Intracavitary Implants: Self-Care Guide

Coping with the changes brought about by cancer treatment is easier when you have information and support.

This brochure will explain intracavitary (internal) radiation therapy, also known as brachytherapy. It will tell you what to expect before, during and after the procedure, and how to care for yourself at home.

Radiation therapy

Radiation therapy, also called radiotherapy, is a form of cancer treatment. It uses high-energy X-rays to kill cancer cells. Cancer cells divide and reproduce faster than healthy cells. Radiation therapy stops these fast-growing cells by destroying their ability to grow and divide. Although both healthy cells and cancer cells are destroyed, most healthy cells can recover quickly.

There are 2 types of radiation therapy, external and internal. A combination of external and internal radiation therapy often is used to treat cancers of the cervix, uterus and vagina.

External radiation therapy

With external radiation therapy, you get radiation from a machine that is outside your body. Patients usually get external radiation therapy over several weeks as an outpatient. Treatments are given Monday through Friday with weekend breaks.

Internal radiation therapy

With internal radiation therapy, radioactive material is placed inside your body where you have cancer. Internal radiation therapy places the source of radiation (implant) as close as possible to the cancer. This helps limit how much radiation nearby body tissues are exposed to.

High-dose-rate brachytherapy

High-dose-rate brachytherapy is a form of internal radiation therapy to treat cancer. In this therapy, the clinician will put a radioactive implant directly into a body cavity such as the vagina or uterus. This therapy delivers a high dose of radiation over a short period of time. It is given directly to the tumor site, so the radiation exposure of other body tissues is limited.

You will have this therapy over 2 to 6 sessions. You may start it while you are getting your external radiation treatments. If so, you will have 1 or 2 implant treatments per week. You will not get an external radiation treatment on the day of an implant treatment.

After you finish your external radiation treatments, you will likely have 1 to 2 implant treatments per week until they all are completed.

If you have any questions, ask your physician or nurse.
You may have questions about your radiation therapy. Your radiation oncologist and radiation nurse can answer them.

**Preparing for implant radiation treatment**

Your physician may order some tests for you, such as blood testing, a chest X-ray and an electrocardiogram (ECG) before your 1st treatment. Your physician will let you know which tests you may need.

You can physically prepare yourself for these treatments. Exercise can improve your circulation before the treatments. Check with your physician before starting any exercise routine. Light exercise, such as walking 20 minutes a day for 3 days during the week before each treatment will help you feel less weak after the treatments.

**Day before implant radiation treatment**

Follow these instructions before each of your implant treatments.

- **Do not eat or drink anything 8 hours before your procedure.** Your physician will let you know which medications you may take with a sip of water, if needed.
- Your physician can prescribe sleep medication for you, if needed, the night before your procedure. But, you must take it **before midnight**.
- You will get medication to make you sleep (conscious sedation) before each implant treatment. Because of this, you must have a responsible adult take you home. You are not allowed to drive yourself home.

**Arriving at the hospital**

On the day of the 1st treatment, check into the pre-operative (pre-op) area on the 6th floor of Northwestern Medicine Prentice Women’s Hospital at 250 East Superior Street.

You can park in the garage at 222 East Huron Street. Valet parking is available in the hospital driveway. For a discounted rate, please bring your parking ticket with you.

You can validate your ticket at the Customer Service Desks on the 1st floor of Prentice Women’s Hospital and the 1st and 2nd floor of Feinberg and Galter pavilions.

Your first procedure will be done in the operating room (OR). Your last 4 or 5 treatments will be done in the Northwestern Memorial Hospital Radiation Oncology Department in the lower level of Galter Pavilion.

**Your 1st treatment**

Your 1st implant treatment will last all day because you will be having a series of procedures. Plan to go home in the late afternoon.

Once you are in the pre-op holding area, you will change into a hospital gown. The clinician will put an IV (into the vein) line in your arm. They will give you fluids and medications through the IV during the procedure. Your nurse will help make you comfortable.
The care team will take you into the OR. The clinician will give you anesthesia to make you sleep. They will put a catheter in your bladder to drain your urine. The OR staff will prepare you for the procedure and clean the area.

In the OR, the clinician will put a plastic device called a sleeve in the opening of your uterus (cervix) to keep it open. This sleeve will be held in place with 2 or 3 stitches and will stay in place until after your last treatment. Most likely, you will not feel the sleeve once it is in place; however, you should not have sexual intercourse until the sleeve is removed. This will prevent discomfort for you or your partner.

**Applicator placement**
The clinician will put the devices that will deliver the radiation (brachytherapy applicators) through the sleeve in your cervix. This applicator is a thin tube that will be used to deliver the radiation to the site. The applicators will be fitted for your body. The clinician takes them out at the very end of each treatment.

After this 1st procedure, the care team will take you to the recovery area.

When you wake up, you will have a magnetic resonance imaging (MRI) test. This is to check that the devices are in the correct position. After the MRI, the care team will take you to a holding area to wait.

The care team will create the radiation plan. You may then get your radiation treatment. It usually takes about 3 to 4 hours after the MRI is finished before you get your radiation treatment.

**During and after the treatment**
When your radiation plan is ready, the care team will take you to the treatment room in the Radiation Oncology Department. The staff will help you onto a treatment table. They will help you find a comfortable position and prepare you for the treatment.

The radiation oncologist will set up the radiation machine, connect the applicators and deliver the radiation dose. You will not feel any discomfort at this time. The radioactive source stays inside the applicator tube. It will never come in direct contact with your body tissues. You will not become radioactive.

You will be alone in the room during the treatment, but the staff will be able to hear, see and talk to you through an intercom. You will also be able to talk to them if you need anything. Your radiation treatment will last about 15 minutes. It is important that you lie still during the treatment. Do not move below your waist.

After your treatment, the care team will remove the applicators and bladder catheter. They will give you medication to make you comfortable during this part of the procedure.

The nurse will give you discharge instructions before you go home. Please note, depending on where the cancer is, your physician may decide to use needles to deliver the radiation dose. If you have needles placed in your cervix, you may need to stay overnight in the hospital. You will have another treatment the next day.
Your 2nd and remaining treatments

Your remaining treatments begin in the Radiation Oncology Department in the lower level of the Galter Pavilion. Your visits will last about 6 hours each. These procedures are repeated before each implant treatment:

You will change into a hospital gown. A clinician will start an IV line in your arm. They will give you medication to make you sleep. The caregivers will prepare you for the procedure, clean the area and insert a catheter into your bladder to drain urine.

The physician will then place the applicators into your vagina and the sleeve.

You may have bleeding from your vagina, and cramping, pressure or pain in your lower pelvic area and vagina. You may feel fullness in your vagina. We will do our best to keep you comfortable during this procedure.

After the physician puts the applicators in, you will have a computed tomography (CT) scan or MRI to check the placement of the applicators. After the scans, the care team will take you to a holding area.

Your physician will use the scans as a guide to plan your treatment. It usually takes about 3 to 4 hours after the imaging is finished before you get the treatment. Once your treatment plan has been created, your radiation treatment will follow the same procedure as the 1st day.

If needles were used for your 1st treatment, you may need to go to the OR for the following treatments. If you have needles placed in your cervix, you may need to stay overnight in the hospital for another treatment the next day.

After the last treatment

At the end of your last implant treatment, the radiation oncologist will remove the sleeve in a treatment room in the Radiation Oncology Department. You do not have to go to the OR for sleeve removal.

The nurse will give you discharge instructions. You should schedule a follow-up visit with your radiation oncologist in 1 month.

Care at home

Side effects

You will not be radioactive after this treatment. Your body fluids will not be radioactive. You may notice these side effects:

- Small amount of vaginal spotting (drops of blood) for 1 to 2 days after the procedure
- Vaginal discharge
- Cramping in your abdomen
- Bladder irritation
- Diarrhea
- Fatigue (feeling very tired)

Your physician or nurse will help you manage any side effects that may happen.
**Activity**
Do not drive on the day you have an implant treatment. You may go back to your regular activity as you are able to the next day. However, do not have sexual intercourse until your physician tells you it is safe to do so.

**When to call your physician**
Call your physician or the brachytherapy patient care coordinator right away if you have any of these symptoms:
- Temperature above 101 degrees F
- Heavy vaginal bleeding (soaking at least 1 pad per hour)
- Abdominal pain that does not go away when you take acetaminophen (Tylenol®) or ibuprofen (Motrin®)
- Changes or problems with urination or bowel movements

**Contact information**
You may contact the Department of Radiation Oncology brachytherapy patient care coordinator:
- Monday through Friday
  - 7 am – 5 pm
  - 312.472.0110
  - TTY: 711
  - After clinic hours and on weekends: 312.472.3650