Cervical cancer is often treated with internal radiation. This treatment emits a high amount of radiation for a short time just in the tumor area. This keeps the radiation away from healthy parts of your body.

Your doctor suggests internal radiation as part of your cancer treatment. This information will help you learn what to expect and how to prepare.

**Before the Implant**

Your health care team will review the procedure and go over possible side effects, how to manage these side effects, and any risks of the treatments. You will be asked to read and sign a consent form.

You will receive anesthesia before the first implant through an IV (a small needle placed into one of your veins). This provides pain relief during the implant and wears off quickly.

**You should have nothing to eat or drink after midnight the night before your treatment.**

After the first treatment, anesthesia may not be needed.

**Treatment Preparation and Planning**

The treatment will take place in the Radiation Oncology clinic. First, staff will place a catheter into your bladder. Next, three hollow metal tubes are placed into the vagina near the tumor or area to be treated. Gauze packing holds these tubes in place.

After the tubes are placed, doctors will check to make sure they are placed properly. Next, they will plan the amount of radiation you will receive. This takes one to two hours.

You must remain in your bed until the tubes are removed after your treatment. The head of the bed may be raised only slightly. You should avoid abrupt twisting and turning to keep the tubes in place. Since you will be in bed for two to three hours, you may want to bring something to read or watch. Many patients also sleep during this time. You may also have family or friends at your bedside.

You may feel some pressure, a mild backache, or dull cramping in the lower abdomen. Ask your nurse for pain medicine if this happens.

**No radioactive material will be put into the tubes until it is time for your treatment.**

**The Radiation Treatment**

Once doctors plan your amount of radiation, you will be taken to the treatment room.

The radiation comes from a machine that is operated under the guidance of a radiation doctor. A staff member attaches small tubes from the machine to the implanted tubes. The staff will then leave the room, but they will stay in contact by intercom and video.

When the machine is turned on, a small radiation source about the size of a grain of rice goes into each of the tubes for only a few minutes. The total treatment time takes 10-20 minutes.

The treatment is painless. You may feel the radiation source as it travels in and out of the tube. After the treatment is done, the radiation source goes back into the machine and the machine is disconnected from the implanted tube.

The only time you are exposed to radiation is the brief time the source is inside the tubes.

After the treatment, doctors will remove the tubes, catheter, and IV. You may then go home.

A full treatment course usually requires more than one implant, with one to three days between each. The first treatment takes the longest. Treatments take at least two hours. Those that involve anesthesia take three to four hours.

**Follow-up Appointments**

Schedule an appointment with your radiation doctor for four weeks after the last implant. Then rotate follow-up visits every three months between your gynecologist and radiation doctor.

**After the Implant**

Side effects may continue for a time after your treatment ends. These suggestions can help ease side effects.

**Soreness.** You may have soreness at the site of your implant. You may take acetaminophen ("Tylenol") or an anti-inflammatory medication such as ibuprofen ("Motrin", "Advil") or naproxen sodium ("Aleve"). Your doctor may prescribe a stronger pain medicine if needed.
**Bladder problems.** You may notice burning when urinating. Drink at least eight cups of fluid each day to keep the urine diluted. This will reduce soreness and help flush the bladder to prevent infection. If burning continues, your doctor may prescribe another medicine to control discomfort or take a urine sample to check for an infection.

**Bowel problems.** This treatment may cause bowel problems that may last for a few weeks. For diarrhea, you may take loperamide (Imodium AD®). Eating a low-fiber diet may also help. The anal area may become sore or hemorrhoids may develop. Wipe the area with alcohol-free baby wipes rather than toilet paper. You may try over-the-counter products such as Aquaphor®, Anusol®, or Preparation H®.

**Vaginal discharge.** It is normal to have a light vaginal discharge for four to six weeks after the treatment. At first, discharge may be light pink, then light brown or tan, then white. You may douche gently once or twice a day with a quart of lukewarm water. Tell your health care team right away if you have heavy flow, bright red blood, or foul-smelling discharge.

**Vaginal changes.** Radiation can cause dryness and shrinking of the vagina, which may hinder your doctor’s ability to perform follow-up exams. It is important to gently stretch the vagina on a regular basis by having regular sexual intercourse or using a dilator. Intercourse may be resumed when comfortable. This is most often within two to three weeks after you are done with implants. A lubricant such as K-Y Jelly® or Replens® may be helpful. If sexual relations are not frequent, patients should use a dilator. See the Vaginal Dilation After Radiation factsheet for more instructions.

**Daily Activity**

Fatigue (feeling very tired) is common. For the first day or two after the implant is removed, get lots of rest. Avoid impact sports, bike riding, or strenuous activities for one month after the last implant.

**Emergencies**

Problems requiring emergency attention are very unlikely. Contact the Radiation Oncology doctor on call if you have problems after an implant.

**During normal business hours:**

Radiation Oncology Department
801-581-2396

**After hours:**

University of Utah Hospital operator
801-581-2121

Toll free: 1-800-824-2073

*Ask for the Radiation Oncology doctor on call. Tell the operator it is urgent.*