High-Dose-Rate Brachytherapy with Cylinder 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 near the tumor, which is called brachytherapy. A temporary device called a cylinder will be placed in the vagina. It is similar to, but larger than a tampon.



What to Expect

Preparation Day Before the Procedure

Take 2 tablespoons of Milk of Magnesia twice a day the day before the procedure to produce a good bowel movement.

- You can eat and drink as normal, though spicy foods should be avoided.
- A nurse will call you the day before the procedure to remind you to take the Milk of Magnesia.

Day of the Procedure

- You will be taken to the ladies dressing room to change for your procedure.
- You will then go to the patient CT area to be prepped for the procedure.

During the Procedure

Positioning of the Device and Treatment Planning

- You will be taken to the CT room.
- The doctor will insert the brachytherapy device into your vagina, which will be used to give the radiation. A special securement brief/pad will be placed and secured to keep the device in place.
- After the device is inserted, you will get a CT scan to ensure it is positioned properly. Occasionally, the device will need to be repositioned. Once proper positioning has been confirmed and the device has been removed, you will be transported back to the patient holding area to rest while the radiation plan is completed.
- During this time, computer calculations will be done to determine how long the radioactive material should be in place.

Treatment

When your calculations are complete, you will be taken to the brachytherapy room for radiation treatment. Once inside, the device will be reinserted, an X-ray will be taken, and the radiation therapist or radiation physicist will connect the device to the brachytherapy machine. After connecting the device, all of the staff will leave and the door will be closed. Although you will be inside this room alone,

there are two cameras and a microphone and speakers for you to speak with the radiation staff, who will be watching during the entire treatment time. There is also a radiation indicator (a light that tells you when the radiation is on). While the radioactive source is in use, you will hear a beeping noise coming from the machine. The treatment time varies, usually 5-20 minutes, depending on the activity (strength) of the radiation source. The doctor will insert the brachytherapy device into your vagina, which will be used to give the radiation. A special securement brief/pad will be placed and secured to keep the device in place.

- During radiation implant time, it is very important that you stay on the stretcher so the device remains in place. Your head may be slightly raised, and pillows may be placed under your knees for comfort.
- You should have little or no discomfort while the implant is in place, but some patients report cramping or pressure from the implant device. If you are uncomfortable, tell your nurse.



- The entire procedure, including planning, can take 2 3 hours for the first treatment.
- For subsequent treatments the time will be approximately 1 hour.

End of Procedure

- Once the treatment is done, the physicist will enter the room with a survey meter. This is done to make sure the radiation source has been properly returned to the brachytherapy machine. Once confirmed, the rest of the staff will enter the room.
- The device will be unhooked from the brachytherapy machine.
- The padding and device will be removed.
- You are not radioactive and the radiation is totally gone.
- Once you are able to urinate on your own, you will be able to leave. You are OK to drive yourself provided you do not require any pain or relaxation medications during the procedure. If you do, someone will have to come and pick you up as you are not safe to drive.

- After you complete your course of treatment you will need to use a vaginal dilator at regular intervals. Your nurse will give you instructions on this.
- A follow-up visit will be scheduled once you have finished the cylinder procedures.

Follow-Up Appointments

A return appointment will be scheduled before you leave the clinic. This appointment enables the doctor to check your progress following the radiation treatments. It is important that you keep this appointment.

If you develop any problems that you feel need immediate attention, contact your primary physician. If you have any questions after reading this information or at any time while under treatment, contact your radiation oncologist or nurse. If you have any questions or problems concerning vaginal dilation or sexual intercourse, please contact the nurse at 214-645-8525.

Side Effects

- You may have a pinkish discharge from the vagina the day of the procedure. This is normal.
- For the first few days, you may experience pressure or burning when urinating or having a bowel movement.
- Possible dryness during and after treatment is expected. Using a vaginal moisturizer a few times per week is helpful.
- You may have bowel upsets, such as diarrhea, for a few weeks or as long as 3 months after your implant procedure. If this happens, it's helpful to stop consuming drinks/foods that irritate the bowel such as alcohol, seasonings/spices, coffee, and tea. Also, avoid foods high in fiber (fresh fruits and vegetables, wholegrain breads, and cereals). Speak with our dietitian if you have any questions.
- Once home, you may feel tired. Your activities should depend on how well you feel. The most important thing is to not overdo it or let yourself get too tired.

Frequent rest periods of 15-30 minutes during the day will help you relax and regain your strength.

Care

After radiation, you may develop some scar tissue in the vagina. This scar tissue could cause your vagina to shorten and close. Your vagina must remain open so your doctor can examine you properly. This is done by using a vaginal dilator. This should be done for at least 1 year following your treatment. Your nurse will provide the dilator and instructions for use. You may have minimal spotting lasting up to a day for the first couple of weeks to months after resuming intercourse or after using a dilator. This is normal. You should not have any pain or discomfort if dilation is done gently and you stay relaxed.

Sexual Intercourse

Ask your doctor when you can start having intercourse again. Usually, it's 1 month after your implant procedure. It's important for you and your partner to know that your vagina may have less natural lubrication (moistness). Many of the glands in your vagina that produce the wet, slippery feeling during sexual excitement can be destroyed by radiation, so artificial lubrication may be necessary. We suggest K-Y® Jelly or any other water-based lubricant suggested by your pharmacist, or an estrogenic cream as prescribed by your doctor. These lubricants can be purchased at any drugstore without a prescription.

DO NOT use Vaseline, hand lotion, baby oil, etc. as they are oil-based and can't be washed away with water. Some lotions are perfumed, which may cause irritation.

DO NOT be concerned about giving your partner cancer or exposing them to radiation. Remember, the source of radioactivity is gone once the implant is removed. You are NOT a danger to your partner, family, or friends.

Bathing and Other 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. 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.

Call Immediately if You Have Any of the Following Symptoms:

- Changes in the color of your mucus when coughing.
- Temperature of 100.5° or higher
- Shaking chills
- Flu-like symptoms
- Bleeding

Contact Us

For any questions or concerns, call your radiation oncologist at 214-645-8525.