



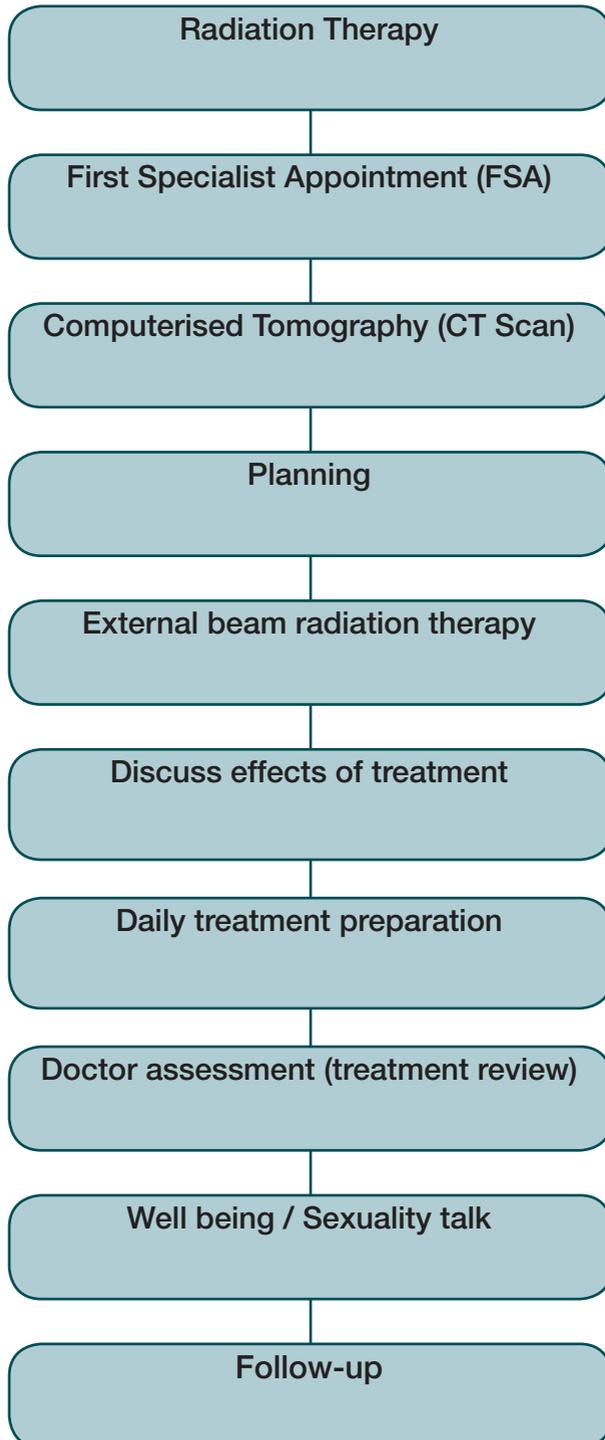
**Information for patients receiving
external beam radiation therapy to the
prostate/prostate bed**



Waikato Regional Cancer Centre



Welcome to Waikato Regional Cancer Centre. The aim of this booklet is to provide information on the radiation therapy treatment procedure and to explain the journey from your first meeting with the radiation oncologist to the completion of your treatment.



What is radiation therapy?

Radiation therapy is the use of high energy x-rays to damage the DNA (genetic code) in the cancer cells. Radiation therapy is planned to treat as little of the normal cells in the body as possible. Special care is taken to limit this by the use of advanced planning techniques and treatment delivery methods.

Radiation therapy is delivered in small treatments called fractions. This allows the normal cells to recover between each daily treatment. Treatment fractions vary depending on an individual needs. This can depend on the type of cancer, staging and intent of the treatment. Fractions can be delivered five days a week up to eight weeks.

First specialist appointment (FSA)

Your consultant (radiation oncologist or registrar) will explain the radiation therapy procedure to you. Your diagnosis, treatment options and potential side effects of treatment will be discussed. If you consent to having radiation therapy treatment, a signature will be obtained at this stage. For the potential side effects please refer to section 'Effects of treatment' on page 5 in this brochure.

Computerised Tomography (CT scan)



A CT scan is performed in order to deliver the treatment accurately and at the correct dose. We need to be able to locate the position of the tumour in relation to the surrounding normal tissue in the body. You will be set up in a comfortable position that will be reproduced when you come for your treatment.

You will be required to undergo bladder/bowel preparation for your CT scan and treatment. If this is required it will be explained in greater detail at your appointment.

At the CT scan small permanent tattoo marks will be given, photos taken of your position and measurements recorded to assist in the daily set-up for treatment.

Planning

Using the information obtained from the CT scan an individual plan is produced. A 'target volume' is determined on the computer planning system. We calculate the best method and beam arrangement for the dose of radiation to be delivered to the 'target volume', while at the same time avoiding as much normal tissue as possible. Time is required for the planning calculations and checks to be done. Treatment is started as soon as possible following the completion of this process.

Treatment - External Radiation Therapy



At treatment you will be set-up in the same position you were in at your planning CT scan. Your daily treatment requires specific positioning, so it is important to relax and allow the radiation therapists to move you as necessary. Once you are positioned correctly you will be required to keep still until the treatment is completed.

The radiation therapists must leave the room during treatment; however, they will monitor you on cameras from outside the room. There is also an intercom system if you were to need assistance you can call out.

On your first day, imaging devices will be used to ensure you are in the right position before the treatment can be delivered. The direction of the beam is set by moving the machine and the couch, on which you will be resting, to the correct position. At times during your treatment we will take images, occasionally adjustments to the bed will be made before continuing with the treatment.

Treatment is usually given once a day. The time you spend in the department can vary for each individual depending on the area been treated and the treatment preparation that you may be required to undertake. Depending on your beam arrangement you will spend approximately 20 minutes in the treatment room but the actual prescribed daily dose of radiation is only a few minutes. During treatment you will not see or feel anything. You will just hear a buzzing sound and that will let you know that the machine is on.

Waikato Regional Cancer Centre is a teaching hospital and at times we have students in our department. If you don't wish to have these students involved with your treatment please advise a member of staff.

For more information please refer to:

<http://www.waikatodhb.health.nz/radiationoncology>

Daily treatment preparation

You may be required to undergo bladder/bowel preparation for your treatment as per your initial CT scan. The amount of water and wait time for bladder filling varies for each individual. Your radiation therapist will explain what preparation you need to undertake for your treatment each day. If you are required to undergo bladder/bowel preparation this helps to maintain a consistent position of the target volume and reduce side effects to surrounding organs.

For the bladder preparation to work you will need to maintain adequate hydration through the day. ***It is important to drink approximately one to two litres of water a day.***

Effects of treatment

After your first treatment a radiation therapist will discuss your treatment plan, including potential side effects, skin care and how long you will be in the department for each day. This is a chance for you to ask any questions. It might be a good idea to write these down in the back of this book.

Radiotherapy is a localised treatment, so most side effects vary depending on the body site being treated. Everyone is affected differently by radiation therapy and the severity of side effects varies from person to person. If you experience any of the following side effects please notify a member of staff.

Potential side effects include but are not limited to:

Early side effects (can occur days to weeks starting radiation therapy treatment)	Late side effects (may occur months or years after radiation therapy treatment)
<ul style="list-style-type: none">• Fatigue (tiredness)• Skin reddening• Bladder changes (more urgent, frequent urination including at night, burning sensation, diminished flow)• Bowel changes (more urgent and frequent, loose bowel movement)• Anal canal can become sore (Haematochezia – passing blood in stools)	<ul style="list-style-type: none">• Permanent bowel changes (increase urgency, frequency, flatulence and mucus)• Radiation proctitis (blood in stools)• Radiation cystitis (blood in urine)• Impotence (ability to achieve and maintain an erection)
Rare late side effects <ul style="list-style-type: none">• Dysfunctional bowel• Permanent urinary irritation• Pelvic adhesion/scarring leading to obstruction or fistula formation which may require further surgical intervention• Pelvis/hip bone weakness• Sacral plexopathy (nerve damage)	

There is an extremely small risk of developing a second cancer many years after radiation therapy treatment. Your oncologist will discuss this with you if this is applicable.

The peak of any reactions/side effects you may experience will occur approximately 7-14 days after the completion of your radiation treatment. This is due to the cumulative nature of the treatment.

Treatment review

You will see your oncologist or register in a regular review clinic while you are on treatment. Clinic days and times are specific for each oncologist. We try our best to coordinate these times with your treatment time but it is not always possible. If you have any concerns before these appointment times please speak to the radiation therapists and where necessary they can organise for a nurse or oncologist to see you.

Wellbeing / Sexuality talk

Mental wellness

The diagnosis of cancer and undergoing treatment can add additional stress to your life. Anxiety and depression are common among patients during and following cancer treatment. It is perfectly normal to feel emotional about the journey you are going through and everyone deals with the situation differently. You may find it helpful to talk to family and friends about how you are feeling or if you would like outside professional and psychosocial support please mention this to a radiation therapist.

Diet and weight

It is recommended that you have a well-balanced diet. It is important that you remain the same body size while receiving radiation therapy treatment. Significant weight loss or gain can influence treatment accuracy and may result in your treatment needing re-planning. Inform your radiation therapist if you are concerned about your weight loss.

Sexuality

It is important to realise that radiation therapy to the prostate/prostate bed may impact on a man's sex life. Discussing intimacy and sexuality is very personal and for some patients this can be difficult.

Some men find that their potency (ability to achieve and maintain an erection) declines slowly over the following months/years after treatment. This is more likely to happen if the erections were already declining prior to radiation therapy treatment (following prostate surgery, hormone treatment, medication, fatigue or from other causes). If desired, and discomfort is not experienced, continuing with sexual activity during treatment is appropriate. Your oncologist will advise you if considered otherwise.

If you have any concerns or questions about **fertility and contraception** your oncologist can talk to you and your partner.

Follow-up

At the completion of your treatment an appointment will be made for you to see your radiation oncologist. This interval will depend on the area that you are having treated and what side effects you may have experienced during treatment. Your radiation oncologist will see you at regular intervals continuing for several years. You may be requested to have further tests or scans done at the request of your radiation oncologist.

If you have any questions or concerns between the end of your radiotherapy treatment and this follow up appointment, you can contact your GP or one of the numbers on the following page.

Useful numbers

- Waikato Hospital switchboard 07 839 8899
- Blue Machine ext: 98073
- Green Machine ext: 98249
- Pink Machine ext: 98221
- Yellow Machine ext: 96191
- Urogenital Nurse Specialist ext: 95030
- Oncology Outpatient Reception 07 839 8604
- The Cancer Society's Lions Lodge 07 834 2351
- Cancer Society - Hamilton 07 838 2027
- Cancer Society Information Helpline Staff 0800 226 237
- Wilson Parking 07 839 8901
- Sex Therapy NZ
www.sextherapy.co.nz
admin@sextherapy.co.nz

For more information on radiation therapy please visit:
<http://www.waikatodhb.health.nz/radiationoncology>
<https://www.healthnavigator.org.nz/>

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