

Bone Metastasis Radiation Treatment Guide

Cancer that starts in one part of the body can sometimes spread to other areas of the body. If cancer spreads to the bone, it is called bone metastasis. Radiation treatment uses high-energy x-rays to pinpoint and kill cancer cells. Radiation is very common treatment for cancer that has spread to the bone. Radiation often works very well at reducing pain caused by cancer that has spread to a bone.

Painful bone metastases can sometimes be treated with one radiation treatment but can often require 1 to 2 weeks of treatment. Treatments are painless. They are much like receiving an x-ray. You will not be radioactive after receiving radiation treatment, so do not worry about any risks to your family and friends. You should be able to go home after treatment.

Radiation treatment takes time to work. Most patients who receive radiation for bone metastasis have pain relief. Some patients will have pain relief within days, while others may not feel relief until a few weeks later. Some patients may only have mild pain relief. Other patients have pain relief in the beginning, but then have pain that gets worse later. If this happens, more testing and radiation treatment may be needed.

Your Care Team

Your radiation oncologist (radiation doctor) works with a care team to plan and deliver your radiation treatment. Your radiation care team often includes an advance practice provider (APP), a radiation nurse, patient access services (PAS), and a radiation therapist. A radiation therapist will give you your treatment and will be with you for every appointment.

Treatment Goals

The treatment goals for patients with bone metastases include:

- Improving pain control
- Maintaining and restoring function of the bone
- Reducing complications of bone metastases (such as spinal cord compression and fractures)
- Controlling tumor growth

What to Expect

Consult Visit

During your consult visit, you will meet your radiation doctor who will talk with you about treatment. Your doctor will discuss if radiation may help you. They will explain the treatment and possible side effects. If you agree to have treatment, you will be asked to sign a consent form.

Tell your doctor if you have any of the following:

- Electronic medical device (pacemaker, defibrillator, neuro-stimulator, drug infusion pump)
- Previous radiation treatment
- Problems lying flat on a table
- If you are or may be pregnant

Before the consult visit, you may be asked to have scans, such as x-rays or an MRI (if these have not already been done). This will help your doctor know more about your bone metastasis before the consult visit. You may also need to meet with an orthopedic surgeon. If you do, your radiation care team will coordinate this.

Simulation

Before receiving treatment, you will have a planning session, called a simulation. Your radiation care team will take a CT scan (computerized tomography) so that your doctor can locate the exact area to be treated.

During simulation, you will be placed in the same position as you will be during treatment. Special molds may be used to help reproduce your position during treatment. For example, a plastic mask may be used if your head, neck or face is treated. After your doctor approves the CT scan, the radiation therapist will mark the area on your skin that will be treated.

After the simulation, your doctor will plan your treatment. This planning process can take 7-10 business days

Your daily treatment time request will be noted at the time of your simulation. If you need to change your treatment schedule, talk with the radiation therapist.

Radiation Treatment

When you arrive for your appointments, check in at the Radiation Oncology Department registration desk.

Before treatment, you may be asked to put on a gown or remove some clothes to allow the treatment area marks to show. The radiation therapist will position you on the table and then leave the room. The therapist will monitor you by closed-circuit television and talk with you through an intercom. Try to relax and breathe normally. You should not feel pain. If you need something, tell the radiation therapist. They will pause the treatment and come into the room. The radiation stops when the machine is off.

If you have 3 or more treatments, you may meet with your radiation doctor. These are called weekly on-treatment visits.

Family members or caregivers **are not allowed** in the simulation or treatment rooms during scans or treatments for their safety. The radiation therapist can see and talk to you by closed-circuit TV and a two-way intercom.

Side Effects

Side effects depend on the part of the body being treated. Most side effects will go away within a few weeks after treatment stops. Your radiation care team will review side effects with you during your consult visit.

Common Side Effects

If you have any of these side effects, tell a member of your radiation care team.

- **Pain flare** – This is a temporary flare-up of pain. Pain usually starts a few days after treatment begins and lasts until a few days after treatment ends. Your radiation care team may prescribe more pain medicine for you to take during this time. They may also prescribe medicine to **prevent** pain flare.
- **Fatigue** – You may feel tired, weak or like you have no energy. During treatment, your body may use more energy to repair tissue. Fatigue may get worse throughout your course of treatment. It can last 3 to 4 weeks after treatment and may possibly last up to 2 to 3 months. It is important to continue your daily routine, but do not do too much.
- **Loss of appetite and nausea** – You may not feel like eating. This side effect is common if your abdomen or mouth is in the treatment area. If so, try eating several small meals or snacks throughout the day instead of 3 big meals. A dietitian can give you more tips on eating. Your doctor may prescribe anti-nausea medicine if needed.
- **Swallowing problems** – If your neck or chest is in the treatment area, you may have problems swallowing after the first 1 to 2 weeks of treatment. If pain prevents you from eating and drinking enough, your doctor will prescribe medicine to help manage pain.
- **Diarrhea** – If your abdomen is in the treatment area, you may have loose stools or diarrhea. You may take over-the-counter Loperamide (Imodium®) to control diarrhea.
- **Urinary problems** – If your bladder is in the treatment area, you may feel burning when you urinate or have a need to urinate more often. Drinking at least 64 to 80 ounces of water each day will help with symptoms. Avoid drinks with caffeine, such as soda, tea, coffee and alcohol.
- **Skin changes** – You may notice minor dryness, flaking, redness and/or itching of the skin. You may use over-the-counter Aquaphor® to prevent and treat these skin problems.
- **Hair loss** – You may lose hair only in the area being treated.
- **Other side effects** – You may receive handouts that will help you manage other side effects not listed here. If you have questions, ask your radiation care team.
- Keep in mind, you **will not** get **all** of the listed side effects. Some of these side effects depend on the body part being treated.

Patient Education



Reporting Side Effects

If you have problems with side effects, **do not wait** for your weekly clinic visit. Tell a member of your care team right away.

Emergency Care

In case of an emergency, call 911 or go to the nearest hospital emergency center.