

# What to Expect When Getting: MRI-Guided Biopsy or High-Dose Rate (HDR) Brachytherapy to Treat Prostate Cancer

## For patients and families

Read this pamphlet to learn about:

- What MRI-guided prostate procedure you need
- What brachytherapy is
- How to prepare
- What happens during and after the procedure
- What side effects are possible
- How to care for yourself when you go home
- When to get medical help



## My Schedule:

Name: \_\_\_\_\_

MRN (Medical Record Number): \_\_\_\_\_

1. Date: \_\_\_\_\_ Check-in time: \_\_\_\_\_

Location: Reception Desk, In-patient Unit,  
18th Floor (side B), Princess Margaret Cancer Centre

2. Date: \_\_\_\_\_ Check-in time: \_\_\_\_\_

Location: Reception Desk, In-patient Unit,  
18th Floor (side B), Princess Margaret Cancer Centre

## What pre-admission tests do I need?

Since your procedure may be done under a general anesthetic, you will need to do some pre-admission tests at Princess Margaret Cancer Centre.

The tests usually include:

- blood tests
- ECG
- chest x-ray (only some patients will have this)

**Please bring a complete list of all the medications you are taking.**

The test results help your health care team decide if you need to see an anesthesiologist. You can expect to be at Princess Margaret Cancer Centre for 2 hours. We will contact you if you need an appointment with an anesthesiologist or any other tests.



Please tell your radiation oncologist if you are taking blood thinners (for example, Aspirin or Warfarin). We will give you specific instructions before your procedure.

## Your MRI-guided Prostate Procedure

(You will have **one** of these procedures):

### 1. **Biopsy of the prostate gland only**

We take small samples of your prostate and send them to a lab for testing.

### 2. **Brachytherapy (HDR treatment) of the prostate gland only**

We insert plastic catheters (tubes) in your prostate to help deliver the radiation to a specific area of the prostate.

### 3. **Biopsy of the prostate gland and Brachytherapy (HDR Treatment)**

A combination of 1 and 2. We take small samples of your prostate before inserting the plastic catheters.

## What happens during a Magnetic Resonance Imaging (MRI) procedure?

With the help of a probe that is placed in your rectum, an MRI machine uses a strong magnet to create detailed images of your pelvis and prostate. These images help the radiation oncologist:

- position the needles into your prostate
- take biopsies
- place the catheters in your prostate for treatment

We give you anesthesia medicine before the procedure so that you don't feel anything.

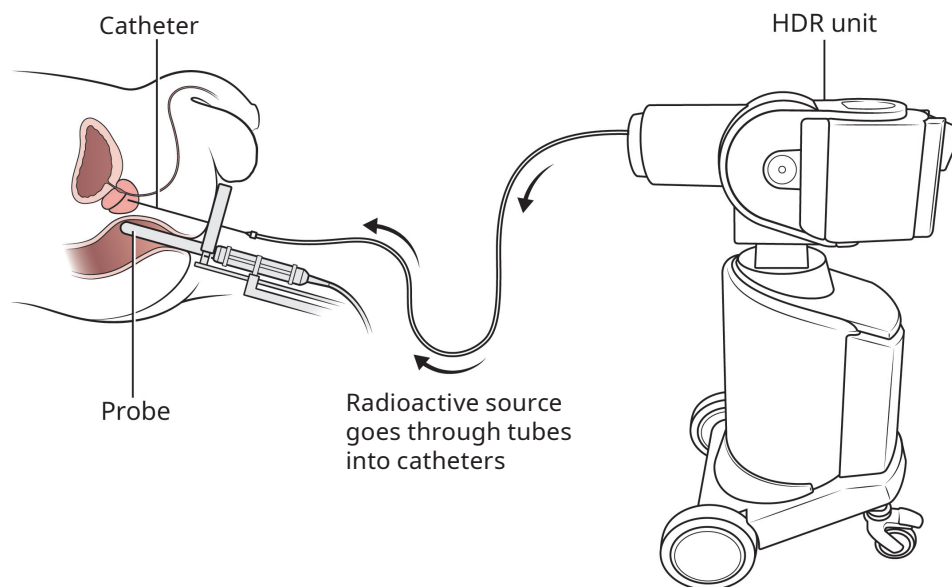
## What is High-Dose Rate (HDR) brachytherapy?

Brachytherapy (also called internal radiation) uses a radioactive source that is in a small capsule. The capsule is about the size of a grain of rice. The source is attached to a cable and stored in a treatment machine, called an HDR unit or “high-dose rate” unit.

The radiation oncologist uses the MRI images to help place plastic catheters (needle-like tubes) in your prostate so that the radiation can be delivered to a specific area.

The catheters in your prostate are attached to the treatment unit by connector tubes. The connector tubes allow the radiation source to travel into each catheter and deliver the radiation treatment.

This picture shows the HDR unit and radioactive source travelling through tubes to the catheters in the prostate



## How do I prepare for the procedure?

### Buy these items from a pharmacy anytime before the procedure:

- Antibiotic prescription for Ciprofloxacin (Cipro)
- Rectal Fleet enema (over-the-counter)

### Do this the night before your procedure:

Date: \_\_\_\_\_

1. Take the first dose of antibiotic called Ciprofloxacin (Cipro) that your doctor prescribed.
- 2. Do not eat or drink anything after midnight the night before your procedure.**

### Do this the day of your procedure:

Date and check-in time: \_\_\_\_\_

<b>Do NOT eat or drink anything until after your procedure is over</b>
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- Take the second dose of antibiotics the morning of the procedure. You may take it with a small sip of water, if needed.
- Before you leave home in the morning, use a rectal fleet enema. Follow the instructions on the package.
- Bring the following with you to the hospital:
  - the medicines you take regularly
  - your health card (OHIP)
  - your C-PAP machine, if you have one
- Leave any valuables or jewelry at home.
- Go to the Reception Desk, In-patient Unit – 18th Floor (side B), Princess Margaret Cancer Centre to check in

## **What happens when I am admitted to the hospital?**

- You are given a hospital gown and asked to remove contact lenses, dentures, all clothing, jewelry and any metal objects.
- We help you prepare for your procedure and take you to the procedure room.

## **What happens in the procedure room?**

1. You lie down on the procedure table.
2. An intravenous (IV) line is put into a vein in your arm or the back of your hand.
3. You receive anesthesia medicine to help you relax and so you don't feel any pain during the procedure.
4. A tube may be placed in the back of your throat to deliver oxygen and general anesthetic gas.
5. If you are having treatment, a catheter may be inserted into your bladder through the urethra to collect your urine.
6. A probe is placed in your rectum so your prostate can be seen in the MRI images.
7. The radiation oncologist uses the MRI images to help guide the biopsy needles and/or treatment catheters through the perineum (the area between the scrotum and rectum) reaching up to the prostate.
8. If you are having a biopsy procedure, the biopsy samples are collected. If you are having treatment, once the treatment catheters are in place, a personalized treatment plan is created for you and the radiation treatment is delivered.
9. After the procedure is finished, the urinary and treatment catheters, and the MRI probe are removed before the anesthesia medicine wears off.

**The procedure can take 1 to 3 hours to complete.**

## What happens when the procedure is finished?

- You are taken to the recovery room until the anesthesia fully wears off. You then return to your room on the 18th floor where your nurse monitors you for a few hours.
- You may eat and drink in the recovery room, starting with small sips of water.
- You are discharged from hospital when you are able to urinate (pee) and generally feel well enough to leave. Usually this is a few hours after the procedure is finished.
- **You must have someone to take you home. You cannot drive or use heavy machinery for 24 to 48 hours after having anesthesia.**

## Recovering After Your Procedure



**Important!**

- Keep taking your antibiotics as prescribed until they are finished. It's important to take them because they lower the risk of infection.

## How much activity is safe?

- For the first 2 or 3 days after your procedure, avoid doing physical activities such as heavy lifting, shovelling snow, mowing the lawn or extreme sports. You may see some blood in your urine after doing heavy activities.
- You can do your usual activities again a few days after your procedure.
- Avoid doing any activities that can cause damage to the perineum (the area between the scrotum and rectum) such as biking or horseback riding for 3 weeks after the procedure.

## What are the possible side effects?

Some of the side effects listed below are temporary. They can last from a few days to a few weeks. Other side effects can last up to 2 to 6 months.

### For patients who had biopsy only:

- Soreness and bruising of the perineum and scrotum for 1 to 2 weeks
- Blood or clots in your urine for the first 1 to 2 days.  
Note: It can be normal to see blood in your urine up to 4 weeks

### For patients getting HDR treatment, you may have the side effects above, and also some (or all) from the list below:

Changes affecting your bladder, such as:

- discomfort, pain or a burning feeling
- peeing more often
- the feeling that you can't pee freely
- a strong need to pee
- trouble emptying your bladder completely or your stream is weak



### **Go to the nearest emergency department if:**

- You have signs of infection such as fever (temperature higher than 38 °Celsius) and chills
- You cannot pee. If this happens, you may need to have a catheter inserted into your bladder temporarily
- Pain or swelling in your abdomen (belly)



## **What medicines can I take to manage my side effects?**

Your radiation oncologist may prescribe medicine to help with your symptoms after the procedure.

- **tamsulosin (Flomax)** – Take 1 pill at bedtime. This may help you pee more easily.
- **acetaminophen (Tylenol)** can be taken for pain, if needed.

## **When can I have sex again?**

You can have sex again whenever you feel ready.

It is normal for your first few ejaculations to be uncomfortable. The semen may be dark brown, black or red. This happens because of the needles or catheters that were placed in the prostate.

## **What can I eat and drink after my procedure?**

- Eat nutritious foods from all the food groups to help you heal and recover. See Canada's Food Guide (<https://food-guide.canada.ca/en>) for more information.
- Drink 8 to 10 cups of liquids, such as water, every day to help relieve some of the side effects you have, like constipation.
- Avoid acidic foods and liquids that can irritate the bladder. They can make you pee often, feel discomfort when you urinate and have a slower urinary stream.

**Below is a list of foods and drinks that are acidic and may irritate the bladder.** A dietitian can also give you advice about what foods to eat. Your oncology nurse can schedule an appointment for you and your family with a dietitian.

<b>Drinks to avoid</b>	<b>Foods to avoid</b>
<ul style="list-style-type: none"><li>• alcoholic drinks</li><li>• caffeinated drinks such as tea and coffee</li><li>• carbonated drinks such as cola</li><li>• citrus fruit juices such as orange juice</li></ul>	<ul style="list-style-type: none"><li>• chilies and spicy food</li><li>• citrus fruits such as oranges and lemons</li><li>• pineapples, strawberries, plums and bananas</li><li>• chocolates</li><li>• pickled foods</li><li>• mayonnaise and sour cream</li><li>• aged cheese such as cheddar</li><li>• onions and tomatoes</li></ul>

### **Will I be radioactive?**

You are not radioactive at any time. There will not be any radiation in or coming from your body when the treatment is finished. It is safe to be around other people, including children and people who are pregnant.

## Summary of preparation instructions

### Buy before each procedure

- Antibiotic Cipro
- Rectal Fleet enema

### 1 day before each procedure

- Antibiotic Cipro at night
- Nothing to eat or drink after midnight

### Morning of each procedure

- Nothing to eat or drink before procedure
- Antibiotic Cipro
- Enema before coming to hospital
- Bring your medicines
- Bring your health card (OHIP)
- Bring your C-PAP machine

## Who do I call if I have questions?

My radiation oncologist: \_\_\_\_\_

Phone: 416 946 2000 (ask for your oncologist's office)

### For questions about your treatment:

Brachytherapy treatment staff: 416 946 4642

### For questions about your schedule:

Brachytherapy booking coordinator: 416 946 4501 ext. 4889

### For after treatment and side effects:

GU resource nurse: 416 946 2233 ext. 2



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