

Radiation Therapy for Prostate Cancer: High Dose-Rate (HDR) Brachytherapy Procedure

You will receive high dose-rate (HDR) brachytherapy procedure to treat your prostate cancer. During this procedure, a radioactive source (Iridium) is put in your prostate for several minutes and then removed. This handout offers information to help you prepare for this procedure. It is important you and your family member/partner-in-care read this handout. For more information, watch the “High Dose Brachytherapy and You” video available on Lakeridge Health website at lh.ca.

After this procedure, it is safe for you to be around other people (including children) and pets. You are not radioactive.

Your Appointments

A radiation therapy receptionist will call with your appointment dates and times. Add these appointments to the table below. If you have any questions or concerns, call the radiation therapy receptionist at 905-576-8711, extension 33856 between the hours of 8am and 6pm (Monday to Friday). After these hours, you may leave a voicemail message. Your call will be returned on the next business day. The cancer centre is closed on weekends and holidays.

Education

You will be in the cancer centre for about 2 hours for these appointments.

Appointment	Date/time	Location	Instructions
Blood work		Main level, cancer centre	After your bloodwork is taken, go to the B1 level of the cancer centre (lower level). Check in at the reception desk.
Teaching – Brachy Electrocardiogram (EKG) – this test checks for problems with the electrical activity of your heart.		B1 level, cancer centre	You will meet with a nurse for this appointment. You will be given information about this procedure and how to prepare for it. The nurse will review your medications with you at this appointment. You may also meet with the oncologist.

Telephone call

An anesthesiologist may call you 1 to 2 weeks before your procedure. Not everyone needs a call from the anesthesiologist. An anesthesiologist is a doctor with special training in giving medication(s) to put you to sleep before a surgery or procedure.

HDR brachytherapy procedure

A nurse will call to review what you need to do to prepare for your HDR brachytherapy procedure. You will receive this call 1 to 2 days before your procedure.

You will be in the cancer centre around 6 to 8 hours for this appointment.

Appointment	Date/Time	Location	Instructions
Radiation Treatment (Brachy)		B1 level, cancer centre	Arrive <u>1 hour before</u> this appointment time. Check in at a computer on the B1 level.

Some things to think about when you come for your appointments:

- Do you understand all of the information given to you?
- Do you have any questions?
- Do you have any symptoms or side effects, or changes in the treatment area?
- Do you need any prescription renewals before your next appointment with your radiation oncologist?

How to prepare for your HDR brachytherapy procedure

If you take a **blood thinning medication**, follow the instructions below:

- If you take Aspirin: stop taking it 1 week before your HDR brachytherapy procedure.
- If you take Warfarin or Eliquis: stop taking it 3 days before your HDR brachytherapy procedure.
- Restart your blood thinning medication the day after your HDR brachytherapy procedure as long as you do not have any bleeding. If you have bleeding, call your primary nurse at the cancer centre from Monday to Friday, 8:30 am to 4 pm, (except on holidays). Use the phone number your primary nurse gave you.

1 week before your HDR brachytherapy procedure

- Buy 2 Fleet Enema kits from your pharmacy.
- Ask someone to drive you to and from the cancer centre on the day of your procedure. You need to have an adult stay with you for 24 hours after your procedure. This is because you will be given an anesthetic to put you to sleep for your procedure.

48 hours before your HDR brachytherapy procedure

Follow the instructions on “how to reduce gas in your digestive system” on page 6 of this handout.

The night before your HDR brachytherapy procedure

- You need to give yourself 1 Fleet Enema before you go to bed. See information below on how to give yourself a Fleet Enema.
- Do not eat or drink any food or fluids after midnight.
- Remove all body piercings (tongue rings, belly rings or studs, etc.).

How to give yourself a Fleet Enema

1. Lie on your left side. Put your right leg over your left leg.
2. Remove the protective shield from the enema tip before inserting it.
3. Gently insert the enema tip into your rectum with a slight side-to-side movement.
4. Do not force the enema tip into your rectum. This can cause you injury.
5. Squeeze the bottle until most of the liquid is gone. The bottle may not be empty.
6. Remove the tip from your rectum.
7. Hold this position until your urge to have a bowel movement is strong. This will take about 2 to 5 minutes.
8. Wash your hands when you are done.

The morning of your HDR brachytherapy procedure

- Do not eat or drink any food or fluids. The nurse will tell you if it is okay to have small sips of water to take some of your medications.
- Give yourself a Fleet Enema 2 hours before you leave home for this procedure appointment.
- Wear loose, comfortable clothing to your procedure appointment.

What to bring to this appointment

- All your medications (except vitamins).
- Your Ontario Health Card.
- Glasses (or contact lenses), hearing aids, dentures and their containers. We need you to remove all of these things for the procedure.
- The contact information for the person who is driving you home.
- If you are diabetic, bring your glucometer and the medications you take for your diabetes.
- If you have sleep apnea, bring your CPAP machine.

What happens on the day of your HDR brachytherapy procedure

Come to the cancer centre 1 hour before your appointment time. The HDR brachytherapy procedure is done in the radiation therapy department. Take the elevators down to the B1 level (lower level of the cancer centre). Check in at the computer and take a seat in the waiting room until you are called for.

You will be given an anesthetic (a medication to put you to sleep) before you have the HDR brachytherapy procedure. The radiation oncologist will put a catheter into your bladder. An ultrasound probe is put into your rectum to see your prostate. Ultrasound pictures show the radiation oncologist where to put 14 to 18 needle catheters into your prostate. Gold seed markers are inserted into your prostate at the same time. The markers help with the right placement of your external beam radiation treatments. Radiation treatment is given through the needle catheters. The needle catheters are taken out when your treatments are finished. This procedure will take about 3 hours. This does not include the time to get ready for the procedure or the time for you to recover. You will stay in the recovery room after the procedure. A nurse will take care of you during this time. You need to empty your bladder and be steady on your feet before you can leave the cancer centre.

After your HDR brachytherapy procedure

You may have:

- Mild pain and/or mild swelling where the needles were put in (between the anus and scrotum).
- Bruising and/or some colour changes in your genital area.
- An upset stomach, dizziness, or a headache for up to 24 hours.
- Discomfort ejaculating for a short period of time after the procedure.
- Blood in your ejaculate (semen). The blood you see may be red or brown in colour. This may last for up to 6 weeks.
- Less ejaculate (semen) than you had before your procedure.
- A small amount of blood from your penis or in your urine for the first 24 to 72 hours.
- Numbness in your penis. This is usually temporary but can last up to 2 months.

You may have urinary changes that may not start until 2 weeks after the procedure. They can last up to 4 months. These changes will go away. You may have:

- Burning, pain, or discomfort when urinating
- Feeling a strong need to urinate
- Some difficulty emptying your bladder
- Some difficulty starting to urinate
- More narrow stream of urine

What you can do after your HDR brachytherapy procedure

- Take acetaminophen (also called Tylenol) for mild pain or discomfort. Your radiation oncologist may give you a prescription for a stronger pain medication.
- Wrap an ice pack or bag of frozen peas in a towel and put on your genital area to lessen any discomfort or pain you have (use up to 20 minutes at a time for up to 6 times a day).
- You may continue with sexual intercourse.

What you cannot do after your HDR brachytherapy procedure

- Do not lift any heavy object that causes you to strain for 1 week after your procedure.
- Do not do any activity that may cause strain or pressure on your perineum (area between your scrotum and anus) for 1 week after your procedure. An example of this kind of activity is bike riding.
- Do not drive for 24 hours after your procedure.
- Do not make any legal or financial decisions for 48 hours after your procedure.
- Do not drink alcohol, take cannabis or any other 'substance' not prescribed to you for 48 hours after your procedure.

The medications you need to take

There are medications you need to take when having an HDR brachytherapy procedure. Your radiation oncologist and nurse will talk to you about these medications. The pharmacist will also review these medications with you.

The following medications will be prescribed for you:

Flomax (Tamsulosin) or Xatral (Alfuzosin)

What this medication is for	To reduce the frequency and urgent feeling of having to urinate.
When to start taking this medication	1 week before your HDR brachytherapy procedure.
When to stop taking this medication	Your radiation oncologist will tell you when to stop this medication.
How to take this medication	Take this medication as prescribed for you. *Take it at the same time every day. Your radiation oncologist <u>may</u> ask you to increase this medication to twice per day if you are not dizzy when standing.
The possible side effects of this medication	Dizziness if you stand up too quickly.

An antibiotic

What this medication is for	To reduce your risk of infection.
When to start taking this medication	Take it as prescribed for you.

An anti-inflammatory

What this medication is for	• To reduce swelling in and around your prostate. • Reduces your risk of a urinary obstruction.
When to start taking this medication	Take it as prescribed for you.

A stomach protector

What this medication is for	• To reduce the production of stomach acid secretions. • Reduce the effects of the anti-inflammatory medication on your stomach.
When to start taking this medication	Take it as prescribed for you.

Call your radiation oncologist or nurse if any side effects get worse or the medication prescribed for you is not working. Your radiation oncologist may prescribe medications not listed here. Always follow the directions on the medication bottle given to you by the pharmacy.

How to reduce gas in your digestive system

You need to reduce gas in your digestive system. The information below will tell you how to do this. It is important to include fiber in your diet.

To help reduce gas:

- Eat slowly.
- Have loose fitting dentures re-fitted.
- Eat less raw vegetables (foods that need lots of chewing can cause you to have more gas).
- Do not eat or drink these foods/fluids: dried peas, broccoli, cauliflower, melon, chives, soft drinks, alcohol, beans, brussel sprouts, turnip, cucumber, pickles, beer, fried foods, peppers, cabbage, eggs, onions, or sauerkraut.
- Do not talk while you are eating or eat when you are upset.
- Do not drink with a straw or drink directly from a bottle.
- Do not smoke or chew tobacco.
- Do not chew gum or suck on candies.
- Do not drink carbonated (fizzy) drinks.
- Do not drink fluids or eat foods with sorbitol and fructose (found in manufactured sugar-free foods).
- Do not drink hot beverages (let your drinks cool to lukewarm).

If you have too much gas (such as bloating, abdominal pain):

- Buy an over the counter medication to help to reduce it. Ask your pharmacist about this.
- Ask a member of your healthcare team to refer you to a registered dietitian.

Next steps in your care and treatment

If you are having external beam radiation therapy, the nurse will give you information about your next appointment before you leave the cancer centre. You will be given a handout called “Radiation Therapy for Prostate Cancer: How to Prepare for your MRI and CT Simulation Appointments”. You can also find this handout on the Lakeridge Health website at lh.ca.

Go to the Emergency Department at the hospital closest to you if you:

- Are not able to urinate.
- Have a lot of bleeding or any other symptom that is severe.
- Have a fever above 38.3° C/100.9°F at any time or above 38.0° C/100.4°F for more than an hour.

If you have a problem or concern about a symptom or side effect from your cancer treatment:

1. Call your primary nurse at the cancer centre from Monday to Friday, 8:30 am to 4 pm, (except on holidays). Use the phone number your primary nurse gave you.
2. Contact CareChart Digital Health from Monday to Friday, 5 pm to 8:30 am and anytime on weekends and holidays for symptom management support.

Talk to a nurse using one of these options:

- Call the after-hours telephone line at 1-877-681-3057.
- Request a video call by going to carechart.ca
- Use the CareChart Digital Health App. This App is available to download for iOS or Android devices.

Call 911 or go to the Emergency Department at the hospital closest to you for a medical emergency. Talk to any member of your healthcare team if you have questions or do not understand any of the information in this handout.

You can find more information about brachytherapy treatment in the Canadian Cancer Society booklet “Radiation Therapy: A Guide for People with Cancer.” Go to the Canadian Cancer Society’s website at cancer.ca and search in publications to find this booklet.

Last reviewed: September 2025