

Radiation Therapy to the Pelvis with the ViewRay MRIdian Treatment Machine

You will be receiving radiation to the pelvis (the area between your hips). Read this handout to know what to expect and learn how to care for yourself.

ViewRay MRIdian

The MRIdian Linac (ViewRay, Inc) is a machine used for radiation treatment. It combines radiation therapy with magnetic resonance imaging (MRI). An MRI uses a magnet to create detailed pictures of the inside of your body, especially soft tissues.

This machine allows your care team to take images during treatment. These images help target the tumor more accurately while limiting radiation to healthy tissue.

Preparing for Treatment

A radiation therapist will call you to schedule your first treatment. They will also give you instructions based on your treatment plan. For example, you may need to arrive with a full bladder or empty your bladder before treatment.

Your treatment will take place in a machine that is also an MRI scanner. You may wear your own clothes if they do not contain metal. If needed, we can provide a hospital gown or scrub pants.

Before treatment, we will ask you to remove all metal items. This includes items such as glasses, hearing aids, cell phones, watches, and jewelry. They will also remind you to check your pockets.

During Treatment

The radiation therapists will help place you in the correct position for treatment. They

will line up marks that were placed on your skin. To help keep these marks in place, avoid swimming or soaking in a bathtub. If swimming or tub baths are important to you, talk with your therapist.

Once you are in position, you will receive headphones and an alert cord. A foam device called a coil will be placed above and below your pelvis. The coil helps create clear MRI images. After everything is in place, you will move into the scanner.

Each treatment begins with MRI images. These images help the therapists see the area being treated. They may adjust your position based on what they see. This helps direct the radiation to the exact location. The scan may take 30 seconds to 2 minutes. After the scan, the therapists and your doctor may review the images before treatment starts.

MRI images are taken throughout your treatment. This allows the care team to monitor movement and adjust if needed.

Side Effects

Radiation Skin Reaction

Most radiation goes through the skin into body tissues. The skin at treatment sites can become red and sore. It can also become dry and itchy. Sometimes the skin may peel or become moist, especially in skin folds.

Your care team will monitor your skin during treatment. Use skin care products only as directed. Tell your care team if you notice skin changes or pain. Acetaminophen (Tylenol®) or ibuprofen may help with pain. Let us know if you need more help.

Skin Care

To protect your skin:

- Bathe or shower with lukewarm water. Use soap made for dry or sensitive skin if needed.
- Gently pat your skin dry. **Do not** rub or scrub the treated area.
- **Avoid** heating pads, hot water bottles, and very hot baths or showers.
- **Avoid** ice and very cold temperatures on treated skin.
- Protect treated skin from the sun. Wear clothing that covers the area when outdoors.
- Use sunscreen with an SPF of 20 or higher on exposed skin.
- Wear loose, cotton-based clothing.
- **Avoid** tape on treated skin.
- **Do not** apply lotions, powders, oils, or other products unless approved by your care team.

If a skin reaction is expected, your care team may recommend a moisturizer. Use it as directed. Make sure the treated skin is clean and dry before each treatment. Continue these skin care steps until your skin has healed.

The skin in treatment areas may always be extra sensitive to sunlight. When outdoors, use a sunscreen of SPF 20 or higher on treated skin exposed to the sun. This is because treated skin is at higher risk for a certain type of skin cancer.

After treatment, treated skin may continue to be dry. It may also darken in color or become firm and tough. It may help to apply skin moisturizer or Vitamin E oil.

Feeling Tired

Feeling tired during radiation treatment is common. This does not mean the tumor is

getting worse. Tiredness may start right away or after 1-2 weeks of treatment. It can last for weeks or months after treatment ends.

Your doctor may order blood tests to check for low blood counts, which can also cause tiredness.

To help manage tiredness:

- Rest when your body tells you to.
- Stay active with light exercise, such as walking.
- Make time for activities you enjoy.
- Eat healthy foods rich in protein.
- Drink 8-12 glasses of fluid each day.
- Accept help from family and friends. Talk with your care team about pain, worries, or concerns.

Diarrhea

Diarrhea can happen when radiation is given to the abdomen. It often starts during the 3rd or 4th week of treatment and may continue for about 2 weeks after treatment ends. If you do not have diarrhea, continue your usual diet and eat foods high in protein. If diarrhea develops, tell your care team. They may suggest medicine, such as loperamide (Imodium[®]), and changes to your diet.

To help manage diarrhea:

- Limit foods high in fiber and fat.
- **Avoid** foods that cause gas or cramping, such as beans and cabbage.
- Drink 8-12 glasses of fluid each day.
- Eat foods high in potassium, such as bananas, cantaloupe, tomato juice, and pulp-free orange juice.
- Eat foods high in protein, such as meat, fish, cheese, peanut butter, eggs, and dairy products.

Diet Tips for Diarrhea

Below are listed some foods to choose and some foods to avoid.

	Foods to Choose	Avoid
Proteins	Two or more servings per day of lean meat, fish, eggs, or cottage cheese.	Fatty or fried meats
Vegetables	Two or more servings per day of cooked or juiced vegetables.	Raw vegetables peas or beans gassy vegetables (such as cabbage, cauliflower, broccoli, and onions)
Fruits	Two or more servings per day of banana, melon, cooked or canned fruits (no skin or seeds), juices, and nectars	Most fresh fruits, dried fruits, and prune juice
Grains	Four or more servings per day of enriched white and refined breads, pancakes, most cereals (except high fiber, whole grain varieties), enriched rice, macaroni, noodles, and spaghetti	Breads or cereals made of whole grain, bran, granola, wheat germ, oatmeal, wheat cereals, or other high fiber grains
Fats	Small amounts of margarine, oil, butter, and cream	Fried or fatty foods rich sauces
Desserts	Small amounts of sweets, ice cream, puddings, Jell-O, and sherbet	Heavy or rich desserts
Dairy	At least two servings per day of milk, cheese, or yogurt	
Other		Nuts or seeds, “sugar free” products made with sorbitol, spicy foods, large amounts of carbonated beverages

Rectal Irritation

Radiation to the pelvis can irritate the rectum. The lining of the rectum is sensitive to radiation. This can cause:

- Pain or soreness
- Burning
- Itching
- Small amounts of bleeding

These symptoms may occur inside or outside the rectum. Diarrhea can make rectal irritation worse. If you have hemorrhoids, they may worsen during treatment. Tell your doctor or nurse if you have these symptoms. Hemorrhoid creams with hydrocortisone, such as Preparation H® or Anusol HC®, may help.

Bladder Irritation

Radiation can irritate the lining of the bladder. This is called cystitis and is often a short-term side effect.

Symptoms may include:

- Needing to urinate more often
- Feeling a sudden urge to urinate
- Burning or pain when urinating

Tell your doctor or nurse if you have these symptoms. Drink plenty of fluids. Bladder symptoms can also be a sign of an infection. Your care team may ask for a urine sample and may prescribe medicine if needed.

Fertility

If your treatment includes the pelvis, radiation may affect fertility and reproductive health. Radiation may cause periods to stop. It may also cause symptoms of menopause, such as:

- Hot flashes
- Mood changes
- Vaginal dryness
- Tingling
- Trouble sleeping

You may also have vaginal itching or burning. Tell your doctor or nurse if you have these symptoms.

If you can become pregnant, talk with your doctor about birth control. Do not become pregnant during radiation treatment. If you are pregnant or think you may be pregnant, tell your care team right away.

Radiation may lower sperm count and affect fertility. Pregnancy can still occur, so use birth control during treatment.

Talk with your doctor or nurse if you have questions about fertility.

Sex

You may have sex during treatment unless your doctor tells you not to. It is common to have less interest in sex during cancer treatment. This often improves after treatment ends. Radiation to the pelvis may affect the ability to get or keep an erection. For many people, this is temporary. In some cases, it can be long-lasting.

Talk openly with your partner about your feelings and needs. You can also discuss questions or concerns with your doctor or nurse.

Vaginal Changes

Radiation can cause vaginal tissues to become drier, tighter, or less flexible. You may have some discomfort during sex.

Vaginal lubricants may help. Your doctor may also suggest using a vaginal dilator during and after treatment to help prevent vaginal tightness. Your nurse will teach you how to use it.

Talk with your doctor or nurse if you have concerns.

Pubic Hair Changes

Radiation may cause thinning or loss of pubic hair. This often begins about 2-3 weeks after treatment starts. Hair loss may be temporary or permanent, depending on the radiation dose.

Other Concerns

A cancer diagnosis can affect many parts of life. You may have concerns about:

- Emotions
- Family relationships
- Work
- Finances
- The future

Your nurses and social workers can help. They can connect you with support services and resources. Talk with them anytime if you need support.

If you need help with daily activities, let your nurse or social worker know. They can connect you with community resources and support services.

Resources

Cancer Connect

Cancer Connect is a free service offered by UW Health. Staff can answer questions about cancer treatments and help connect you with community resources and support services.

Phone: **(608) 262-5223**

National Cancer Information Service

The National Cancer Institute offers a free telephone service with information about cancer care and resources.

Phone: **1-800-422-6237**

Who to Call

Please call if you have any questions or concerns. The phone number for the Radiation Oncology Clinic is **(608) 915-1200**.

If you live outside of the Madison area, call 1-800-323-8942. If the clinic is closed, your call will be transferred to our answering service. Ask to speak to the radiation oncology doctor on call. The doctor will call you back.

Your health care team may have given you this information as part of your care. If so, please use it and call if you have any questions. If this information was not given to you as part of your care, please check with your doctor. This is not medical advice. This is not to be used for diagnosis or treatment of any medical condition. Because each person's health needs are different, you should talk with your doctor or others on your health care team when using this information. If you have an emergency, please call 911. Copyright © 7/2026 University of Wisconsin Hospitals and Clinics Authority. All rights reserved. Produced by the Department of Nursing. HF#8085.