



RADIATION THERAPY INFORMATION GUIDE

Interstitial brachytherapy
for gynecologic cancers

Name of my radiation oncologist: _____

Department phone no.: **418 691-5264**

Consult this document on: www.chudequebec.ca/Curietherapie_gynecologique

Introduction

Your health condition requires you to have brachytherapy.

This pamphlet contains information about:

- what brachytherapy is;
- the steps involved in planning your treatments;
- what will happen during your treatments;
- the possible side effects;
- recommendations during and after the treatments.

The centre

The radiation oncology centre at CHU de Québec-Université Laval is a supraregional centre with a mission to:

- provide quality treatments;
- promote research;
- participate in student training;
- evaluate new technologies.

You may be asked to participate in research projects during your treatments. You may also be seen by students during your appointments. Students are always closely supervised by a health professional in their field.

Your team

- The **radiation oncologist** (your doctor) will meet with you for a consultation. After reviewing your file, speaking to you and examining you, the doctor will decide whether you are a candidate for brachytherapy. He will oversee every step of your treatment.
- The **nurse** will be involved in assessing your physical and mental condition and will manage your symptoms during your treatments.
- Radiation therapists will be there to support you during your brachytherapy treatments (from preparation to administration).
- **Medical physicists** will calculate your brachytherapy dose.
- Depending on your condition, you may need to see other team members before or after your brachytherapy treatments, including a **nutritionist, social worker, psychologist or pivot nurse**.

What is high-dose-rate brachytherapy?

High-dose-rate brachytherapy (HDR-BT) is a procedure that involves placing a high dose of radiation directly into the tumour to preserve as much of the surrounding normal tissue as possible. The objective is to maximise the control of the disease with minimal side effects.



To do this, catheters are placed directly into the areas invaded by the tumour. The catheters are then connected to the treatment device.

The device contains a radioactive source of iridium-192. The radioactive source moves to different positions inside the applicator. At the end of the treatment, the source returns to its sealed capsule. This device lets us administer a very high dose of radiation in a short period of time.

The device does not release any radioactivity. You will not become radioactive after your treatments, and there is no danger to anyone around you.

Brachytherapy and other treatments

Most of the time, brachytherapy is used in combination with surgery, external radiation therapy and/or chemotherapy.

The treatment choice is based on accepted practices and a joint decision between you and your doctors.

First visit



Review of your medical file

You will not have any treatment at your first radiation oncology visit. Your radiation oncologist will review your medical file and examine you, after which he will prescribe the appropriate treatment.

At this visit, it's important to tell your doctor if you have an implantable electronic or other medical device (e.g., pacemaker, insulin pump, hearing aid). To avoid breakage, manufacturers recommend removing some of these devices during pre-treatment examinations or treatments.

Treatments

The number of treatments depends on the assessment of your health condition and your file. **Most often, you will have 4 treatments spread out over 2 weeks.**

It's important to remember that your treatments are personalized and tailored to your individual needs.



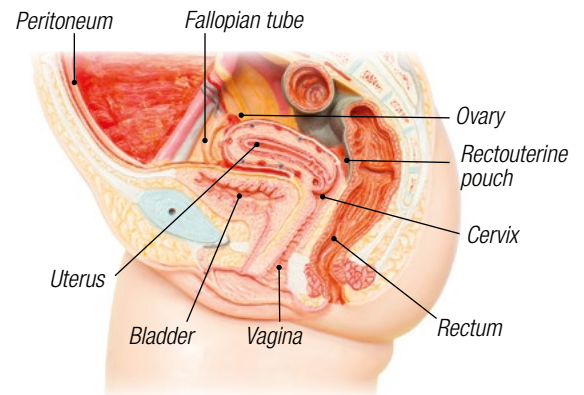
Preparatory steps for treatment

- A few days before your treatments begin, the pre-op team will call you to schedule the tests and give you the instructions to follow before the procedure. You may need to see other specialists before your treatments.
- A brachytherapy nurse will contact you to review the documents received during the consultation and the instructions to be followed before the brachytherapy procedure.
- A magnetic resonance imaging (MRI) scan will be performed a few days before treatment in order to plan the brachytherapy treatments.

On the day the catheters are inserted

* Plan to spend the entire day at the hospital

- You will therefore leave the hospital at the end of the day or in the evening, depending on the time of your procedure. You must be accompanied when you return home.
- You will need to do two enemas (bowel preparation) at home, 90 minutes before your appointment.
- A urinary catheter will be inserted during the procedure. It will be removed when you wake up before you go home.
- The catheters will be inserted under anesthesia using imaging guidance..
- Once the catheters have been inserted, you will have a CT scan and MRI to check the position of the catheters and calculate the treatment dose.
- The radiation will then be delivered through the catheters. This step usually takes 15 to 30 minutes.
- After the catheters are removed, you will be kept for observation until you're ready to leave the hospital.
- The same steps are repeated for each treatment.



There will be times during the day when you will have to wait, so you should consider bringing a book, music, etc.



Side effects

Brachytherapy is a treatment that can affect normal tissue and cause side effects.

These side effects don't always happen. Their seriousness depends on the person, the type of disease, the dose of radiation, and the area treated.

The side effects of brachytherapy can also be affected by external radiation therapy. However, the effects of this treatment will not be discussed here.

Risks during the procedure

- Fatigue
- Discomfort
- Increased vaginal discharge
- Vaginal bleeding
- Bleeding
- Infection
- Perforation of the organs near the treatment site (rectum, bowel, bladder, uterus)
- Formation of blood clots in the lungs (pulmonary embolism)
- Formation of blood clots in the legs (phlebitis)

Here is a list of possible side effects and when they tend to appear:

In the days/weeks following brachytherapy

Most common side effects:

- Burning when urinating
- Diarrhea or loose stools
- Vaginal discharge

In the months or years following brachytherapy

Most common side effects:

- Narrowing and shortening of the vagina
- Vaginal dryness
- Pain during intercourse
- More frequent need to urinate

Less common side effects:

- Bowel obstruction
- Blood in the stool or urine
- Rectal ulcer
- Vaginal ulcer

Rare but serious side effects:

- Opening (fistula) between the vagina and the rectum

Very rare side effects:

- Decreased sensitivity and/or strength in the legs
- Cancer caused by radiation therapy (the benefits of treatment outweigh this very low risk)



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Rarely, other side effects may occur that we cannot predict.

*However, if you develop side effects that are causing discomfort, **feel free to contact us.***



Medical follow-up

Generally, your radiation oncologist will see you again 4-6 weeks after your brachytherapy.

Recommendations following treatments:



- You must not be alone for 24 hours after your treatment.
- The sedation may cause difficulty concentrating. It's recommended you avoid driving and operating machinery for 24 hours after the treatment.
- Once you're back at home, you can gradually resume your normal activities (eating when you're hungry and taking your usual medications), unless your doctor says otherwise.
- Avoid alcohol for 48 hours after your treatment.
- You can gradually resume physical activities at your own pace.
- You can take a shower the day after the procedure. Avoid taking baths and swimming for 72 hours.
- If you feel pain, you can take Tylenol (or another pain reliever, as prescribed by your radiation oncologist).
- Avoid sexual intercourse for four weeks after the brachytherapy. You should be able to tolerate the third exercise in the vaginal stenosis guide issued by the women's health clinic (WHC).
- A few weeks after your treatment, start using the vaginal dilator as instructed by your radiation oncologist or the WHC nurse.
- Tell the radiation oncologist if you develop:
 - a fever;
 - persistent irritation;
 - foul-smelling discharge;
 - persistent discharge or bleeding;
 - severe pain in the treated area;
 - severe abdominal pain;
 - persistent pain when urinating.
- If you develop a fever in the week after your treatment, call us or go directly to the Emergency department.



If you have the potential to get pregnant, use an effective method of birth control during your treatments.

Smoking



- You should abstain from smoking during your treatments and quit permanently afterwards. Support is available at www.tobaccofreequebec.ca/iqutnow or by calling 1-866 JARRETE (1-866-527-7383). You can also talk to your doctor or pharmacist about other resources to help you quit.

Notes

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Radio-oncologie

This guide contains recommendations consistent with the scientific information available at the time of publication in september 2023. However, these recommendations are no replacement for medical advice. If you have any questions, please speak to your health provider.

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