

# YOUR TREATMENT TOOLKIT

Palliative Radiotherapy  
(Bone Metastases)  
Supportive Care Guide

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Version 1.1 | March 2026  
Evidence-based protocols from ASCO, ASTRO, NCCN guidelines  
and bone metastases management literature

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## Welcome

Palliative radiation therapy is **different from curative radiation**. Our goal is to relieve your pain and improve your quality of life, not to cure the cancer. The good news: this treatment is **short** (usually 1–10 fractions, not 30+), and side effects are typically **milder and shorter** than long courses of radiation.

This guide explains what to expect, how to manage pain and bone safety, and when to contact us. **Read it. Keep it handy. Ask questions.**

## Your Treatment Timeline

Treatment Type	Duration	What to Expect
Single Fraction	1 day	Quick treatment. Pain relief often begins within 1–2 weeks.
Short Course	1–2 weeks	Multiple sessions. Pain relief typically within 2–4 weeks.
Recovery Phase	2–4 weeks	Side effects are mild. Most patients manage at home.
Pain Assessment	4+ weeks	We reassess pain relief. Retreatment possible if needed.

## The Golden Rules

### 1. Pain Relief is the Goal

We are treating your pain, not trying to cure the cancer with this radiation. If your pain does not improve after 2–4 weeks, tell us. We have more options.

### 2. Pain Flare is Real (and Temporary)

Up to 40% of patients experience a temporary **increase** in pain for 2–5 days after treatment, before it gets better. This is not a sign that treatment failed. Take your pain medications on schedule. We may give you steroids to prevent this.

### 3. Protect Your Bones

Bone metastases weaken bones. Avoid heavy lifting (nothing over 10–15 lbs), sudden twisting, and falls. Use assistive devices (cane, walker) if weight-bearing bones are affected. Watch for signs of fracture.

### 4. Keep Taking Your Other Medications

Palliative radiation works **alongside** chemotherapy, immunotherapy, and other cancer treatments. Do not stop anything unless your team tells you to.

## Section 1 — Pain Flare: What to Expect

*A temporary increase in pain called a pain flare can happen within the first few days after treatment. Without preventive steroids, this has been reported in roughly one-third of patients after standard palliative RT, though rates vary by technique.*

### Why Does Pain Flare Happen?

Radiation causes inflammation in the tumor and surrounding bone. This inflammation is part of the healing process, but it can hurt for a few days. It usually improves after the inflammation resolves.

### What You Should Do

1. **Continue your current pain medications.** Do NOT reduce them because you had treatment. Your body needs them now more than ever.
2. **Your doctor may prescribe dexamethasone** to reduce inflammation and prevent pain flare. For some single-fraction treatments, the evidence-based regimen is 8 mg orally at least 1 hour before treatment, then 8 mg daily for 4 additional days (5 days total). In a phase III trial, this reduced pain flare from 35% to 26%.
3. **Ice packs over the treated area:** 20 minutes on, 20 minutes off, several times daily. This helps with inflammation.
4. **Be patient with pain relief.** Radiation pain relief takes **1–4 weeks** to fully develop. You may not feel relief immediately. This is normal.

### Red Flag: When to Call

**If pain is worse than before treatment and not improving after 5 days:** Call us. We can adjust your medications or investigate further.

## Section 2 — Pain Management

Pain is a symptom. Pain medications are **your friend** during this time. Taking them as prescribed does NOT mean you are weak or drug-seeking.

### The Pain Ladder

Severity	Treatment
<b>Mild Pain</b>	Acetaminophen (Tylenol) 500–1000mg every 6 hours, scheduled
<b>Moderate Pain</b>	NSAID (ibuprofen/naproxen) + acetaminophen, OR weak opioid (hydrocodone)
<b>Moderate-Severe</b>	Opioid medications (oxycodone, morphine). Take as prescribed, on schedule.
<b>Severe/Crisis</b>	Strong opioids (long-acting morphine, fentanyl patches) + breakthrough medications

## Key Principles

- **Stay ahead of pain.** Take medications on a schedule, not just when pain spikes.
- **Breakthrough pain:** Quick-acting medication for sudden pain spikes between scheduled doses.
- **Report pain honestly.** We adjust regimens at every visit.
- **Constipation from opioids:** WILL happen. Start a stimulant laxative (senna) and/or polyethylene glycol (MiraLAX) the SAME DAY you start opioids. Stool softener alone (docusate) is not enough. If stimulant + PEG regimens fail, prescription agents (methylnaltrexone, naldemedine, naloxegol) are guideline-supported next options — ask your team.
- **Nausea from opioids:** Usually improves after 3–5 days. Zofran or ginger can help.
- **Drowsiness:** Avoid driving/machinery initially. Usually improves after a few days.
- **Never stop opioids abruptly** after regular use. Taper with your team to avoid withdrawal.

## Section 3 — Bone Safety & Fracture Prevention

Bone metastases are like “**termites in wood**” — they tunnel through bone, weakening it from inside. The bone may look normal on the surface but is fragile inside. A pathologic fracture (break through a weak spot) is an emergency.

### Prevention Strategies

1. **Avoid heavy lifting.** Nothing over 10–15 lbs in the area where metastases are located.
2. **Use assistive devices.** If spine, hip, or leg bones are affected: walker, cane, or brace. Your physical therapist will help.
3. **Move carefully.** Get up slowly from lying down. Avoid sudden twists or jerking motions.
4. **Fall prevention.** Remove tripping hazards at home (rugs, cords). Use grab bars in bathroom. Non-slip mats in shower.
5. **Log-roll if spine is affected.** Turn your body as a single unit (like a log rolling). Do not twist.

### Bone-Strengthening Medications

Your oncologist may prescribe **bisphosphonates** (zoledronic acid/Zometa) or **denosumab** (Xgeva) to strengthen bones and reduce fracture risk. These are given separately from radiation.

- **Calcium + Vitamin D:** Take supplementation as recommended by your team.

### Red Flags: Possible Fracture

- **Sudden severe pain in a bone area** (worse than baseline)
- **Inability to bear weight** on an affected limb
- **New deformity** (visible swelling or bend in limb)
- **Snap or pop felt at time of injury**

**If you experience any of these: GO TO THE ER.** X-rays can confirm or rule out fracture. Fractures may need bracing, surgery, or additional radiation.

## Section 4 — Spinal Cord Compression: EMERGENCY

*Spinal cord compression is a TRUE MEDICAL EMERGENCY. Symptoms can progress to permanent paralysis within 24–48 hours. If you have ANY of these symptoms, go to the ER immediately.*

### Symptoms to Watch For

- **New or rapidly worsening back pain**
- **Weakness or numbness in legs** (or arms if neck is affected)
- **Difficulty walking, unsteady gait, or foot drag**
- **Loss of bladder control** (inability to urinate or sudden incontinence)
- **Loss of bowel control** (new incontinence or inability to pass stool)
- **Saddle numbness** (numbness in buttocks and inner thighs)

**If you experience ANY of the above: CALL 911 or GO TO THE ER IMMEDIATELY.** Call us on the way if possible. Delay of even 24 hours can mean permanent paralysis. Doctors often start dexamethasone right away (typically 16 mg daily per current guidelines) while arranging urgent MRI and treatment. When feasible, surgery followed by postoperative radiation is preferred over radiation alone.

## Section 5 — Side Effects (by Treatment Location)

Palliative radiation causes **mild** side effects for most patients, and they resolve quickly. Below is what to expect based on where the radiation is aimed.

### Spine & Pelvis

- **Nausea:** Usually mild. Zofran or ginger helps. Eat small, frequent meals.
- **Diarrhea:** Mild, typically 1–2 weeks. Loperamide (Imodium) can help. Avoid high-fiber foods.
- **Fatigue:** Usually mild. Rest when needed, stay active when possible.

### Ribs & Chest Wall

- **Skin irritation:** Mild redness that resolves in 1–2 weeks.
- **Cough:** Possible if lungs are in the field. Usually resolves within 2–4 weeks.
- **Shortness of breath:** If it develops or worsens, call us.

### Arms & Legs (Extremity Metastases)

- **Minimal side effects.** Skin may be slightly red at the treatment area.
- **Swelling:** Possible but usually mild. Elevation and compression (if tolerated) help.

## Shoulder & Hip

- **Stiffness:** Gentle range-of-motion exercises help.
- **Skin changes:** Mild redness or darkening. Resolves over weeks.

## General

- **Fatigue:** Short-course palliative RT causes MILD fatigue, much less than long curative courses.
- **Skin:** Mild redness at treatment site, resolves in 1–2 weeks. Use gentle moisturizer (Aquaphor, Eucerin).

## Section 6 — Retreatment

If your pain returns months or years later in the same bone area, **we can often re-treat that area**. Retreatment is safe in many situations. A systematic review found an overall pain response around 68%, and many patients report improved pain and quality of life.

**If pain returns: Tell us. Do not assume nothing more can be done.** We have many tools to help manage your pain.

## SBRT (Stereotactic Body Radiation)

For some patients who are otherwise doing well, a more focused treatment called SBRT may be considered. Per the ASTRO 2024 update, SBRT is conditionally recommended over conventional palliative RT in selected good-performance-status patients without neurologic symptoms and without surgical intervention. It is not the default for everyone, and the choice depends on prognosis, tumor location, prior radiation, and whether there are neurologic symptoms.

## Cement Augmentation

For selected vertebral compression fractures or mechanical instability, procedures such as kyphoplasty or vertebroplasty may be used alongside radiation to stabilize the bone and relieve pain. These do not replace radiation for localized bone metastases.

## Section 7 — Fatigue & Daily Life

Fatigue from short-course palliative radiation is usually **mild**, much milder than long curative courses. Most patients can continue daily activities during treatment.

- **Rest when needed.** Your body is healing.
- **Stay active when possible.** Light walking encourages blood flow and mood.
- **Accept help.** Let family and friends assist with meals, errands, chores.

## Section 8 — Nutrition & Hydration

Good nutrition supports healing and maintains strength. Hydration is essential for all treatments.

### General Guidelines

1. **Protein intake:** Aim for adequate protein (discuss target with dietitian).
2. **Hydration:** Drink 64 oz (2 liters) of water daily as a baseline.
3. **Avoid irritants** if nausea occurs: spicy, greasy, very hot foods.
4. **Eat frequent small meals** rather than 3 large ones if appetite is reduced.

### If Nauseous

- **Small, frequent meals** with bland foods (crackers, toast, plain chicken).
- **Ginger tea** or candied ginger can ease nausea.
- **Zofran (ondansetron)** may be prescribed to prevent nausea.
- **Nutritional supplements:** Ensure, Boost shakes if appetite is very poor.

### If Appetite is Poor

- **Ensure Max Protein** or **Boost Very High Calorie:** Drink these cold, like ice cream.
- **Small frequent sips** rather than trying to drink full cans at once.

## Section 9 — Emotional Support & Goals of Care

A cancer diagnosis with bone metastases is **genuinely difficult**. Feeling anxious, sad, angry, or overwhelmed is **normal**, not weakness.

### Support Resources

- **Palliative care team:** Specialists in symptom management and quality of life.
- **Social worker:** Helps with practical needs (financial, legal, family support).
- **Chaplain or spiritual counselor:** Available regardless of faith.
- **Support groups:** Connect with others having similar experiences.
- **Mental health counselor:** If anxiety or depression is interfering with daily life, we can help.

### Goals of Care Conversations

Discussing what matters most to you — priorities, values, fears — is important. These conversations help us provide care that aligns with **your** values, not just medical defaults.

- **Advance directives:** Document your wishes if you become unable to make decisions.
- **Healthcare proxy:** Designate someone you trust to make medical decisions for you.

- **Hospice is NOT giving up.** It is expert symptom management, comfort care, and support when cure is no longer the goal. Many patients live months or years with high quality of life on hospice.

## For Caregivers

- **You matter too.** Caregiver burnout is real. Ask about respite care.
- **Help with practical needs:** Meal prep, transportation, medication management.
- **Attend appointments** if the patient wants support.
- **Listen without trying to fix.** Sometimes people just need to be heard.

## Red Flags: When to Call or Go to the ER

Call us immediately if you experience any of the following:

Symptom	Why It Matters
Sudden severe bone pain with inability to bear weight	Possible pathologic fracture — ER
New leg weakness or numbness	Possible spinal cord compression — ER
Loss of bladder or bowel control	Possible spinal cord compression — ER
Fever over 100.4°F	Possible infection
Pain significantly worse 1 week after treatment	May need re-evaluation
New or worsening shortness of breath	Multiple causes — needs assessment
Confusion or altered mental status	Urgent evaluation needed
Fall with new pain or deformity	Possible fracture — needs imaging
Uncontrolled nausea/vomiting	Dehydration risk
Chest pain or severe pressure	Possible cardiac issue — ER

## Long-Term Considerations

*Palliative care is ongoing. These are important for your continued quality of life.*

### Pain Reassessment

We will reassess your pain at follow-up visits (typically 2–4 weeks after treatment). If pain is not improving, we can try different medications, repeater, or other approaches.

### Retreatment Options

If pain returns months or years later, we can often re-treat the same area. **Do not hesitate to contact us if pain recurs.**

### Bone-Strengthening Agents

Your oncologist may continue bisphosphonates or denosumab long-term to reduce fracture risk.

### Orthopedic Evaluation

If bones are very weak or fractures occur, orthopedic surgery may be an option. We can discuss with orthopedics if appropriate.

## Ongoing Palliative Care Coordination

Your oncology team, palliative care team, and primary care doctor should communicate. This ensures you get coordinated, comprehensive care.

## Recommended Products

Below are products commonly recommended for bone metastases management. These are suggestions, not endorsements — equivalent brands work fine.

Category	Product	Cost	Notes
<b>Pain Management</b>	Pill organizer (7-day)	~\$8	
<b>Pain Management</b>	Ice packs (reusable set)	~\$10	
<b>Pain Management</b>	Heating pad (electric)	~\$20	
<b>Bone Safety</b>	Non-slip bath mat	~\$15	
<b>Bone Safety</b>	Grab bars (bathroom)	~\$25	
<b>Bone Safety</b>	Reacher/grabber tool	~\$12	
<b>Mobility</b>	Walking cane	~\$20	
<b>Mobility</b>	Shower chair	~\$35	
<b>Mobility</b>	Walker (if needed)	~\$40	
<b>Constipation</b>	Senna (stimulant laxative)	~\$8	
<b>Constipation</b>	MiraLAX/polyethylene glycol	~\$15	
<b>Nutrition</b>	Ensure Max Protein shakes	~\$28/12pk	
<b>Nutrition</b>	Boost Very High Calorie	~\$30/12pk	
<b>Nutrition</b>	Ginger chews	~\$8	
<b>Comfort</b>	Memory foam mattress topper	~\$50	
<b>Comfort</b>	Body pillow	~\$25	

*Pain medications (opioids, anti-nausea, anti-inflammatory) will be prescribed by your care team.*

## Important Contact Information

### Main Line Health — Radiation Oncology

100 East Lancaster Ave · Rosengarten Bldg, Basement · Wynnewood, PA 19096

1078 West Baltimore Pike · Health Center 1, Ground Floor · Media, PA 19063

### Phone

**Appointment Line: 1.866.CALL.MLH (1.866.225.5654)**

**If you are experiencing a life-threatening emergency, call 911.**

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Document Version 1.1 | March 2026

# My Treatment Journal

A place to notice patterns, remember questions, and track what helps.

*You do not need to fill this out perfectly. Even a few notes can help you see patterns, remember what worked, and tell your care team what is actually happening at home.*

## This Week

Week of / goals / anything I especially want help with

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## Daily Check-In

Day / Date	Energy (0-10)	Pain (0-10)	Eating / Drinking	Sleep	Main note
Mon					
Tue					
Wed					
Thu					
Fri					
Sat					
Sun					

## Symptoms I Want to Watch

<input type="checkbox"/> Pain level	<input type="checkbox"/> Pain medicine timing	<input type="checkbox"/> Walking / function
<input type="checkbox"/> Sleep	<input type="checkbox"/> Constipation / nausea	<input type="checkbox"/> New weakness / numbness
<input type="checkbox"/> Other: _____		

## What I Tried / What Helped

Use this page to test small changes and keep track of what helps, what does not, and what you want to ask about next.

Problem or symptom	What I tried	Did it help?	Next step / question

*Examples: taking pain medicine before meals, changing skin care timing, drinking earlier in the day, using a humidifier, adjusting fiber, walking after treatment, or asking for a refill.*

## Questions for My Care Team

Bring this page to visits. Small questions are worth writing down, especially when treatment days start to run together.

Symptoms or side effects I want to mention

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Medication, refill, or product questions

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Eating, drinking, bowel, bladder, skin, sleep, or activity questions

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Logistics: appointments, transportation, work, family, forms

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One thing I keep forgetting to ask

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