

When you return to begin your treatments, you will meet the radiation therapists who deliver your daily treatments. Treatments are scheduled Monday through Friday. The exact number of treatments will be determined by your physician and is designed to best meet your specific treatment needs.

Radiation therapy is closed for certain holidays, and you will be notified if a holiday occurs during your course of treatment. Due

to the number of patients under treatment and emergency hospital patients, there can be delays in the time of your daily treatment. We appreciate your patience.

Radiation to bones generally represents palliative treatment to help patients improve pain control and mobility. This is intended to help you maintain maximal functional status and, therefore, general quality of life.

Side Effects

At your initial consultation, your radiation physician reviewed the anticipated results and side effects of the radiation plan determined to best fit your needs. This handout is to acquaint you with some of the most common side effects that can occur because of your treatment. It will also explain some of the things that can be done to help manage these side effects.

It is important to remember that most people do not experience all of the side effects mentioned here. Please keep us informed of your particular needs so that appropriate recommendations can be provided for you.

Side effects of bone irradiation are quite variable. These are related to the area of the body treated, total radiation dose, number of treatments, administration of chemotherapy during treatment, and individual patient factors.

The most common side effects by area of treatment include the following:

- Scalp – hair loss, scalp irritation
- Cervical spine – skin reactions, sore throat
- Thoracic spine – skin reactions, difficulty swallowing, nausea
- Chest (ribs, collarbone or shoulders) – skin reactions
- Lumbar spine – skin reactions, diarrhea, nausea

- Pelvis/Hips – skin reactions, diarrhea, bladder irritation, nausea
- Long bones (arms/legs) – skin reactions

Skin Reactions

Skin irritation from bone irradiation is generally just mild redness/itching that occurs approximately 2 weeks after treatment begins.

Over the long term, the skin may have pigment changes (lighter or darker) and the skin may feel firm and thickened (i.e., leathery) in the treatment area.

Bone Metastasis Precautions

If your cancer has spread to weight-bearing bones, such as the spine, hips, legs, and arms, you may need to reduce stress on these bones to decrease the chance of bone fracture.

Although it is important to stay as active as possible, you must keep a balance between exercise and rest. Fractures can occur even with non-stressful movement.

To avoid stress on fragile bones:

- Scoot heavy objects instead of lifting.
- Delegate large household tasks. Break moderate tasks into small segments.
- Move about as much as is comfortable, avoiding prolonged pressure on affected bones.
- Avoid prolonged holding or carrying of heavy items.

- Use your largest unaffected bones for balance and weight-bearing to open heavy doors.

- **If an activity causes pain, don't do it.**

To maintain good posture and practice good home safety:

- Keep walking areas free from objects.
- Use rubber backing on throw rugs or remove them.
- Use rubber strips in bathtub and shower, or a shower chair.
- Wear shoes that support feet and do not easily slip off.
- Use extreme caution on walkways that are wet or on uneven ground.
- Do not twist or turn body; keep your nose and toes pointing the same direction when walking.

Some signs of a fracture or symptoms to report to our clinical staff include:

- increased pain or swelling in the affected area
- grating or crunching sounds with exercise or movement
- area over painful bone is reddened and warmer
- weakness, heaviness, or numbness of your arm(s) or leg(s)
- difficulty moving your arm or leg
- loss of control of bowels
- problems in holding urine or unable to urinate
- pain with coughing or deep breathing.

Pain Management

The main goal of the radiation therapy is to relieve pain. Maximum pain relief usually occurs 7 to 14 days following the completion of your radiation therapy. Continue taking your pain medications until your pain improves. Then you should gradually decrease the amount of medication.

Managing your pain is important. Our clinical staff needs to know:

- The name and dose of the pain medication and how often you take the medication.
- How well or for how long the pain medication relieves your pain.
- Other things you do to help relieve the pain (i.e., other medications, heat, relaxation, etc.).
- If your pain has been difficult to control, keeping a pain medication log will be essential for helping you with the appropriate changes in your pain medications. Please keep an ongoing record of what pain medications you take and when you take them (please see the log sheet attached).

Constipation

Constipation is extremely common when patients are receiving pain medications. The stool becomes hard in consistency and can be difficult to pass. Symptoms of constipation can include 1 or more of the following:

- small, hard stool
- stomachache or cramps
- passing of excessive gas or belching frequently
- belly appears puffy or blown up
- no regular bowel movement in recent 3 days
- feeling of fullness or discomfort.

NOTE: If you are on pain medications or experience constipation, please alert our clinical staff. They will provide you with general information and interventions to manage your constipation.

Nutrition/Appetite

It is unusual for patients to experience appetite changes during bone irradiation. Sometimes patients may already be experiencing decreased appetite due to their underlying disease itself, prior treatments (i.e., surgery or chemotherapy), or other general medical issues.

Nutrition is an important part of your therapy, and weight maintenance is recommended. Eating well helps maintain your strength and energy and provides building blocks for repair of normal tissues. You will feel better and, thus, be more able to cope with your therapy and possible side effects. If you are having difficulty eating, please inform our clinical staff so appropriate recommendations may be provided for you.

Fatigue

Fatigue is common in patients with cancer. This can result from a combination of factors. The act of going to radiation treatments 5 times a week can result in some decrease in your energy level.

Strategies you can use to reduce energy expenditure:

- Planning/scheduling activities (e.g., spreading chores over the course of the week; planning to take a nap in the afternoon).

- Decreasing non-essential activities, such as cleaning, cooking, or socializing.
- Increasing dependence on others (allowing family members or friends to assist in housework, childcare, and shopping).

Other activities that patients have reported helpful in reducing their fatigue during treatment include:

- Walking/light exercise
- Distractions (gardening, listening to music)
- Balancing pleasurable activities with work activities

While Receiving Radiation

You will be seeing a radiation physician at least one time per week during treatment. They will be assessing your progress and making recommendations to you on changes in your care program as needed. Our clinical staff will be available at any time if you have questions or concerns that need to be addressed between these scheduled weekly visits.