

## High-Dose Rate Gynecologic Brachytherapy (Vaginal Cuff)

Your radiation oncologist has ordered high dose rate (HDR) brachytherapy (BRAY-key-THAIR-uh-pee) to treat your cancer. This procedure delivers a high dose of radiation directly to a tumor site over a short period of time. This treatment method limits the dose of radiation to nearby body tissues.

### Consultation

Your radiation oncologist and radiation oncology nurse will meet with you to discuss the HDR brachytherapy treatment. They will answer any questions you have about the treatment. You will then be asked to sign a consent form for the treatment. A physical examination, including a pelvic exam to determine the applicator size, is usually done at the time of the consultation visit.

### Simulation

Simulation (sim-you-LAY-shun) is a treatment planning session that is done before your first HDR brachytherapy treatment. During simulation, measurements and x-rays are taken to help your radiation oncologist and medical physicist plan your treatments. Your nurse will ask you to empty your bladder and change into a hospital gown. You will be taken into the simulation (planning) room, where you will lie down on a table.

Your radiation oncologist will place an applicator into your vagina. The applicator is similar to a large tampon. At first, you may experience a stretching feeling at the entrance to your vagina. Then you will just have a feeling of fullness. Taking slow, deep breaths through your mouth will help you relax. A CAT (CT) scan or MRI may be done to complete the planning of your treatment.

Your radiation oncologist will prescribe the amount of radiation you are to receive.

Your doctor will determine the number of treatments you will need. Your treatment plan is:

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### Your Treatment

When you arrive for your first treatment your doctor may ask the nurse to insert a soft plastic tube (catheter) into your bladder to drain your urine or the nurse may just ask you to use the restroom to empty you bladder. This will help your doctor when planning the treatment.

Your nurse or radiation therapist will take you into the treatment room with the applicator in place. You will be on a stretcher since you can't walk with the applicator inserted. The applicator will then be connected to the treatment machine.

To keep staff from being exposed to radiation, everyone will leave the room. You will be monitored through use of a television camera. You will be able to talk to staff through an intercom, should you need anything. If necessary, the treatment can be stopped at any time so a staff member can enter the room.

The treatment machine will send the radiation source through the tube and into the applicator inside your vagina. The radioactive source is passed through the tube and into the applicator by a computer-controlled machine. The

radioactive source stays inside the applicator and never comes in contact with your body tissues. Only the source inside the applicator is radioactive. You do not become radioactive.

The treatment is painless; however, you may feel a slight movement of the applicator and you may hear noises from the machine as the radiation source moves through the tube. The treatment itself takes five to 15 minutes. It is very important to lie still during the treatment so the applicator is not pulled or dislodged.

### **Following the Treatment**

When the treatment is complete, the radiation source will return to the treatment machine automatically. The physicist will then come into the treatment room and take final measurements. Your Doctor or Radiation Therapist will then remove the applicator from your vagina. This is a simple procedure that usually does not cause discomfort. There may be a small amount of bleeding from your vagina after the treatment. You will be given a feminine pad.

You will then return to an exam room, where you will be able to change into your clothes. Before you leave, you will be given written instructions about possible side effects that may occur. You will also be given the date and time of your next appointment.

Between your appointments, do not hesitate to call your radiation oncology nurses with questions about side effects or concerns about your next treatment visit.

### **In an Emergency, Call:**

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