



Radiation to the Spine

What you should know

This handout explains what to expect when you are receiving radiation to the spine.

What is Radiation Therapy?

Radiation therapy is a treatment that focuses on tumors, killing cancer cells, and reducing tumor masses.

Radiation is given daily, Monday through Friday, until a desired dosage is reached. It is important to come in for all the treatments.

Side Effects

Both normal and tumor cells within the area that is treated can be irritated or damaged during radiation. Normal cells, like skin cells, can repair themselves when treatment is completed. Damaged tumor cells cannot repair themselves.

Side effects are different from patient to patient and depend on which area of the spine is being treated. Most side effects will go away 1 to 2 weeks after your treatment is done. We have medicines and strategies to prevent and minimize most radiation side effects.

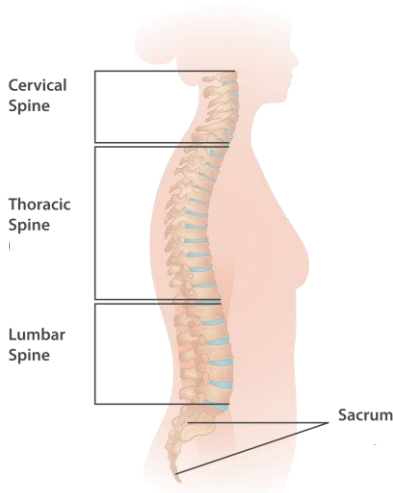
Skin reactions and fatigue are common side effects from radiation to the spine. Other side effects are listed here by treatment area:

Neck (cervical) area:

- Dry or sore throat
- Hoarse voice

Chest (thoracic) area:

- Sore throat, swallowing difficulties, or heartburn
- Nausea and/or vomiting



There are four distinct areas of the spine:

- The *cervical* spine is in the neck area, between the shoulders and the base of the head.
- The *thoracic* spine is in the chest area.
- The *lumbar* spine is in the low back area.
- The *sacrum*, or *sacral* spine is at the base of the spine. It is mostly solid bone but has some nerve roots that connect with the spinal cord.

Low back (lumbar) area:

- Nausea and/or vomiting
- Diarrhea

Sacrum area:

- Diarrhea

Skin Reactions

Skin reactions vary in severity, based on the amount of radiation given. They include:

- Increased redness
- Dryness
- Itching
- Flaking
- Blistering or skin breakdown

Use soaps without additives, and lotions without oils or fragrances, on the treatment area. Talk with your nurse about products you can use during treatment.

Fatigue

During radiation treatment, the body uses a lot of energy. Stress related to your illness, daily trips for treatment, and the effects of radiation on normal cells all add to fatigue. The level of fatigue varies with each person and may take 1 to 2 months to resolve after radiation is done.

Pace your activities and make note of the times you are most tired. Add rest periods to your daily schedule to avoid becoming over-tired. Studies show that mild exercise and maintenance of your normal activity help decrease overall fatigue.

Sore Throat, Swallowing Difficulties, or Heartburn

The *mucous membranes* (the moist, inner lining of some organs) in your throat may become dry and sore, making swallowing uncomfortable or difficult. Drink plenty of liquids each day to help soothe this irritation. There are mouthwashes and medicines that can also help.

Chest or *thoracic* (upper) spinal radiation may irritate your *esophagus* (the tube to the stomach). You may feel heartburn, fullness in your stomach, or feel like there is a lump in your throat when you swallow. We have a numbing medicine that helps with this discomfort.

It may help to only eat foods that are soft, smooth, and moist. Eating smaller amounts more often can support good nutrition.

Nausea, Vomiting, or Diarrhea

Nausea, vomiting, and diarrhea are temporary reactions. We have medicines that can help with these symptoms.

Neurological Reactions

You may already have neurological symptoms because of the disease in your spine. Your radiation oncologist will talk with you about what to expect during and after your treatment. We expect your symptoms will stabilize and may improve during treatment. Tell your doctor or nurse if your neurological symptoms change or get worse in any way.

Questions?

Your questions are important. If you have questions or concerns, the best way to contact your doctor is to send them a message through MyChart. Please include a photo if relevant.

You may also call UWMC Radiation Oncology:

Weekdays from 8 a.m. to 5 p.m., call UWMC Cancer Center at 206.598.4100. Press 1 after the call goes through.

After hours and on weekends and holidays, call 206.598.6190 and ask for the Radiation Oncology resident on call to be paged.

Bone Marrow Suppression (Low Counts)

Bone marrow (the inside of the bones) makes red blood cells that carry oxygen, white blood cells that fight infection, and platelets that help clot the blood. Bone marrow is made in the large bones in an adult (pelvis, thigh bones, breastbone, and spine) and in all bones in a child.

Bone marrow is very sensitive to radiation. When bone marrow-producing bones are in the radiation area, your blood counts may be affected. If we think this will happen, we will ask you to have your blood drawn regularly to check your counts. Your results will be available the day after your blood is drawn. Your nurse can give you the results.

Other Side Effects

It is possible that less common side effects may also occur. Talk with your doctor or nurse if you have any other symptoms or concerns.