

Advanced Gynecological Brachytherapy

As part of your planned cancer treatment, you will be treated with external beam radiation and internal brachytherapy. This booklet is a guide for you and your family/care provider. It tells you what to expect during brachytherapy and how to be ready for this procedure.

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What is brachytherapy?

- Brachytherapy is a type of radiation treatment in which a radiation source is used to deliver a boost of radiation from an applicator that is placed inside the body.
- The type of applicator will depend on the type of cancer you have and where the disease is. Your Radiation Oncologist will choose the applicator that best treats your cancer.
- Brachytherapy allows a high dose of radiation to be given in or very close to the tumour.
- Your brachytherapy treatments will start near the end of your external beam radiation treatments.
- The number of brachytherapy treatments you have depends on what your radiation oncologist orders. Most patients have 3 treatments.
- You will receive anesthesia support during your brachytherapy to ensure that your pain is well controlled.
- After each brachytherapy treatment it is safe for you to be around other adults, children and pets. ***You will not be radioactive.***
- You will need someone to drive you to and from the JCC for each of your brachytherapy treatments. You will not be allowed to drive after the treatment.

How is the radiation delivered?

- The radiation source sits inside a shielded machine called the High Dose Rate (HDR) after-loader machine.
- During the radiation treatment, the radiation source travels into the applicator through a long tube that is connected to the HDR unit. When this happens, you will hear a beeping sound. On average, it takes only 10-15 minutes to deliver the fraction of radiation.
- Once the radiation is delivered, the source returns to the after-loader. If you don't hear the beeping sound, the radiation source is safely in the HDR after-loader machine.

Your appointments

Radiation planning scans

- After you are first seen in consultation, you will return for mapping scans which include a CT simulation scan and possibly an MRI simulation scan.

Daily radiation

- Once your radiation plan is ready, you will start daily radiation treatments.
- While receiving radiation, you will see your Radiation Oncologist once a week to help monitor your symptoms from radiation.

Weekly chemotherapy

- Some patients will get weekly chemotherapy with their radiation.
- You should not have chemotherapy on the same day as brachytherapy.
- If you are getting chemotherapy, you will see your Gynecologic Oncologist to monitor your symptoms from chemotherapy.

Brachytherapy planning appointments

Pre-operative anesthesia assessment

- You will meet with the pre-operative anesthesia team to review your medications and make a plan for pain control during the procedure.

Brachytherapy patient education sessions

- These appointments will take place during week 1, 2 and 4 of your external beam radiation treatments.
- During these visits, you will meet with our brachytherapy education team to answer your questions and make sure everything is on track for your brachytherapy.

Pre-brachytherapy MRI appointment

- This appointment will be booked approximately 1 week before your first brachytherapy treatment.
- It will help your team plan the brachytherapy treatments.
- The MRI machine is located at the Juravinski Cancer Centre, on Level 0, in the Radiation Therapy Department.

What happens leading up to brachytherapy?

The day before brachytherapy:

- You will have bloodwork drawn from the Juravinski Cancer Centre Outpatient Lab (Level 1).
- You will have an appointment with one of the team members to review your bloodwork and ask any questions.
- If the day before your procedure falls on a holiday Monday, you will meet in a clinic on the Thursday or Friday prior.

The night before brachytherapy:

- Do not eat or drink after midnight.
- Do not smoke or drink any alcohol for 24 hours before treatment.
- Take 2 tablets of Imodium at midnight.
- Remove artificial nails and nail polish from your hands and feet.
- Remove all body piercings (tongue rings, belly rings or studs, etc.) or artificial eyelashes.

The morning of brachytherapy:

- ***Do not eat or drink anything.*** You may take your morning medications with a small sip of water as directed by the pre-operative clinic.
- Wear loose, comfortable clothing.

Where to go for brachytherapy:

- Check in time: 8:15 AM
- Location: Juravinski Cancer Centre (JCC), Level 0, Clinic G

What to bring with you to the brachytherapy appointment:

- A list of your medications (except vitamins).
- If you are diabetic, bring the medications you take for your diabetes.
- Ontario Health Card (OHIP).
- Glasses or contact lenses, hearing aids, dentures and their containers.
You will need to remove all these things before each treatment.

- Contact information for the person who will drive you home.
- A translator if English is not your first language or you are hearing or speech impaired.
- If you have sleep apnea, bring your CPAP machine.

What happens during your brachytherapy treatments?

- During the procedure you will be given medications by the anesthesiologist to ensure you don't have any pain and don't feel the treatment.
- Brachytherapy is delivered in different ways. Some patients will receive brachytherapy during the day and go home that night. Others may need to stay overnight in hospital to receive more than one treatment with the applicator. Your brachytherapy team will review this with you prior to your first treatment so that you are prepared.
- If you are getting same day treatment, you can plan to be at the hospital for 6 to 8 hours.
- If you are staying overnight for treatment, most patients stay in the hospital one night and return home later the next day.

What to expect after brachytherapy

- After the applicator is removed you will be monitored as you recover from anesthesia.
- A nurse will care for you, checking your blood pressure, heart rate and temperature.
- You will need to be able to empty your bladder and walk before you can leave the Cancer Centre.

- You will get a sanitary napkin and disposable underwear to wear home.
- We will make sure you have your next appointment before you leave.
- You may feel nauseated (sick to your stomach), dizzy or have a headache from the anesthetic for up to 24 hours. This is normal.

Managing side effects

You may have side effects after your brachytherapy treatments. If you have had external beam radiation you may already be feeling some of these symptoms. Brachytherapy treatments may make these side effects worse.

Here is a guide to help you manage:

1. Cramping in your vaginal/pelvic area:

- Take an over-the-counter pain medication if needed (for example: acetaminophen).

2. Bleeding or spotting from vagina:

- Wear a sanitary napkin or pad.
- Do not use a tampon.

3. Burning sensation while urinating:

- Drink 8-12 cups of fluid (1 cup = 250ml) for 24 hours after you go home.
- If the burning persists, contact your health care team so that a urine culture can be arranged to rule out an infection.

4. Vaginal changes post treatment:

- You will receive teaching regarding the use of a vaginal dilator to prevent narrowing and changes within the vagina. Start using the dilator 2 weeks after your last brachytherapy treatment.

5. Skin changes on the vulva and groin:

- Wear cotton underwear and pantyhose with ventilated lining.
- Continue with the skin care routine for 2 weeks.

Reasons to seek medical care

- Not able to urinate (pee).
- Heavy bleeding from your vagina (soaking 1 pad per hour with blood).
- Chills or fever (temperature 38°C (100°F) or higher).
- Very bad cramps in your abdomen.
- Pain or severe pain in your abdomen.
- Foul smelling discharge from your vagina.

Important dates to remember:

Pre-operative Anesthesia Consultation: _____

Pre-treatment MRI: _____

1st Insertion: _____

2nd Insertion: _____

3rd Insertion: _____

Questions or concerns?

Call your Health Care Team:

- From 8:30 AM – 4:30 PM: 905-387-9495 ext. 63123
- For after-hours support please call CareChart: 1-877-681-3057

Brachytherapy Team:

Our brachytherapy team is made up of a group of dedicated physicians, nurses, radiation therapists, medical physicists and health care aides. You will meet some or all of us during your time at the Juravinski Cancer Centre. We have a team of specialized Radiation Oncologists who perform Gynecologic Brachytherapy. You may meet any one of these physicians at your brachytherapy appointments.



Dr. K. Schnarr



Dr. E. Donovan



Dr. J. Sienna