Radiation Therapy for Cervical Cancer

You and your doctor have chosen radiation therapy as part of your cancer treatment. This handout describes:

- What to expect.
- How to care for yourself during treatment.
- How to reduce side effects and increase your comfort during treatment.

Most often, 25 to 28 radiation (external beam) treatments are prescribed. The radiation treatment itself is just like having an X-ray. It is not painful; you will not feel anything.

Treatment Planning

Once the decision to proceed with radiation has been made, you will be scheduled for a planning session or a simulation. This session will last between 1 to 2 hours.

During this session, your doctor will take X-rays that will help target the radiation treatment area.

Treatment Schedule

The treatments are given Monday through Friday. Your therapist will work with you to set up daily appointment times, each lasting 15 to 20 minutes. While the actual treatments take only a few minutes, it is best to allow an hour for:

- X-rays.
- Meetings with your doctor or nurse.
- Any unexpected delays.

X-rays are done weekly to assure the precision of your position on the table. The X-rays are not used to diagnose problems and do not assess treatment effects.

You will meet with your doctor at least once a week on _________________________________.

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

After you finish your external beam treatments, your doctor will prescribe internal treatments to give a “boost” of radiation to your cervix. This is done by placing 2 or 3 hollow tubes into your vagina and up to your cervix. This insertion will be done in the operating room while you are asleep (under general anesthesia).
Once in the recovery room and awake, you will come to the Radiation Oncology unit for X-rays. These X-ray are done to calculate the correct dose of radiation for you. Then, you will be transferred to a hospital room. Once the dose is ready, your radiation doctor will come to your room and the radiation implants will placed into the tubes.

While the tubes and radiation implants are in place, you will need to stay in bed. Your nurse will give you more detailed information about the implants before your procedure.

**Skin Marks**

Often, permanent marks called tattoos are used to identify the exact location of the treatment area. These marks are freckle-sized and will not fade. You may wash your skin in this area as usual.

Sometimes, ink pen marks are used. To prevent the loss of these marks, clear medical tape is often placed over the ink. Do not remove this tape or the marks. Take care when you wash your skin so that you do not wash off the marks. If your marks start to fade, please tell your therapist. Do not redraw them yourself. If you are allergic to tape, tell your therapist or nurse.

**Common Side Effects**

**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, a condition called *cystitis*.

If you develop cystitis, increase your fluid intake. By drinking more, your urine contains more water and is less irritating to your urethra. If the cystitis persists, your doctor may ask for a urine sample to test for a bladder infection. If you do have an infection, your doctor may prescribe antibiotics. If there is no infection, your doctor may prescribe some medicine that will decrease the burning.

**Diarrhea**

Part of your large bowel or colon may be in the treatment area. The intestine’s rapidly-dividing cells are more sensitive to the radiation. As a result, abdominal cramping and diarrhea can occur. This effect usually is seen after 10 to 14 treatments. Some patients may develop diarrhea sooner, while some never have diarrhea at all.

To help decrease the radiation to your bowel, your doctor wants you to drink 3 to 4 glasses (24 to 32 ounces) of water 30 minutes before each treatment to fill your bladder. When your bladder is full, it pushes up on your bowel and helps move it out of the treatment site. This will help decrease abdominal cramping and diarrhea.

If you have diarrhea, tell your doctor or nurse. Be sure to contact them if you have diarrhea 4 or more times in a 24-hour period as this can lead to dehydration. Your doctor or nurse will suggest a low fiber diet. If your doctor prescribes *Imodium® A-D* (loperamide hydrochloride):

- Take 2 tablets with the first loose stool.
- Then take 1 tablet after each subsequent loose stool.
- It is important that you not take more than 8 tablets a day.
Be sure to stay well-hydrated. During your 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, but only in addition to the recommended guidelines for drinking fluids.

**Skin Changes**

During radiation, you may notice some changes to the skin folds of your groin, vagina and/or anus (perineal area). Most often, the treated area may become dry and peel. Or, it may darken in color or become red and irritated. It is very important that you keep these areas clean and dry. Follow these guidelines to ease discomfort and protect your skin from more irritation.

- Clean the area with a bath soap for sensitive skin. Some suggested soaps are: Basis® for Sensitive Skin, Dove® for Sensitive Skin or Neutrogena® Unscented. Avoid soaps that are heavily scented or anti-bacterial.
- Use lukewarm water. Hot water can further irritate the skin.
- Gently clean using a soft cloth or your hand.
- Pat your skin dry. Do not rub.
- Do not shave the area being treated with radiation.
- Do not use heating pads or ice packs on the treated area. Extreme temperatures can cause more damage.
- For clothing, choose cotton or soft knit fabrics. Some fabrics like wool may be irritating.

Many women also notice that the elastic in underwear can worsen the irritation to the skin folds in the groin. If this is a problem try to wear loose underwear that does not bind or rub the skin, such as boxer shorts.

If the perineal skin becomes irritated and sore, stop using toilet tissue and use baby wipes or soft, damp washcloths to clean yourself after having a bowel movement. You may want to use a sitz bath, (found at drug stores), to help clean your perineal skin.

Your doctor or nurse may suggest a moisturizing cream, such as Miaderm® or Aquaphor®, 3 to 4 times per day to the area being treated. But, please **do not put these creams on your skin within 2 hours of your treatment, as it will make your skin more sensitive to the effects of radiation.**

You may also notice some loss of your pubic hair. This is a normal effect of the radiation. The hair will start to grow back after your treatments are complete.

If you are concerned about changes in your skin, please talk with your doctor or nurse.

**Fatigue**

Fatigue is a common side effect, but varies with each patient. Stress about your illness, daily trips for treatment and the effects of radiation on normal cells may make you more tired.

Fatigue often begins after 10 treatments. It is often worse at the end of the week but seems to improve over the weekend. It may last several weeks to several months after your treatment has ended.
Plan activities early in the week, when energy levels are higher. Try to keep regular hours, getting up at the same time 7 days a week. Try to keep active and exercise if you can. It is important not to overexert yourself. If you become tired, plan for rest periods during your day.

**Vaginal Discharge**

It is common for women to develop some vaginal discharge during radiation treatments for cervical cancer. The discharge may be white or yellow and may be thick or thin. As needed, wear a panty liner. Tell your doctor or nurse if you:

- Have a lot of discharge.
- Notice that the discharge has an odor.

This could be a sign of a vaginal infection, which would require medication.

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 doctor or nurse know right away.

**Vaginal Dryness and Stenosis**

Radiation treatments can cause scar tissue to develop in your vagina. This decreases the size and length of your vagina (vaginal stenosis).

Scar tissue is less elastic than normal tissue, causing a feeling of tightness. As a result, you may have discomfort during vaginal exams and intercourse. After you finish your treatments, your nurse will give you a vaginal dilator and talk about its use. The dilator will help break up any scar tissue and help decrease the stenosis.

After your treatments are completed, you may also notice some vaginal dryness. Using a 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 doctor or nurse. They can refer you to a trained health care provider who can assist you with your sexual concerns.

**Health Information Resources**

For more information, visit Northwestern Memorial Hospital’s Alberto Culver Health Learning Center. This state-of-the-art health library is located on the 3rd floor of the Galter Pavilion. Health information professionals are available to help you find the information you need and provide you with personalized support at no charge. You may contact the Health Learning Center by calling 312-926-LINK (5465) or by sending an e-mail to hlc@nm.org.

For additional information about Northwestern Medicine, please visit our website at nm.org.