

Information for
patients & families

HDR Brachytherapy for Gynecological Cancer

Radioactive Iridium-192 Temporary Implant



Treatment – Radiation

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Radiation treatment

Radiation is a treatment for cancer that destroys cancer cells by stopping them from growing and dividing.

The types of radiation treatment are:

- **External radiation** — the radiation is produced by a machine and is aimed at the tumour, so it comes from outside of the body.
- **Internal radiation** — the radioactive source is placed inside the body, either inside the tumour, or close to it. This is also called brachytherapy.

HDR Brachytherapy

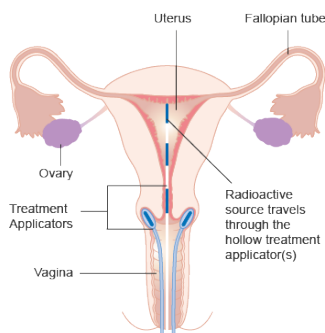
HDR brachytherapy is a type of **internal radiation** treatment where a radiation source is temporarily placed inside the patient using a treatment applicator. HDR stands for **High Dose Rate**. Different kinds of treatment applicators can be used to treat different types of gynecological cancers.

What is intracavitary brachytherapy?

It is a way of delivering a high dose of radiation inside the body by placing a treatment applicator through an opening in the body.

For example, the radiation oncologist can place a hollow treatment applicator inside the uterus by inserting it through the vagina, and then through the opening of the cervix. This is done in the operating room.

During treatment, a radioactive source goes into the treatment applicator and delivers the radiation treatment to the area the radiation oncologist wants to treat.

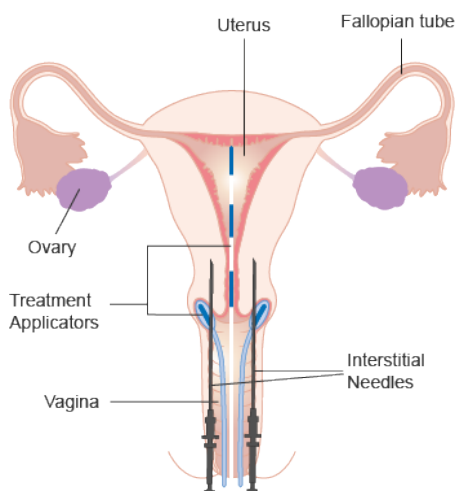


What is interstitial brachytherapy?

Interstitial brachytherapy delivers radiation inside the tumour or body tissues by placing small hollow needles into the body.

Interstitial brachytherapy is often given at the same time as intracavitary brachytherapy.

Your doctor will give you more information if you are getting this treatment.



How many treatments will I get?

Your radiation oncologist will tell you how many treatments you will need. Some people have treatment as an 'outpatient' once a week for several weeks. Other people have treatment as an 'inpatient' — they are admitted to the hospital and get their treatment over 2 days.

Your radiation oncologist will talk to you about which way you will get your treatment.

- ☐ **Outpatient** — This treatment is given a few times, often 1 week (7 days) apart.

At each treatment appointment, you will need to have the treatment applicator inserted. Appointments can take several hours from start to finish.

- ☐ **Inpatient** — you stay in the hospital for 2 days.

Inbetween your treatment sessions you can have visitors. Normally, you only need to have the treatment applicator inserted once.

What do I need before I have brachytherapy?

Pre-admission Clinic

- You may need to go to the pre-admission clinic or they may call you, to assess your general health and ability to have anesthetic. Your doctor may ask that you have tests such as blood work, x-ray or EKG (checks the heart) to help make this assessment.
- The pre-admission clinic will tell you if you need to stop certain medications temporarily before or after your treatment.

Tests

- Imaging such as a CT scan, an MRI or both will be taken of your pelvis to help the radiation oncologist prepare for your treatment.

The day before your treatment

- Call the contact number you were given to confirm your check in time.

The night before your treatment

- Follow the eating and drinking instructions you were given
- Empty your bowels using a Fleet enema or Pico-salex

Ask your healthcare provider **which product you should use:**

☐ Fleet enema

or

☐ Pico-salex

Your Brachytherapy Team

- **Radiation Oncologist** – cancer doctor for radiation treatment who prescribes your treatment and helps you manage any side effects.
- **Medical Physicist** – specialist of medical physics who helps plan the treatment and ensures the quality of the implant.
- **Dosimetrist** – a radiation therapist specializing in the treatment planning for radiation.
- **Radiation Therapist** – delivers radiation treatments, and helps you before, during and after the implant.
- **Anesthesiologist** – a medical doctor who provides you with care during your implant and recovery. They may talk to you about the medications you take before and after the implant.
- **Nurse** – may help in the operating room (O.R. Nurse) and during your recovery (Day Surgery Nurse).

Preparing for the Implant

What can I do to help prepare for my procedure?

Write the instructions on a calendar or on your phone so you remember when you need to do them.

What should I bring to the hospital?

- ☐ Your healthcare card
- ☐ Government ID
- ☐ Someone to drive you home

What if I need a place to stay before the implant day?

There are several hotels and motels close by. In Calgary you can stay at the hospital hostel.

The Day of the Procedure

Checking-in for your treatment

Your healthcare team will review check-in instructions with you.

Before the treatment happens



You will need to put on a hospital gown. Your clothes and valuables will be put into:

- Your hospital room (for inpatient treatment)
- A locker (for outpatient treatment)



The anesthesiologist will decide if you will have a **general anesthetic** (be asleep), a **spinal anesthetic** (numbness from the waist down), or conscious sedation (you are awake but will not feel pain or remember the procedure).

- You will get an IV (intravenous line).
- After your anesthetic, you will have a catheter placed in your bladder.



The treatment applicator is put in place in the operating room.

- You will be monitored during the procedure.
- You may get IV antibiotics to help reduce your risk of infection.

Inserting your treatment applicator



Your radiation oncologist will work with the team to insert the treatment applicator inside of you. If needed, any interstitial needles will also be inserted.

Ultrasound can be used to guide the placement of the treatment applicator and interstitial needles.

You will need to lie as still as possible once your treatment applicator has been inserted to keep it from moving.

The treatment plan



Once the treatment applicator is in place, you will be taken to have a CT Simulation scan, an MRI Scan, or both. This imaging can take up to 2 hours, to do.

These scans:

- Check the placement of the applicator and interstitial needles (if used).
- Are used to create your treatment plan. It can take 2–3 hours to plan your treatment.

Will I have discomfort while I'm waiting?

While you wait for your treatment, you may have cramping or discomfort in the area of your pelvis. If this happens, tell your nurse. Your care team can give you medication to help make you more comfortable.

Your brachytherapy treatment

- You will be moved into the treatment room.
- A tube will connect the applicator to the treatment machine.
- To avoid radiation exposure to staff, everyone will leave the room during the treatment.
- Staff will monitor you using an intercom (voice), and video camera system.
- When the machine is turned “**on**”, the radioactive source will travel from the treatment machine through the tubing, and into the applicator.
- The applicator delivers the radioactive source to the treatment area.
- You will not feel anything when the radiation treatment is delivered.
- Each treatment will take between 15–40 minutes.
- You need to stay as still as possible during the treatment so that the treatment applicator stay in place.

Removing the radiation source

The radiation source has a thin wire attached to it, which is used to return the source to the treatment machine when the treatment is finished. You will not feel any discomfort as the source is moving through the applicator and tubes.

Removing the treatment applicator

When the treatment applicator is removed:

- You will feel pressure as gauze (packing) is applied to the area.
- You may get medication to help reduce bleeding.
- We will take you to the recovery area where you will stay until you can pee on your own without the catheter. This normally takes about 1 hour, but can vary from person to person.
- If you are having treatment once per week, you will be discharged from the hospital. You will need to have someone drive you home. If you are having treatment over 2 days, you will be taken to your hospital room.
- You may have some vaginal discharge, bleeding or spotting, which should stop after a few days. Wear a pad, but do **not use a tampon**.

Follow-up care

Your follow up care is very important. You will have a follow up appointment with your radiation oncologist 6–8 weeks after your treatment is complete. Your radiation oncologist will continue to see you.

Managing Your Side Effects

There are some common side effects after the treatment. You may:

- Need to pee urgently or more often
- Have more bowel movements (poops) than usual
- Feel tired or fatigued
- Have vaginal irritation and discharge
- Have some blood or burning when you pee

These symptoms may increase for 1–2 weeks after the treatment, but should begin to improve by the 3rd week.

What can I do to help after treatment?

- Keep the skin of your perineum area (bottom) as clean and dry as possible. Wipe gently after going to the bathroom. Use a mild unscented soap. It may be helpful not to wipe. Use a squeezable bottle to help rinse the area after going to the bathroom.
- If peeing is painful, pour warm water over the area before and while you pee to reduce the burning feeling.
- Follow any other recommendations or instructions given to you by your healthcare providers.
- Take all prescribed medications as directed.



Take a sitz bath

A sitz bath 2–3 times per day can help. A sitz bath is a warm, soothing soak for the area of the rectum. You can use your bathtub, a large basin, or a plastic sitz bath that fits over a toilet seat. You can buy these at a drug store.

How sitz baths can help:

- Cleans your skin
- Lowers your chance of infection
- Soothes your skin and makes it feel better
- Gets blood flowing to the area to speed up healing

Tips for your sitz bath:

- Use water that is a little warm
- Check the temperature of the water to make sure it is not too warm
- Soak your bottom for about 10–15 minutes each time
- Have as many sitz baths as you like to stay comfortable
- **Do not** add bath oils or anything to the water

Fatigue

You may feel tired (fatigued) as a result of treatment. This tiredness usually goes away in a few days to weeks. Light to moderate exercise can help.

Get more tips to help with fatigue:

- Read “How to Manage Cancer-Related Fatigue”
- Watch the video series:
<https://myhealth.alberta.ca/alberta/cancer-fatigue>

How to Manage
Cancer-Related Fatigue



Symptom Management



Vaginal Tightening

Over time, radiation treatment can cause the vagina to become narrow and shorter over time. Read the ‘Using a Dilator’ booklet for helpful tips and instructions.

Vaginal dilators help:

- Keep your tissues soft and able to stretch
- Prevent adhesions that can cause the walls of the vagina to stick together. This can make pelvic exams and sexual intercourse painful.
- Make sexual activity more comfortable
- Stretch your tissues for physical examinations

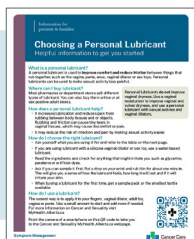


Wait 6–8 weeks to use your dilator after treatment, unless your radiation oncologist tells you otherwise.

Vaginal Irritation

Irritation to the lining of your vagina can cause discomfort with sex, and can take weeks to improve. Try using a water soluble lubricant or vaginal moisturizer for comfort. If there is no infection, and you feel up to it, you can start having sexual intercourse 4–6 weeks after the treatment.

Get more tips and check out the “Choosing a Personal Lubricant” handout.



Sexual Activity

Sexual function can vary after the treatment. It may take time before your sexual function returns to how it was before the implant. You may need medication. If you have any problems returning to your usual sexual practices, talk to your healthcare team.

- You can email your questions to: sexandcancer@ahs.ca
- Visit [MyHealth.Alberta](https://myhealth.alberta.ca) and search Cancer and Sexuality



Infection

Sometimes an infection can develop in the days after the treatment. You will get antibiotics in the operating room to help prevent infection.

Go to the nearest Emergency Room and tell staff you had brachytherapy treatment if you have:

- Heavy bleeding
- Pain in your abdomen (belly)
- Fever

38.0°C (100.4°F) to 38.2°C (100.8°F) for at least 1 hour

OR

38.3°C (100.9°F) or higher at any time



Living Your Best

Supportive Care

Cancer Care Alberta Psychosocial Oncology

Difficult emotions often happen during cancer and its treatments. Experts can offer counselling to patients and family members to help reduce emotional distress and explore coping skills. They help with things such as communication, stress, coping with treatment side effects, mood changes, quality of life, body image or loneliness.

- Support groups give those people living with cancer an opportunity to interact with others in similar situations. Some are led by healthcare professionals while others are led by community members.

For resources and Supports for People with Cancer, visit:

<http://bit.ly/ccagettinghelp>

Canadian Cancer Society — Peer Support Program

The Canadian Cancer Society's Cancer Connection program is a support network that offers peer-to-peer support to cancer patients and their caregivers. You can talk with caregivers or current and former patients with your same type of cancer. Call 1-800-263-6750 or visit www.cancerconnection.ca.

What if I need medical treatment to my pelvis after my brachytherapy implant?

If you need future medical treatment, especially abdominal surgery, the doctor may wish to have information about your brachytherapy implant.

- Call your radiation oncologist about any concerns related to your treatment.
- If needed, your radiation oncologist can discuss any concerns with you.

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The information is to be updated every 3 years, or as new clinical evidence emerges. If there are any concerns or updates with this information, please email cancerpatienteducation@ahs.ca.



For your next appointment

- Bring this booklet
- Arrive 15 minutes early
- Bring a list of your medications
- Bring a list of questions

For other Cancer Care Alberta resources,
visit cancercarealberta.ca



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