High Dose Rate (HDR) Vaginal Cuff Brachytherapy

You and your physician have chosen high dose rate (HDR) brachytherapy as part of your treatment for cancer. Before each treatment, a small hollow tube (cylinder) will be placed into the vagina to give radiation to the vaginal cuff. The vaginal cuff is the top of your vagina that was stitched closed after your hysterectomy.

This handout describes:
- What to expect during the treatment
- How to care for yourself during the treatment
- How to reduce side effects and increase your comfort during treatment

Treatment schedule

After your planning CT scan, you will be scheduled for your first treatment. The treatments are given Monday through Friday, 1 to 2 times per week for 3 to 5 treatments. Your nurse will work with you to set up needed appointment times. While the actual treatments take only a few minutes, plan to allow an hour for:
- Meetings with your physician or nurse
- Any unexpected delays

Your treatment and side effects are checked during these visits. Any concerns about your disease and treatment can be discussed at this time.

First treatment

You may eat or drink normally the day of the procedure. When you arrive, the nurse will escort you to the dressing room where there is a locker with a key for your use. You will be asked to remove all clothing from the waist down and change into a hospital gown.

From there you will go to the HDR treatment room. The nurse will assist you onto an exam table. Your vital signs are checked before the treatment. You will be covered with a sheet. Your legs will be put into leg rests that support you under the knees and calves. Then, the lower half of the table will be removed.
What to expect before the treatment

Your physician will do a vaginal exam to check that the vaginal cuff is healed.

The physician will place the cylinder in your vagina. The cylinder will lock into place on the table so it will not move. Your legs will be brought down to lie straight on the table. You will rest on the table in this position during your treatment.

You may listen to music on our player or you may bring a small listening device of your own.

During the treatment

Once the placement of the cylinder has been checked, the treatment will begin. One end of a flexible tube is attached to the radiation machine. The other end is connected to the cylinder that is in place inside you. Your physician controls the machine from a room outside the treatment room. You will not feel anything during the treatment, but you may hear the sound of the machine. The treatment takes about 5 to 10 minutes to complete.

When the treatment is done, the physician will remove the applicator and the nurse will tell you when you will have your next treatment.

You may have a small amount of spotting (blood from the vagina) for the rest of the day. Call your physician immediately or the clinic at 312.472.3650 if you have large amounts of bleeding.

Follow-up treatments/appointments

For each of the remaining sessions:
- You will still change into a hospital gown and be in the same position on the exam table.
- Appointments will last about an hour.

Your physician will usually want to see you for follow-up about 1 month after the final treatment. You may schedule this follow-up exam with the nurse.

Possible side effects

Diarrhea
You may have some diarrhea after the procedure, but it is generally mild. If you have diarrhea, tell your physician or nurse. Be sure to contact them if you have diarrhea 4 or more times in a 24-hour period. This can lead to dehydration. Your physician or nurse will suggest a low fiber diet. If your physician prescribes Imodium® AD (loperamide hydrochloride):
- Take 2 tablets with the first loose stool.
- Then take 1 tablet after any other loose stool that day.
- It is important that you not take more than 8 tablets a day.
Be sure to stay well hydrated during treatment. You should drink at least eight 8-ounce glasses or 64 ounces of non-carbonated, non-caffeine fluids, such as water, juice or sports drinks daily. You may drink beverages with caffeine and carbonation, but only in addition to the recommended guidelines for drinking fluids.

**Burning with urination**
Radiation can irritate your bladder and urethra (tube that carries the urine from the bladder out of the body). This can cause burning when you pass urine. If you develop burning when you pass urine, increase your fluid intake. By drinking more, your urine contains more water and is less irritating to your urethra. If the burning persists, your physician may ask for a urine sample to test for a bladder infection. If you do have an infection, your physician may prescribe antibiotics. If there is no infection, your physician may prescribe some medicine that will decrease the burning.

**Fatigue**
While fatigue is a common side effect after any type of radiation, it is not expected to be overwhelming for this targeted treatment.

**Vaginal discharge**
It is common to develop some vaginal discharge during radiation treatments. The discharge may be white or yellow and may be thick or thin. As needed, wear a panty liner. Tell your physician or nurse if you:
- Have a lot of discharge
- Notice the discharge has an odor

This could be a sign of a vaginal infection, which would require medicine. While you may notice some vaginal spotting, you should not have heavy bleeding. If you develop bleeding that is heavier than a menstrual period, let your physician or nurse know right away.

**Vaginal dryness and stenosis**
Radiation treatments can cause scar tissue to form in your vagina. This decreases the size and length of your vagina (vaginal stenosis). Scar tissue is less elastic than normal tissue. As a result, you may have discomfort during vaginal exams and intercourse. At your first follow-up visit, your nurse will give you a vaginal dilator and talk about its use. The dilator will help you break up any scar tissue and help decrease stenosis. After your treatments are completed, you may also notice some vaginal dryness. Using water-based lubricant, such as K-Y® jelly or Astroglide®, can ease discomfort during intercourse.

After pelvic radiation, some women also report having a difficult time reaching orgasm. If you have any problems resuming intercourse, discuss it with your physician or nurse. They can refer you to a trained healthcare provider who can assist you with your sexual concerns.