Brachytherapy for Gynecologic Cancers

What is Brachytherapy?
Brachytherapy (brake-ee-THER-uh-pee) is a type of internal radiation treatment. A radioactive implant is put inside your body in or near your tumor.

Brachytherapy can be used to treat many kinds of cancer. It can be used along with surgery, chemotherapy or other types of radiation therapy. The radiation treatment can be given in different ways. Your treatment depends on the area of your body being treated and amount of radiation needed. Your treatment may be given in the hospital, in a doctor’s office or clinic, or at the time of your surgery.

Radiation given inside the body is a common treatment for:
• Cancer of the cervix
• Cancer of the vagina
• Cancer of the uterus

There are 4 common types of implants:
• Vaginal Cylinder
• Ring and Tandem
• Syed Template
• Y Tandem

What is high-dose-rate remote Brachytherapy?
High-dose-rate brachytherapy gives radiation therapy in just a few minutes and is given at your radiation oncology appointment.

A high dose of radiation is placed into your tumor through a needle or catheter. A catheter is a long, thin, flexible tube. No radioactive materials are left inside your body. Your implant will be removed and you will be able to go home after your procedure. There are no special safety precautions to follow after your treatment.

This handout is for informational purposes only. Talk with your doctor or health care team if you have any questions about your care.

How do I prepare for the surgery?

Tell your doctor if you take any medicines or supplements that thin your blood or prevent clots. You may need to change these medicines or adjust the amount you take before your procedure is done.

- These medicines include:
  - Aspirin
  - Clopidogrel, brand name Plavix
  - Prasugrel, brand name Effient
  - Ticagrelor, brand name Brilinta
  - Apixaban, brand name Eliquis
  - Ticlopidine, brand name Ticlid
  - Warfarin, brand name Coumadin
  - Enoxaparin, brand name Lovenox
  - Dabigatran, brand name Pradaxa
  - Fondaparinux, brand name Arixtra
  - Rivaroxaban, brand name Xarelto
  - Cilostazol, brand name Pletal
  - Edoxaban, brand name Savaysa

- **If you have a stent, do not stop taking your medicines to prevent clots without first talking to the doctor who put in the stent.** For more information, ask a member of your health care team for the patient education handout on protecting your stent.

- If you take aspirin or medicines like aspirin for arthritis pain, your doctor may have you take a different medicine in the weeks before your procedure.

- If your surgery is canceled for any reason, call your doctor because you may need to restart the medicines you take to thin your blood or prevent clots.

- **Do not** eat or drink anything after midnight the night before your procedure. Unless told otherwise by your doctor, you can have sips of water to take medicine.

- You will need to have someone drive you home after your procedure and stay for the next 24 hours.
What happens during a Brachytherapy Treatment?

Your doctor will meet with you to talk about the procedure. Your first treatment is done while you are under a general anesthesia (deep sleep) in a procedure room. You will be in the radiation oncology area 1 to 6 hours for your procedure.

- A nurse will take you to a procedure room. You will be asked to lie on an exam table and put your feet up in stirrups.
- Your doctor will place the implant device into the area being treated. You may feel some discomfort and mild cramping while your implant device is in place.
- Once your implant is placed, packing material or a special device will be used to keep your implant from moving.
- An x-ray, CT scan or MRI will be use to check that your implant is in the right location.
- The radiation oncology team will check your treatment plan before your treatment starts. This planning can take 10 to 90 minutes.
- You will not feel the radiation during your treatment. You may hear sounds made by the machine when your treatment is given. You will be alone in procedure room. The controls for the machine are outside of the procedure room. A TV monitor and intercom lets the radiation oncology team see and hear you during your treatment.
- After your treatment is done, the implant will be removed and you will be able to leave

Will this treatment cause side effects?

Radiation treatment targets cancer cells but it can also damage nearby healthy cells. Your healthy cells almost always recover when your treatment is over, but you may have side effects. Your radiation oncology team will carefully plan your treatment to limit side effects.