can spread to your upper thighs; this will gradually disappear
- Have discomfort when you sit down and at the site of the needle punctures. You can use an over-the-counter painkiller such as Paracetamol or Ibuprofen (unless you are allergic to them) to relieve the discomfort

You can help yourself by drinking approximately 1.5 - 2 litres each day until any urinary symptoms settle. Avoid large quantities of caffeine (tea, coffee, energy and cola-type drinks) as caffeine can increase the flow of urine. Decaffeinated drinks are OK. Moderate amounts of alcohol can be taken, but stop if you notice any irritation. Some people find cranberry juice helpful, but do not drink it if you take Warfarin. Also, more than a couple of glasses a day can cause your bowels to be loose. Drink less after 7pm so that you do not have to get up during the night to pass water.

What to expect after this treatment and long term effects

Treatment is usually well-tolerated. Many men may already have experienced similar symptoms to those caused by the treatment either because of their cancer or increasing age, e.g. urinary frequency (especially during the night), weak stream, urgency. Those men experiencing these symptoms for the first time may find the first few months following treatment more challenging with a potentially greater impact on your daily life/mood.

Following treatment, and within the first 3 months, the following symptoms are most common but usually mild; pain in the bladder and rectum, blood in the urine, diarrhoea and fatigue.

Urinary symptoms (frequency and retention) are most troublesome approximately 1 month following the initial brachytherapy treatment. Less than 1 in 20 men will experience urinary retention



(inability to pass urine) which requires temporary placement of a catheter. After this time, and for the next few months, the bladder symptoms may continue to be bothersome. Those men who have bladder symptoms before treatment are more likely to develop acute and late effects which require medication. 1 In 20 men are incontinent (leakage of urine) after 3 years.

Long term side effects can occur months or even years after completing treatment. These include:

You may find the following advice helpful:

- Drinking more fluid to soothe and flush the bladder; plain water is best and avoid excessive quantities of caffeine (found in tea, coffee, energy and cola-type drinks) which can increase the flow of urine
- Be aware that it may take longer to start to pass urine and the flow may be different; be patient!
- Take painkillers, if necessary
- Avoid foods which increase your bowel activity
- If fatigued, do activities for shorter periods and plan regular rest times into your day

If you have any concerns, please contact your GP.

Erectile dysfunction can occur, particularly in the first 6 months and for some men it can be permanent.

A noticeable reduction in the volume and consistency of the semen produced on ejaculation is common, becoming clearer and more “liquid” than before. Eventually, you may not ejaculate any semen at all. This is called dry ejaculation and does not affect your ability to reach orgasm.

Prostate cancer treatment can impair sperm production and cause infertility (inability to have children) but you cannot assume that you are not able to make someone pregnant. You should therefore take contraceptive precautions, if this is relevant. If you want keep the option of having children in the future, discuss this before having brachytherapy. One of the options is sperm banking.

Follow-up and recovery

As you complete your Brachytherapy, your care needs will be assessed. A doctor from the oncology team will see the majority of patients within 4-6 weeks after completion of treatment. This appointment is usually at your local hospital. Meanwhile, if you have any concerns you should contact your GP or staff at the Brachytherapy department - (see references section).

The diagnosis of cancer together with the impact of treatment and any side effects can have a major impact on how you feel, which then affects how you behave. Sometimes, your relationship(s), including sexual intimacy, are affected. You might find that you lack interest in sex and may have difficulty getting and maintaining an erection. Please discuss any sexual problems that arise with



your consultant/nurse specialist, as various treatments or referral to specialist teams are available to help.

If you are able, talking about how you feel can be a great help. Some men and/or their partners may find it useful to visit the Prostate Cancer UK charity website, where people who have experience of cancer treatment share their experiences and advice. Some find it useful to have the support of others who have experience of cancer by attending a local support group. Contact the Macmillan Information & Support Centre in the main reception of Clatterbridge Cancer Centre – Wirral , Liverpool or Aintree for more details.

If you find that you have long or frequent periods of low mood you should seek help from your GP. There are many ways to be helped, including but not always, a short course of anti-depressant tablets. Sometimes, more help is required to help you cope and overcome any negative feelings. Often, these feelings become more apparent once you have completed all your treatments and you are beginning to recover. You should discuss these issues with your GP or your oncology doctor at your follow up appointments. Referrals to specialist staff, e.g. a psychologist or sexual health practitioner alone or with your partner can be beneficial.

Diet and prostate cancer

Research is emerging which suggests that some foods may slow down the growth of prostate cancer in men who already have the disease or reduce the chance of prostate cancer returning after treatment. Please visit the “Prostate Cancer UK” website for more information.

Prostate Cancer UK and Macmillan Cancer Care Charities

Prostate Cancer UK and Macmillan Cancer Care have lots of information on coping and living with cancer that are available free of charge. These can be ordered by telephone or by visiting a Macmillan Information Centre (sited in the main entrances of Clatterbridge Cancer Centre – Liverpool, Wirral and Aintree).

Useful Contact details

The Clatterbridge Cancer Centre

0151 556 5000 or www.clatterbridgecc.nhs.uk

Macmillan Cancer Support

0808 808 0000 or www.macmillan.org.uk

Macmillan Cancer Information and Support at:

Clatterbridge Cancer Centre - Liverpool 0151 318 8805

Clatterbridge Cancer Centre - Wirral 0151 556 5570

Clatterbridge Cancer Centre - Aintree 0151 556 5959



Email: ccf-tr.informationcentre@nhs.net

Prostate Cancer UK

www.prostatecanceruk.org or 0800 074 8383

Brachytherapy Clinical Specialist Radiographer

Direct Dial - 0151 556 5342

Pre-assessment contact Brachytherapy - Liverpool

Direct Dial - 0151 556 5065

Clatterbridge Cancer Centre Hotline 0800 169 5555

If you are unwell during or up to 8 weeks following your cancer treatment please call the Clatterbridge Cancer Centre Hotline.

Your call will be answered by a dedicated nurse advisor. This line is available 24 hours a day, 7 days a week.

How we produce our information

All of our leaflets are produced by staff at The Clatterbridge Cancer Centre and this information is not sponsored or influenced in any way. Every effort is made to ensure that the information included in this leaflet is accurate and complete and we hope that it will add to any professional advice you have had. All our leaflets are evidence based where appropriate and they are regularly reviewed and updated. If you are concerned about your health in any way, you should consult your healthcare team.

We rely on a number of sources to gather evidence for our information. All of our information is in line with accepted national or international guidelines where possible. Where no guidelines exist, we rely on other reliable sources such as systematic reviews, published clinical trials data or a consensus review of experts. We also use medical textbooks, journals and government publications.

References for this leaflet can be obtained by telephoning 0151 556 5570.

If you need this leaflet in large print, Braille, audio or different language, please call 0151 556 5570.

If you have a comment, concern, compliment or complaint, please call 0151 556 5203.

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