

High-Dose Rate Brachytherapy with Interstitial Implant

This information will help prepare you and your caregiver for your treatment. Radiation therapy is a treatment for some cancers. One way to give radiation is to place a radioactive source temporarily inside the body or near the tumor, which is called brachytherapy.

You will be getting high-dose rate (HDR) brachytherapy delivered through an interstitial system of catheters. These catheters will be placed in the operating room. You will be admitted to the hospital and will stay for 3 days. Most patients also get external beam radiation therapy (EBRT), which is explained on another sheet. The HDR treatments begin about a week after EBRT is completed.

What to Expect

Preparation

- Your doctor's office will schedule the HDR treatment. Someone will call you the day before to tell you what time to arrive and where to check in.
- You will meet with someone from the brachytherapy team about 1 week before admission. He or she will review the details of the procedure with you.
- If you develop a cold, fever, flu-like symptoms, or a rash, call your doctor as soon as possible. We may have to reschedule the treatment.
- Stop aspirin 5 days before you are admitted to the hospital. Stop NSAIDs 24 hours before you are admitted.
- By the time you start treatment, you may have diarrhea from your external beam radiation therapy. We need to ensure your bowel is fairly empty of stool the day of your treatment, so follow the instructions below on how to change your diet the day before the procedure.

The Day Before You Are Admitted

- Take your usual medicines.
- Eat a light breakfast.
- Start a clear liquid diet (see below) after breakfast and continue it all day and evening up until midnight.
- To prevent dehydration and feeling weak, have at least eight to ten 8-ounce servings of liquid.
- **Do not have anything to eat or drink after midnight**, including hard candy or chewing gum.
- Your radiation oncologist prescribed a laxative called Golytely. Drink three quarters of the Golytely around dinner time the day before your surgery. This will ensure you are ready for your procedure the following morning.

Clear Liquid Diet

Food Category	You May Have	You May NOT Have
Soups	<ul style="list-style-type: none"> ▪ Clear broth or bouillon ▪ Clear consommé 	<ul style="list-style-type: none"> ▪ Any other soups
Sweets and Desserts	<ul style="list-style-type: none"> ▪ Gelatin ▪ Flavored ices ▪ Honey, sugar, sugar substitutes ▪ Hard candy 	<ul style="list-style-type: none"> ▪ Any other sweets or desserts
Beverages	<ul style="list-style-type: none"> ▪ Water ▪ Clear fruit juices, such as apple, cranberry, or white grape; Kool-Aid® ▪ Gatorade® ▪ Black coffee or tea (in limited amounts; no more than 2 cups) 	<ul style="list-style-type: none"> ▪ Juice with pulp or nectars ▪ Carbonated drinks or soda, such as ginger ale, 7-Up®, Sprite®, seltzer, cola ▪ Alcoholic beverages ▪ Milk or cream

The Morning of the Procedure

- Take a shower before you come to the hospital.
- You may brush your teeth, but do not swallow the water.
- Do not have anything to eat or drink.
- Take your usual medicines, except those for diabetes, with a small sip of water.
- Do not wear any makeup or nail polish.
- You will need to remove glasses, hearing aids, and dentures if you wear them. Bring cases for them so they will be safe.
- Do not wear contact lenses.

During the Procedure

Positioning of the Catheters and Treatment Planning

- You will be taken into the operating room and given sedation to make sure you are asleep and have no discomfort. You will be lying on your back with your legs raised.
- A catheter will be placed into your bladder to drain urine. A number of catheters will be placed through your vagina and into your uterus and cervix. Your doctor will decide how many catheters are needed based on the size of the area that is to be treated. The catheters will be held in place by a template, which is a small square piece of plastic with holes in it. The template will be secured between your legs and sutured to your thighs.
- After the catheters are placed, you will be brought to the recovery room.

- When you wake up you will have an intravenous (IV) in place through which you will receive pain medicine. Nurses will monitor you for about 1 hour.
- Once you are fully awake, you will be taken to have a CT scan, which takes about 20 minutes, to check the placement of the catheters. If necessary, the doctor can adjust their position. For some patients, the CT is done while still under anesthesia.
- Your treatment team will also use the CT scan to plan your HDR treatment. After the scan is completed, you will be taken to your hospital room.

Treatment

- You will receive four to five treatments while you are in the hospital. The first will be given the evening of your first day in the hospital.
- The radiation therapists will attach the catheters coming out from your vagina to cables, which look like long plastic straws. The cables are connected to a machine that stores the iridium (radiation). The therapist will call out numbers to ensure that each catheter is connected correctly.
- Once everything is set, you will be left alone in the room to receive treatment.
- The room has a video camera and an intercom, so staff can see and hear you at all times.
- The iridium will be moved through the cables into the catheters. It is left in your cervix for 10 – 20 minutes. You will not feel any pain or discomfort while the iridium is in place and you will not see or feel the radiation. You may hear the machine humming when it is turned on.
- After the treatment is done, the iridium is moved back into the storage machine.
- The therapist will come back and disconnect the cables.
- You will be taken back to your room.

The remaining treatments will be exactly like the first. You will have them twice a day. Each treatment is about 6 hours apart.

After the last treatment

- The template and catheters are removed.
- You will be brought back to your hospital room.
- You will be discharged home the next day.
- You may feel some uterine cramping and pressure in the vaginal area, but these symptoms go away within a couple of hours. If you are uncomfortable, ask the nurse for medicine.

While in the Hospital

- The urinary catheter will remain to drain urine from your bladder.
- While the catheters are in place you must stay in bed. You will be lying on your back with your legs straight. You can have the head of the bed up only 30 degrees.
- You can't move your hips or legs, but you can wiggle your toes. You can also move your arms and upper body.
- Compression boots (also called SCDs) will be placed on your legs. These boots will be connected to a machine that pumps air in them from time to time to help the blood flow in your legs.
- You will be asked to do deep breathing exercises using an incentive spirometer while you're in the hospital.

- You will have all your meals in bed. You will be given a low-residue diet and medicine to prevent you from having a bowel movement. Some patients prefer not to eat food that makes them bloated or produces gas, as this makes them uncomfortable.
- If you need help, use your call bell. It will be anchored to your bedside.

Lying still and flat in bed for 4 days is difficult. Since you must remain in bed at all times, bring materials that will help you pass the time, including books, magazines, a radio, DVDs, cards, or board games. While you are in your hospital room, there is nothing radioactive in the catheters. You may have visitors and do not have to be alone.

After Your Discharge

- You may go back to your usual diet.
- You are not radioactive from the treatment. You may have contact as you wish with other people.

Side Effects

- You might cramp for a day, but ibuprofen or Tylenol® (acetaminophen) should help.
- You might have vaginal spotting or bleeding. It should not be more than you have with a monthly period. You can use pads, but do not use tampons or a douche.
- The vaginal or anal area may become irritated. Sitz baths with plain warm water can be soothing. You can buy a plastic sitz bath that fits into your toilet at a drugstore or you can fill a tub with warm water. Sit in the water for 15 – 20 minutes and repeat as needed for your comfort.
- You may have side effects for 4 – 6 weeks after treatment is done. Your nurse will tell you how to care for yourself.

Care

Bathe and shower daily using warm water and a mild unscented soap such as Dove® or Purpose®.

- **Do not** use a washcloth, scrubbing cloth, or brush when bathing.
- Pat skin dry with a soft towel or allow to air-dry.

To minimize skin irritation, wear loose-fitting cotton underwear and clothing.

Since the area being treated has the potential for increased sensitivity than the rest of your skin, always protect the area from sun exposure after your treatment ends. Use PABA-free sunscreen with a SPF of at least 30.

A daily vitamin is OK during your treatment. **Do not** take other vitamins or any supplements, including both nutritional and herbal supplements, without talking to your doctor.

Swimming is permitted **only if**:

- You **do not** have any skin reactions during your treatment
- Pool is chlorinated

Rinse off chlorine right after getting out of pool.

Caution

- Heating pads and/or very hot water can cause pain or skin irritation to the treatment area.
- Hot tubs or saunas are not encouraged while receiving radiation treatment.

Call your doctor or nurse if you have:

- Vaginal bleeding that is more than light spotting
- Cloudy, foul-smelling urine or blood in your urine
- Fever greater than 100.4° F (38° C)
- More than three watery bowel movements a day that are not relieved by medicine
- No bowel movement in 3 days
- Rectal bleeding
- Nausea or vomiting and are not able to keep food down
- Abdominal or pelvic pain that does not go away after you take your pain medicine

Contact Us

During office hours, call your radiation oncologist. After-hours, call 214-645-8525.