

## A Patient's Guide to Prostate Brachytherapy using Temporary Implants

Patient Information Series No 50

### Consent

It is a legal requirement to have a signed Consent Form from you before the start of your treatment.

If you have already been given one of these forms, please bring the completed form with you when you come for your first appointment.

If you have not been given a form, it will be given to you at your first appointment.

### Identification

Please note that it is a legal requirement for the staff to check your name and details against your treatment sheet and your hospital name band each time you attend.

Please wear your name band at all times whilst in hospital.

### Fathering a child

Patients must not father a child during a course of brachytherapy (radiotherapy) or for some months afterwards. **Please discuss this with your cancer specialist.**

If you think there is a chance, however small, of your partner becoming pregnant during your treatment, it is extremely important that you discuss this with your oncologist, radiographer or nurse as soon as possible.

## A Patient's Guide to Prostate Brachytherapy using Temporary Implants

### Contents

Introduction	4
What is brachytherapy?	4
How can I get this treatment?	4
Is it suitable for all patients with prostate cancer?	5
Will I have conventional radiotherapy as well?	5
What will happen during the implant?	5
When you wake from the anaesthetic	6
What happens at the treatment?	7
What happens after treatment is completed?	7
Is there anything else I should know?	9
What about any long term side effects?	10
Additional help and support	11
Contacts	11

### Introduction

This leaflet aims to explain what happens when you have brachytherapy to treat your prostate gland.

Whilst it doesn't cover all the issues, it is intended as a guide to help you to understand more about this particular treatment and the procedure involved.

The cancer specialist is in charge of your care and throughout this leaflet we will refer to him/her as the oncologist<sup>1</sup>. There will also be a team of other hospital staff caring for you.

### What is brachytherapy?

Brachytherapy is a form of radiotherapy given by introducing a radiation source directly into the area we wish to treat.

In the case of the prostate gland, we do this with a temporary implant using applicators which are used to direct a radioactive iridium pellet into the prostate gland.

This leaflet explains about using temporary implants.

### How can I get this treatment?

This treatment may be recommended for some patients as the best means of delivering high dose radiation to the prostate gland, often in combination with external beam therapy.

Alternatively it may be offered to you as part of a clinical trial at Mount Vernon Hospital.

<sup>1</sup> Throughout this leaflet the term 'oncologist' will refer to both your cancer specialist (oncologist) and any doctors working within his/her team.

## **Is it suitable for all patients with prostate cancer?**

No. It is suitable for patients who have localised prostate cancer or where there may be only early spread into the nearby tissues. Your suitability is assessed by the size of the gland on examination, the type of cancer cell (grade), the Prostate Specific Antigen (PSA) level and your Magnetic Resonance Imaging (MRI) scan.

## **Will I have conventional radiotherapy as well?**

Temporary implants may be used alone or included as part of an overall treatment programme following beam treatment (radiotherapy).

The standard combined treatment currently includes a period of external beam treatments given daily for up to 4½ weeks as an out-patient.

This is then followed by a single temporary implant treatment called a boost, which is given as an in-patient.

## **What will happen during the implant?**

You will be admitted the day before the procedure, and that evening you will be given medication to clear your bowel. This makes the implant procedure easier.

On the day of the implant you will be taken to the operating theatre where you will be given a general anaesthetic. A catheter (a thin flexible tube) will be inserted to drain urine from your bladder. Fine plastic tubes (applicators) will be passed directly into your prostate gland, guided by a transrectal ultrasound scanner. You will feel nothing whilst this is happening.

## **When you wake from the anaesthetic**

When you wake up from the anaesthetic you will be aware of the catheter in your penis. You will need to remain lying flat on your back. If you are feeling any discomfort your nurse will be able to give you some medication to make you more comfortable.

You will also be aware of the applicators in the area of skin between your scrotum and your anus. You may feel a little bruised in this area, and your skin may feel stiff, as the applicators as are held in place by a silicone template which is attached to your skin by adhesive.

When the anaesthetist is happy for you to leave the Recovery area, you will be taken to a CT (Computed Tomography) scanner and/or a MRI scanner.

Here we will take images of your prostate, so that we can accurately measure the position of the applicators which have been inserted.

This takes about one hour and following this you will go back to the ward. You will need to remain flat on your back in bed (although you may sit up slightly, but not fully) when eating or drinking. During this time patients can experience backache, from lying in bed and discomfort from increased flatus (wind). You will be given some pain medication if needed to help you feel more comfortable.

Over the next hour or two, the doctors and physicists will be carrying out measurements and calculations on the scans to decide how long the radioactive pellet needs to rest within each applicator, to give an even dose of radiation to your prostate.

A further CT scan shortly before treatment may be taken

to ensure there has been no change in the position of the applicators in the prostate. Occasionally some minor adjustments may be necessary following this.

Once this has been done, the treatment is ready to be given.

## **What happens at the treatment?**

The treatment is usually given in the late afternoon of the day on which you have the implant inserted. You will be taken to the Radiotherapy Department on a trolley.

- The applicators are checked to ensure they have not moved. Provided they are in the correct position, they are connected to a series of tubes which join them to the machine containing the radioactive pellet (the brachytherapy machine).
- Once this is completed, the staff will leave the room, and the treatment will start. However, they will be watching you at all times on a TV monitor in the control area nearby and be able to talk to you via an intercom. You will be able to signal if you need help.
- The brachytherapy machine will pass the pellet down each applicator in turn, for the calculated length of time that is needed to deliver the necessary radiation dose. You shouldn't feel any discomfort during treatment.

## **What happens after treatment is completed?**

- At the end of the treatment, the treatment applicators need to be removed. You do not need any sedation for this as they are removed very simply.

- First, the plastic template is taken off your skin. This is a little bit like removing a plaster. There may be slight discomfort as this is removed, but otherwise the procedure is pain free. Then the treatment applicators are taken out. There may be a little oozing of blood from the site where the applicators pass through the skin, this bleeding will stop when gentle pressure is placed on the site for a few moments.
- At this point the catheter draining your bladder is usually removed.
- Most men now have only one treatment and the applicators are removed directly afterwards. In some cases however a second treatment may be given in which case the you will return to the ward where you stay overnight. A second treatment is then given the next morning going through the same steps as above.

Following the treatment you will return to the ward. We like you to remain there until we are sure that you can pass urine easily, and then you should be able to return home. Some patients may need to stay overnight if they are having difficulty passing urine.

You may pass small amounts of blood in your urine for a few days after the procedure. There is no need to worry about this.

Occasionally a small clot may block the urine passage, and the catheter will have to be replaced to wash the clot away.

Before you leave the hospital you will be given medication to take, which should help to reduce some of the side effects. Although these may not be completely relieved with medication, they will slowly improve with time. After a few weeks you should find that you can return to your normal level of activity.

## Is there anything else I should know?

The area where the implant was placed may feel a little uncomfortable for a few days, particularly if you sit on a hard chair.

You may feel the need to urinate more often, sometimes with urgency or discomfort. This is due to swelling of the prostate following treatment. Please continue to drink plenty of fluids and contact the cancer centre if the urgency and discomfort persists.

If your prostate is very swollen and it is difficult to pass urine, you may need a catheter to drain the urine. This symptom is called urinary retention and may happen in the first few weeks following your treatment.

If this does happen and you find that you cannot pass urine, you will need to contact Mount Vernon Cancer Centre (see page 11) or your local Accident and Emergency (A & E) Department. You should take this leaflet with you and explain to them that you have had prostate brachytherapy.

If you go to an A & E department you should ask them if they have any concerns to contact Mount Vernon Cancer Centre on the telephone numbers given at the end of this leaflet. They may pass a small urinary catheter (gauge 14) to drain your urine. This is a small flexible tube which will be put into your bladder through your penis and will drain your urine from your bladder into a bag.

If this is difficult and unsuccessful after one or two attempts, they should not continue without contacting a urology specialist.

Sometimes bowel movements may feel uncomfortable for a few days and may occasionally cause a sharp pain. This

usually settles on its own and is rarely severe enough to need active treatment.

Some men have noticed a patch of numb skin along the penis which may take some months to improve.

## What about any long term side effects?

There is a risk of scarring around the ureter (urine tube) causing a reduced urinary stream. Around 5% of men may need to undergo a minor procedure to dilate this if it becomes troublesome.

## If I have any questions, who should I contact?

Although this technique has been undertaken at Mount Vernon Hospital since 1996, it is relatively new to the United Kingdom.

Because of this, however, many doctors outside Mount Vernon Hospital may not be familiar with the technique.

We hope this information is helpful to you, and if you feel you require further information or your G.P. would like more details, these can be obtained by calling:

Linda Bryant (Brachytherapy Radiographer): 01923 844636

Prof. P J Hoskin: .....01923 844533

Dr Rob Hughes: .....01923 844526

Dr Peter Ostler: .....01923 844592

## Additional help and support

You can also drop in or call the Lynda Jackson Macmillan Centre (LJMC) at Mount Vernon Hospital (see details on the back of this leaflet).

### Contacts

Secretary to Professor Peter Hoskin: ..... 01923 844313  
(9.00am to 5.00pm)

Ward 10 (Mount Vernon Hospital): ..... 01923 844205  
(out of office hours)

Brachytherapy Unit: ..... 01923 844636  
(office hours Mon - Thurs)

Out of hours (9pm - 8am) you may also call .....  
01923 826111 and ask for bleep 6113

This leaflet has been written in collaboration with oncologists, health professionals, patients and carers at Mount Vernon Cancer Centre.

If you have difficulty reading this size of print, a version of this leaflet or any of our leaflets can be produced for you in a larger print.



This leaflet forms part of a series of publications produced by the Lynda Jackson Macmillan Centre (LJMC).

If you would like further information about any aspect of cancer and its treatments, please drop in to the centre or call the Helpline.

The LJMC is staffed by healthcare professionals and trained volunteers and is part of the Mount Vernon Cancer Centre.

- |                                                                     |                                                                    |
|---------------------------------------------------------------------|--------------------------------------------------------------------|
| <input type="checkbox"/> Drop-in centre for support and information | <input type="checkbox"/> Counselling *                             |
| <input type="checkbox"/> Telephone Helpline                         | <input type="checkbox"/> Support groups                            |
| <input type="checkbox"/> Benefits Advice *                          | <input type="checkbox"/> Look Good...Feel Better™ beauty workshops |
| <input type="checkbox"/> Pre-treatment visits*                      |                                                                    |
| <input type="checkbox"/> Complementary therapies *                  |                                                                    |
| <input type="checkbox"/> Relaxation classes                         |                                                                    |

\* These services are available to patients under the care of an NHS oncologist based at Mount Vernon Cancer Centre.

Opening hours: Mon - Fri: 9.30am - 1.00pm & 2.00 - 4.30pm

Lynda Jackson Macmillan Centre  
situated between the Cancer Centre and Gate 3 (White Hill)  
Mount Vernon Hospital, Northwood, Middlesex HA6 2RN  
Telephone Helpline: **01923 844014**  
[www.ljmc.org](http://www.ljmc.org)

