

# Treating prostate cancer with high-dose-rate brachytherapy



You'll soon be starting high-dose-rate brachytherapy to treat your prostate cancer. Here's what you need to know about the treatment and what to expect.

## What is brachytherapy?

Brachytherapy is a form of radiation therapy. It consists of sending a radioactive source into your prostate. The radiation emitted causes damage to the cancer cells. During your treatment, a radioactive source emits very strong radiation for about 20 minutes. This is called high-dose-rate, or HDR brachytherapy.

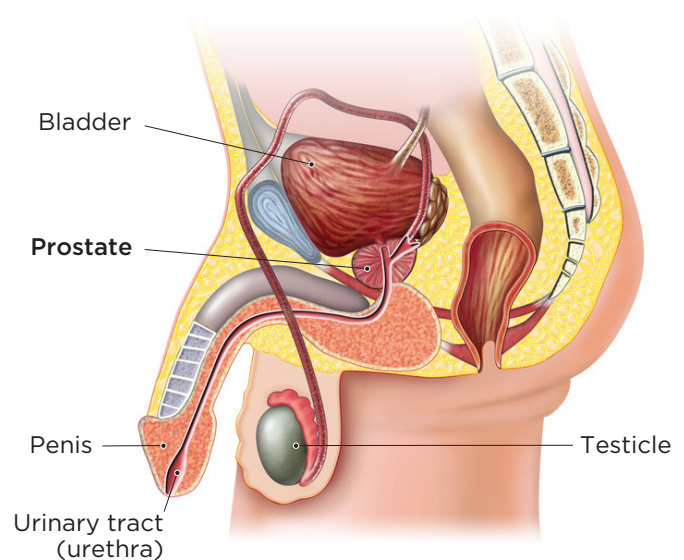
There is also another form of brachytherapy, called low-dose-rate, in which the radiation dose is weaker, but permanent.

## Why would I receive one treatment rather than the other?

There are several ways to treat prostate cancer. Your doctor will suggest different treatments depending on the extent of your cancer, among other factors. Your doctor will also discuss the side effects with you. Together, you will choose the most appropriate treatment, based on the advantages and disadvantages that matter most to you.

Remember that your body will **NOT** be radioactive either during or after your treatment.

Prostate and nearby organs



## How long will the treatment take?

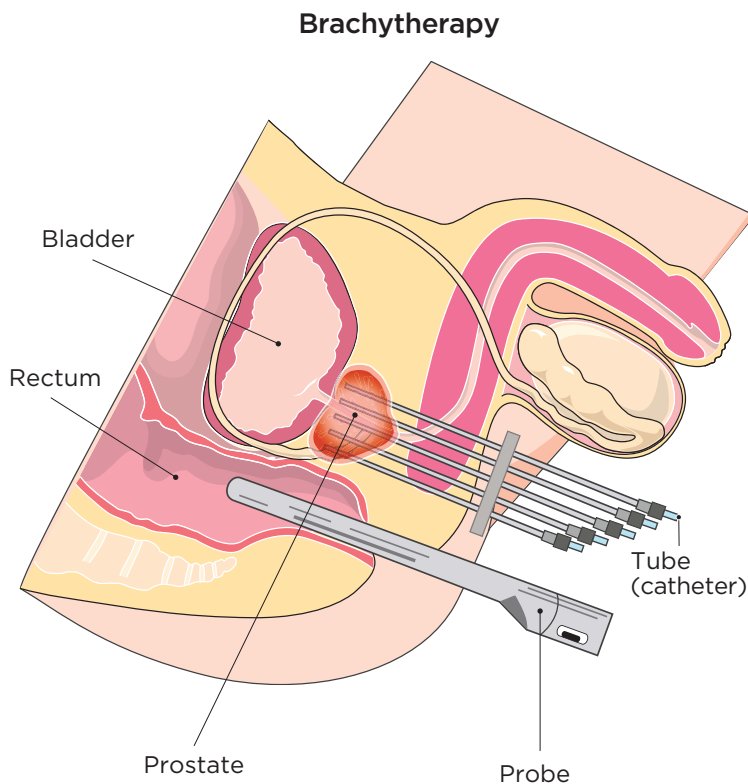
Plan on a full day.

Normally, you'll leave the hospital by the end of the afternoon. You'll need to have someone with you, as you won't be able to drive.

## How is radiation therapy administered to the prostate?

With HDR brachytherapy, radiation is delivered directly to the prostate through small tubes inserted between the scrotum and the anus (the perineum).

This is different from external radiation therapy, which uses a device outside the body to send radiation to the tumour. In that case, the rays need to go through the skin and sometimes travel through healthy organs. Brachytherapy is less likely to affect adjacent organs.



The small tubes deliver radiation to the prostate.

## How should I prepare BEFORE the treatment?

### Several weeks before the treatment

You will have an appointment at the CHUM for a health assessment and, if necessary, at the pre-admission clinic.

One week ahead, start taking the medication (Flomax or Tamsulosine) your doctor prescribed to help you urinate.

Your doctor may also ask you to stop certain medications.

### The night before the treatment

At home, in the evening, you will need to give yourself a Fleet rectal enema, as explained to you.



**You must not eat after midnight the night before your treatment. You can drink a clear liquid (e.g. apple juice, cranberry juice, iced tea) between midnight and one hour before your appointment, 500 ml (2 cups) maximum.**

### The day of the treatment, bring to the hospital

- All the medications you usually take, in their original containers.
- Comfortable underwear, not too tight. You'll be more comfortable for your return home.

## What happens during the treatment?

- > Important! Tell your doctor if you have any have a particular health condition (e.g. pacemaker, insulin pump, hearing aid). To avoid breakage, some devices must be removed for preparatory exams or treatments.

- > This procedure is performed while you're "asleep" (under general anesthesia).
- > An antibiotic will be given to you in the operating room. This reduces the risk of infection.
- > A urinary catheter will be installed. This is a tube that goes into the penis so you can urinate. It is removed at the end of the treatment.
- > The doctor will introduce plastic tubes (catheters) into the skin, between the scrotum and the anus.
- > The medical team will make sure these tubes are correctly positioned, using a rectal probe (see diagram on page 2).
- > The tubes will be attached to a treatment device that will send a radioactive source (Iridium 192) through the tubes. The treatment will take 20 to 30 minutes.
- > Then the tubes will be removed.
- > A recovery period is then needed.

### Could I feel some discomfort after the treatment?

- > A bruise may appear on your testicles or penis right after the treatment or a few days later. This is normal and generally not very painful.
- > You may have blood in your urine a few hours or a few days after treatment. Don't worry; this happens sometimes. You'll need to drink 1 to 2 liters of water a day to prevent the formation of blood clots in the bladder. Do this until your urine is clear again. If it continues, contact your clinical care provider.
- > For the first month after your treatment, you may feel the need to urinate more often. You may also feel a slight burning while urinating. If this happens to you, tell your doctor. There is medication that can help you.



- > Having a bowel movement may hurt a little if your anus is irritated. Some people also have bloody stools or diarrhea. These effects, which are rarer, disappear about 5 weeks after the treatment. They may come back from time to time, even months later. Tell your doctor if these side effects continue.



### IMPORTANT

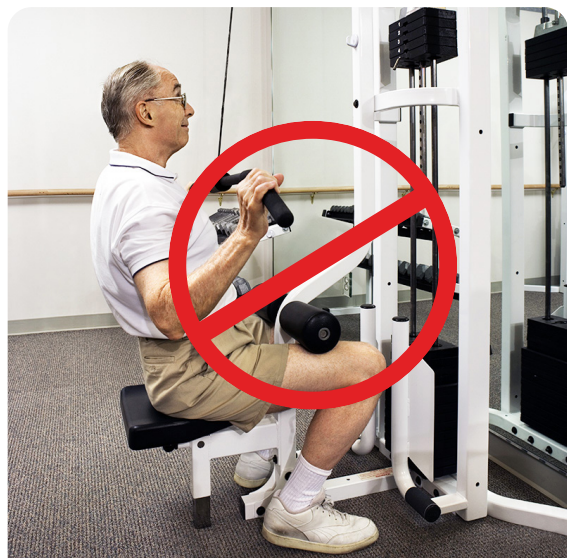
**If you're unable to urinate**, call your clinical contact in the radiation oncology department. If it's after hours, call **9-1-1** for emergency assistance or go to the emergency room at the hospital.

### Could there be long-term consequences?

The major risk related to this treatment is impotence. Three or four of every 10 men who have the procedure are unable to have an erection 5 years later. There is also a slight risk of inflammation of the bladder and the rectum. Talk to your doctor.

### What precautions should I take AFTER the treatment?

Once you're back home, avoid anything that involves strenuous effort for a week or two. No cycling, no gym workouts, no moving boxes! You must not drink alcohol for 24 hours after the treatment.



## When will I go back to see my doctor?

This can vary from patient to patient. Normally, brachytherapy is performed before external radiation therapy treatments. In that case, you'll see your doctor a few days after the brachytherapy procedure. At that appointment, the doctor will also plan the external radiation therapy treatments that are usually offered. You will have imaging tests the same day. The staff will tell you what preparations to make.

Once all your radiation therapy treatments are completed, you'll see your doctor every 4 months and then every 6 months for at least 5 years.

## Who should I notify if I can't come to my appointment?

If you must cancel an appointment, please call the radiation oncology department as early as possible:

Tel.: .....

## Who should I ask for help or answers to my questions?

If you have questions or concerns:

- on weekdays, call the radiation oncology department and ask to speak to your radiation oncologist
- in the evening or on weekends, call the hospital and ask to speak to the radiation oncologist on call



## USEFUL RESOURCES

Ask for a copy of the CHUM information sheet on support services for prostate cancer patients and their families.

Other health sheets published by the CHUM are available. Ask for those that might fit your situation.



You can also find them on our website [chumontreal.qc.ca/fiches-sante](http://chumontreal.qc.ca/fiches-sante)



## NOTEPAD



### Questions




### Resource people and contacts


*The content of this document in no way replaces the recommendations and diagnoses made, or the treatment suggested by your health professional.*

To find out more about the Centre hospitalier de l'Université de Montréal [chumontreal.qc.ca](http://chumontreal.qc.ca)

