Prostate brachytherapy service HDR (high dose rate)

Local helpline numbers

DORAH (Dorset Radiotherapy Helpline)
Tel (answerphone) **0300 019 2481**
If you leave a message and your name and number, a radiographer will get back to you as soon as possible.

To read this leaflet in a different language, please visit our website: **www.uhd.nhs.uk/visit/patient-information-leaflets** and use the language and accessibility function available along the top of the site.

To ask for this leaflet in larger print, please contact the patient experience team on **0300 019 8499** or email **uhd.patientexperienceteam@nhs.net**.

Poole Hospital,
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t: 01202 665511 w: www.uhd.nhs.uk
: @UHDTrust : @uhd_nhs

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Visit **www.uhd.nhs.uk/future** to find out more.

NHS
University Hospitals Dorset
NHS Foundation Trust

Dorset Cancer Centre

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Patient information booklet and treatment record

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Contact list:

Poole

Brachytherapy team - **0300 019 2047**

Uro-oncology specialist nurse practitioner - **0300 019 8635**

Radiotherapy bookings team - **0300 019 8635**

Royal Bournemouth

Urology clinical nurse specialist team - **0300 019 4977**

Uro-oncology specialist nurse team - **0300 019 4969**

Dorchester

Urology oncology nurse specialist - **01305 255695**

Urology specialist nurse team - **01305 255145**

Oncologists

Dr Masters and Dr Davies
Secretary - **0300 019 2492**

Dr Roberts - oncologist
Secretary - **0300 019 8435**

Emergency post implant contact

RBH surgical admissions - **0300 019 6009** / **0300 019 6435**

Dorchester emergency department - **01305 255541**

Medicine	Reason for taking	Dose	How often

This leaflet has been written in collaboration with the Oncologists, Urologist, Radiologist, Radiographers and Urology Nurses on the Brachytherapy Team.

National helpline numbers

Prostate Cancer UK
Specialist nurse telephone - **0800 074 8383**
Website: **www.prostate-cancer.org.uk**

Macmillan Cancer Support
Telephone: **0808 808 00 00** (seven days a week, 8am-8pm)
Website: **www.macmillan.org.uk**

Cancer Research UK
Telephone: **0300 123 1022** (Mon-Fri, 8am - 6pm)
Specialist nurse telephone: **0808 800 4040**
(Mon - Fri, 9am-5pm)
Website **www.cancerresearch.org.uk**

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Preparation for the procedure

You will have to attend a pre-operative assessment at the hospital prior to the implant. This is to ensure you will be able to have a general anaesthetic. A telephone appointment will also be scheduled with the brachytherapy team to discuss the procedure as well as answer any questions you may have.

Alpha blocker (usually Tamsulosin) should be taken one week before your procedure and continued for six months to a year afterwards. This will help with urinary frequency and reduce the risk of urinary retention. Your GP will be asked to provide a prescription.

The procedure

On the day of the procedure, you will be admitted onto the ward and given a hospital gown to change into. You will be collected from the ward and taken to brachytherapy. You will be under a general anaesthetic for the procedure, which means you will not be conscious during it. A catheter will be inserted into your bladder. Once the catheter is in place, an image of your prostate will be taken using an ultrasound probe which is inserted into your back passage. These images are used to plan your treatment. A treatment plan is created by deciding how long the radioactive source needs to be in the needles that have been inserted into the prostate. The treatment is given while you are under the general anaesthetic. When the treatment is finished, the needles will be removed, and you will be woken up in the recovery area. You will then be taken back to the ward for an overnight stay. The procedure will take approximately four hours to complete.

Bowel side effects:

Changes to your bowel movements - you may experience loose bowel movements (diarrhoea) or constipation. You may also experience increased wind. You may be advised to alter your diet to help with this side effect.

Bleeding from your back passage (bottom) - if you experience blood in your stool or blood when wiping please inform a member of your treatment team.

Increased urge - feeling of wanting to open bowels more often due to an inflamed prostate, this should gradually settle.

The rectum may also become inflamed, causing a burning sensation after opening your bowels. If this is not controlled by pain killers, then contact your GP.

Ejaculation/impotence:

The semen may be discoloured - Brown or black for the first few ejaculations after the implant. This is caused from bleeding during the procedure.

Pain in the tip of the penis - this can be due to the catheterisation you had or referred pain from irritation of the nerves at the base of the penis. If this occurs, you can take painkillers such as paracetamol or ibuprofen.

Painful ejaculation - this tends to settle after a short while.

Impotence - (the inability to achieve an erection) occurs in 20-30% of patients under the age of 60, and more frequently for those over 60. If this is a problem please discuss it with your Consultant, urology nurse or GP as there are treatments for this condition. It is therefore important you start on a prescription of a suitable PDE-5 inhibitor such as Viagra or Cialis to help support you especially if you want to remain sexually active.

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Follow-up

We will write to your GP once you have completed your treatment to inform them of what you have had done and to advise them about possible side-effects you may experience. We will ask them to continue your prescription of Tamsulosin. You may need to continue with your hormone treatment- only if instructed to do so by your oncologist. Your oncologist will have written to your GP prior to inform them of this.

You will have a follow-up with your oncologist regularly over the next few years in which your PSA blood test will be monitored closely. If at any time you are concerned please contact the Brachytherapy team for advice.

Patient record sheets

You can use these to record your blood test results, side effects, medicines and any questions that you wish to ask.

Date	PSA results	Comments

Introduction

This leaflet provides information for those who are thinking about, or who have decided to have, high dose rate (HDR) brachytherapy treatment for prostate cancer. It is hoped that this will answer any questions that you or people close to you may have. This leaflet is only a guide and does not contain every possible detail about your treatment. If you have any other questions or would like any further information, please feel free to ask any member of the team.

Brachytherapy is one way of treating prostate cancer. Your consultant will have discussed your treatment options with you. You will have been given several months of hormone treatment before having your brachytherapy and may have to continue hormones for some time after your radiotherapy. Your oncologist will advise you on this.

What is brachytherapy?

HDR brachytherapy is a technique for treating prostate cancer using a temporary radioactive source and a transrectal (via the rectum) ultrasound probe to guide needles into the prostate while under a general anaesthetic. A plan is created in theatre to decide where the radioactive source needs to go. This allows high doses of radiation to be delivered to the prostate. The radioactive source is a small radioactive iridium pellet which is mounted at the end of a cable. The cable is placed into each needle to deliver the treatment. It is controlled by a machine that will remove the radioactive pellet when the treatment is finished. Since only a small area is affected by the radiation, the surrounding healthy tissues such as the rectum and the bladder receive a relatively small dose of radiation.

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After the implant and before you leave you will be given:
Alpha blocker (usually Tamsulosin) - taken for six months to a year, to help with urinary frequency and reduce the risk of urinary retention.

Macrogol laxative sachets which are to be mixed with water to drink. We will ask you to take one sachet morning and night until your radiotherapy planning CT. This will help soften your stools (poo) to help you empty your bowels.

We do not supply painkillers to take home but recommend you have a supply of ibuprofen and/or paracetamol at home to help with the inflammation and pain from the procedure.

Antibiotics are not given routinely as you will be given antibiotics intravenously (into a vein) during the procedure.

Radiotherapy CT

After your procedure you will have a radiotherapy CT scan. This is usually the same week as your brachytherapy however not directly after to allow for the initial swelling to subside. This scan is not a diagnostic scan, the scan will be used to plan your radiotherapy treatment To prepare you, it is important to stay well hydrated after your brachytherapy procedure and prior to the radiotherapy CT scan and follow the bladder and bowel preparation instructions very carefully to ensure optimal conditions for your CT scan. The CT radiographers will go through the bladder and bowel preparation instructions for your treatment. You will usually start your radiotherapy 2 weeks after your brachytherapy as this allows us time to plan your radiotherapy treatment.

Side effects

A few weeks after your brachytherapy and radiotherapy, your side- effects will start to improve. It may take some time before you notice the side-effects settling.

The side effects that you may experience are shown below -

Bruising and inflammation - caused by the implant and may make you feel uncomfortable for a few days. This should subside after a couple of weeks.

Tiredness/fatigue - you may feel increased tiredness after your brachytherapy treatment. This is also caused by hormone therapy and radiotherapy so this may last until all your treatments have finished.
To help reduce your tiredness we recommend you rest when needed. Regular physical activity such as short walks if suitable can also help.

Bladder side effects:

Urinary side effects may include:

- **Blood in urine**
- **Burning sensation during urination**
- **Urinary frequency**
- **Urinary urgency**
- **Poor urinary flow - slow to start**
- **Increased urination at night (Nocturia) - 1-2 times more than normal**
- Very occasionally uncontrolled urine leakage can happen if you are unable to reach a toilet in time.
- **Urinary incontinence** - occurs in less than 2% of patients who have not had prior prostate surgery.
- **urinary retention** (unable to pass urine) - occurs in a small percentage of patients.

In order to help manage these side effects we recommend:

- **Drink plenty of water (2-3 litres per day)** - to help flush out your system, reduce any blood clots, reduce irritation, frequency and urgency.
- **Drink cranberry juice or lemon barley water** - to help reduce irritation, frequency and urgency. **Do not drink cranberry juice if you have been prescribed warfarin**.
- **Reduce your water intake a couple of hours before bedtime** - to help reduce the number of times you will need to empty your bladder.
- **Cut out caffeinated drinks e.g. tea, coffee and cola** - to reduce irritation, frequency and urgency.
- **Cut out alcoholic drinks** - to reduce irritation, frequency and urgency.
- **Sitting down while urinating** - this may help with poor flow. Taking a warm bath may also help.
- **If retention occurs while you are on the ward** - a catheter will be re-inserted. Your district nurse will be informed and will monitor this after discharge and advise accordingly.
- **If retention occurs after you have been discharged** - it is important to contact either RBH Surgical Admissions or Dorchester A&E department (see telephone number in the front of this book). Let them know what treatment you have had so they can treat your retention appropriately. If you have been catheterised, it is likely to stay in place for several weeks until the maximum swelling has settled.

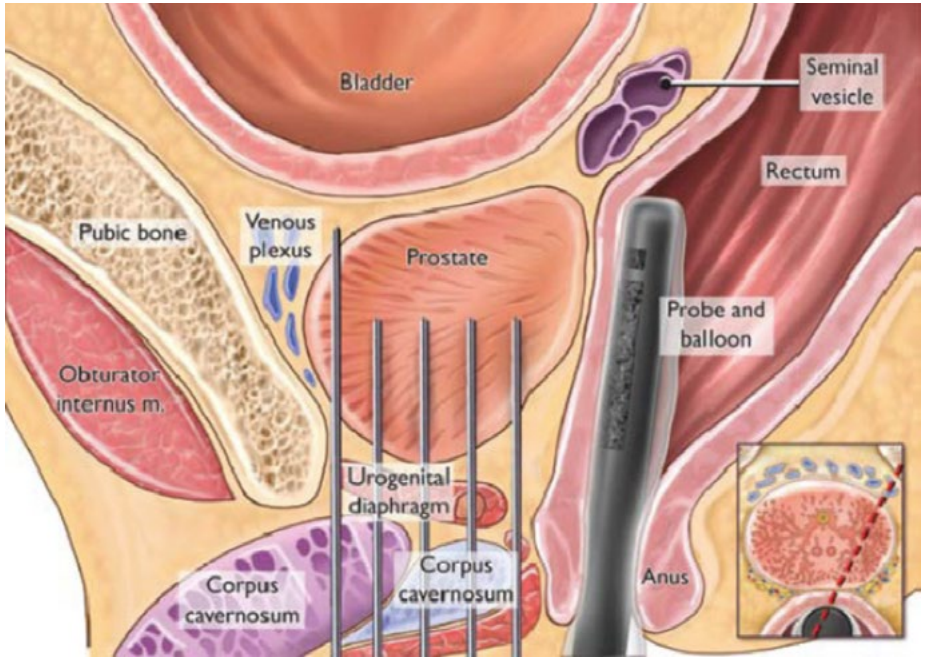

Diagram of the insertion of the needles into the prostate

After the implant

The following morning the catheter will be removed. It is important that we are sure you can pass urine (wee) without the aid of a catheter before you leave hospital. It is normal for your urine to be red/pink in colour as you may have some bleeding in your bladder. This will settle but may take a while. A brachytherapy radiographer will see you on the ward and ensure you have all the necessary documents and information for the start of your radiotherapy treatments.

Because of the anaesthetic you should not drive for 24 hours after your procedure. Due to the bruising caused by the procedure, do not lift heavy weights for a few days after the procedure. You can return to work as soon as you feel comfortable.