

# PROSTATE SEED (LDR) BRACHYTHERAPY

## Understanding My Treatment:

In this booklet you will learn about:

- Prostate seed brachytherapy
- How to get ready for your treatment
- What will happen on the day of your treatment
- Side effects after treatment
- How to take care of yourself after treatment
- What happens after treatment
- How to protect yourself and your loved ones
- Who to call with questions

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## What is prostate seed brachytherapy?

*also known as low-dose brachytherapy (LDR)*

- Internal radiation treatment where a large number of tiny radioactive seeds are put into the prostate.
- These seeds have radioactive iodine which give off radiation over a few months to kill off cancer cells with little risk of damaging the organs around the prostate.
- The treatment is done at the Odette Cancer Centre in the Brachytherapy Suite. You do not need to stay in the hospital for this treatment.
- Your treatment is given to you by a team of Nurses, Radiation Oncologists, Radiation Therapists and Medical Physicists.

### **There are 3 steps to prostate seed brachytherapy treatment:**

Step 1: Planning your trans-rectal ultrasound (called a TRUS)

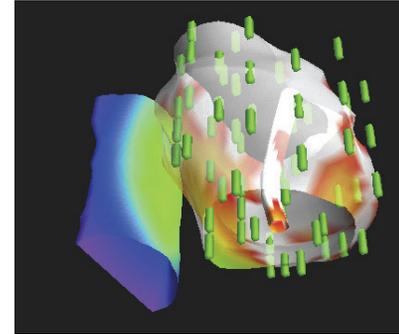
Step 2: Implanting the radioactive seeds

Step 3: Follow up care

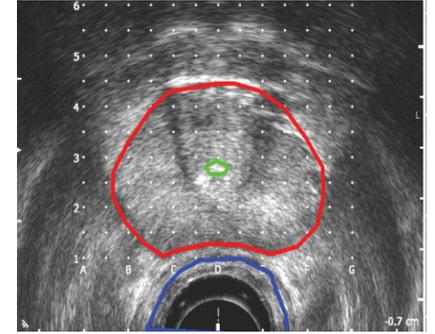
## STEP 1: Planning your transrectal ultrasound (TRUS)

At this appointment the healthcare team will map out the size and position of the prostate.

- The TRUS will be done by your doctor or by a specially trained radiation therapist.
- You will lie on your back with your feet in stirrups.
- Some jelly will be put into the urethra. The urethra is a tube that runs through the prostate which carries urine from the bladder. This is done so that the urethra can be seen on the ultrasound. This may cause some discomfort.
- An ultrasound probe will be put into your rectum to get images of your prostate.
- The images will be used to plan for your permanent seed brachytherapy treatment. Usually 80 to 120 seeds are needed.
- On the day of your TRUS you may have blood tests done and an electrocardiogram (ECG) to check your heart.



The computer gives a 3-D image of the prostate, rectum, urethra and seeds.



The ultrasound shows the size and shape of the prostate as seen on TRUS.

### How do I get ready for my TRUS?

- You may need to give yourself a fleet enema 1 hour before the TRUS appointment. Your health care team will let you know. You can buy the fleet enema at your pharmacy. You do not need a prescription.
- Check in at the Ground Floor Radiation Therapy reception desk

## STEP 2: Implanting the radioactive seeds

### The day before the treatment:

- Start a clear fluid diet.
- Do not eat any solid food
- Try to drink at least 2 Litres of fluid to make sure you are hydrated
- Drink 8 ounces of magnesium citrate the afternoon before your treatment to clear out your bowels. You can buy this at your pharmacy. You do not need a prescription.

**What is a clear fluid?** A clear fluid is a liquid that you can see through at room temperature.

**What are some clear fluids you can have?** Apple, cranberry, grape juice, ginger ale, cola, lemon/lime soft drinks, Gatorade, PowerAde, black tea, black coffee (can add sugar but **NO milk or cream**), jello (no fruit toppings or whip cream), popsicles, lemon ice, broth, consommé.

**It is very important that you do not drink milk, cream, any juice with pulp, or alcohol after midnight.**

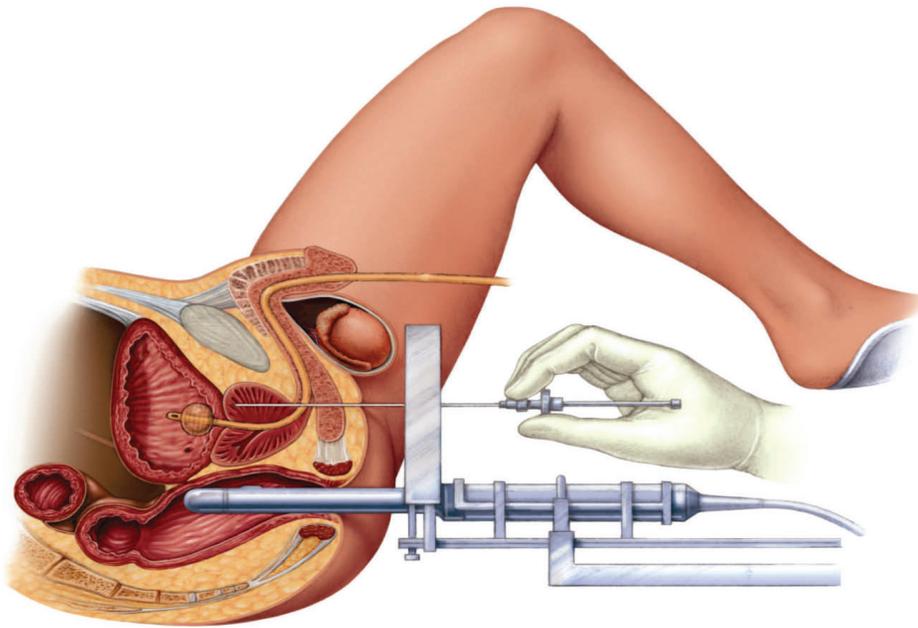
### Are you diabetic?

Please talk with a member of your healthcare team for advice on medication and blood sugar checks

- Make sure you have a ride to and from the hospital the day of the treatment. You cannot drive after the anesthesia (medicine that puts you to sleep).
- Plan to have someone stay with you for 24 hours after the treatment. This is for your safety.

### The morning of the treatment: How do I get ready before I arrive?

- Give yourself a fleet enema before you come to the hospital.
- Wear loose fitting pants such as track pants
- Ask your healthcare team what medications you can take the day of treatment. Bring them with you and the Nurses will tell you when you can take them next.
- You may have clear fluids up to 2 hours before your treatment.



Seeds are inserted into the prostate under ultrasound guidance through the skin between the scrotum and anus. Note ultrasound probe in rectum.

## What will happen on the day of my treatment?

- Please check in at the Ground Floor Radiation Therapy reception desk when you get to the Odette Cancer Centre.
- A Nurse will get you ready for the treatment and start an intravenous (IV).
- You will be brought into the treatment room where an Anaesthetist will put you to sleep.
- The treatment is done with you are asleep under anaesthetic. You will not have any pain during your treatment.
- Some jelly will be put into the urethra so that the urethra can be seen on the ultrasound.
- An ultrasound probe will be put into the rectum so that we can see the prostate. Seeds are then implanted using long thin needles that are inserted into the prostate through the skin between the scrotum and the rectum.
- The seed implant procedure takes under an hour.
- After the treatment the needles are taken out and you will wake up
- You will go to the recovery rooms for 1 to 2 hours or until you are ready to go home
- A Nurse will tell you about what you need to do at home before you leave the hospital

## What are the side effects of this treatment?

You will get prescriptions to help you empty your bladder more easily and for pain.

### You may have these side effects for a short period of time

- Bruising or discoloration of the scrotum and penis
- Discomfort or burning sensation when you pass urine
- Urinating more often
- A sense of urinary urgency
- Decrease in the force of the urinary stream
- Slower urinary stream with a risk of urine blockage which may mean you will need a catheter (< 5% risk)
- Blood in the urine or semen

### Other symptoms that you can have and that you may need medication for are:

- Minor rectal discomfort
- Impotence (the inability to have an erection)
- Pain or discomfort on ejaculation
- The amount of semen may be less over time and it may become more 'sticky'

## How do I take care of myself after treatment?

- Do not drive within 24 hours after the treatment. You will be drowsy and driving can be dangerous.
- Drink lots of fluid for the first 2 days. This will help dilute the urine and help with the burning or urgency sensations.
- Do not drink alcohol or drinks with caffeine for the first 2 days after your treatment. This will help make urinating more comfortable.
- Place an icepack on the area between the anus and the scrotum for 10 minutes at a time, 4-5 times a day, over the next two days. This will help with any discomfort.
- Take the medications the doctor prescribed after the treatment.
- Talk with your healthcare team to see if you can take anti-inflammatories such as ibuprofen to help with pain or discomfort.
- Do not do any heavy lifting or ride a bike for the first 2 days after the treatment.

## Step 3: Follow up Care

- One month after the implant you will come back for a CT scan and a follow up visit to see your Radiation Oncologist.
- The CT Scan is used to check that the seeds are well positioned within the prostate and to calculate the amount of radiation being delivered.
- On very rare occasions some more seeds may need to be inserted.
- You do not need to do anything special to get ready for this visit.

### How do I protect myself and my loved ones?

- Please do not have close or long periods of contact with young children during the first 2 months (or example: child sitting on your lap for more than 5 hours per week)
- Do not sleep with a woman who is pregnant
- Although it is rare, a seed may be lost when you urinate. If a seed is passed in this way it almost always takes place in the first week after the implant procedure.
- If you pass a seed, do not touch it. Flush the seed down the toilet. A seed may rarely be passed in the semen. For this reason, please use a condom during intercourse for the first 2 months.
- In the event of unexpected death or surgery in the pelvic area within 2 years of the implant please let the cancer centre know as the seeds may still be radioactive. This is particularly important if cremation was being considered.

## Contacts

### Have questions regarding your care?

Please call the Radiation Nursing Team  
416.480.5000 Ext. 81062

### Have questions about your appointments?

Please call the Brachytherapy Booking Coordinators  
416.480.5046

### Want more information?

- Check out the Patient Education and Research Learning (PEARL) Centre on the 1st floor of the Odette Cancer Centre  
Phone: 416.480.4534  
Email: [patienteducation@sunnybrook.ca](mailto:patienteducation@sunnybrook.ca)
- Visit the Odette Cancer Centre Prostate Group website at [sunnybrookprostate.ca](http://sunnybrookprostate.ca)
- Visit Prostate Cancer Canada at [prostatecancer.ca](http://prostatecancer.ca)





# Prostate Seed Brachytherapy

Sunnybrook Odette Cancer Centre