



PATIENT EDUCATION

Heterotopic ossification & prophylactic radiation

A plain-language guide for patients and families. Bring this to your visit. It does not replace advice from your clinician.

What is heterotopic ossification?

Heterotopic ossification (HO) is bone that forms in soft tissue where bone does not belong — often around a hip or other joint after major orthopedic surgery, fracture, or neurologic injury. The extra bone can cause pain, stiffness, and loss of motion. It is not cancer.

What you may notice

- Increasing pain or warmth around a joint after surgery or injury
- Progressive stiffness and reduced range of motion
- Difficulty with walking, sitting, or daily tasks as motion decreases
- Imaging (X-ray or CT) later showing bone in soft tissue near the joint

Usual care options

Prevention is the main strategy in high-risk patients (for example, certain hip surgeries). Options can include anti-inflammatory medicines when appropriate, careful surgical technique, and **a single low-dose radiation treatment** given around the time of surgery to lower the chance that extra bone forms. Established HO that already blocks motion may need surgical removal plus prevention of recurrence.

Where CureRays may fit. For selected high-risk orthopedic patients, CureRays coordinates **prophylactic low-dose radiation** (often a single fraction) timed with surgery to help reduce the risk of heterotopic bone. Your orthopedic and radiation teams plan timing together.

What treatment usually involves

- Joint planning with your orthopedic surgeon about risk and timing
- Often a single outpatient radiation session shortly before or after surgery (timing is individualized)
- Careful targeting of the soft-tissue zone at risk while protecting structures that should be spared
- Return to your orthopedic recovery plan the same day regarding radiation
- Follow-up imaging and motion checks as your surgeons recommend

Why timing matters

Radiation works best as **prevention** when given close to the surgical window, before mature bone has formed in the soft tissue. It does not dissolve large, already-mature heterotopic bone by itself. If HO is already limiting motion, surgery plus preventive measures (which may include radiation) may be discussed.



Side effects you should know about

A single low-dose prophylactic treatment is usually brief. Discuss personal risks; common themes include:

- **Skin.** Mild temporary redness over the field can occur.
- **Fatigue.** Usually minimal after a single session.
- **Wound healing.** Your teams coordinate so radiation timing supports — not undermines — surgical healing.
- **Rare / serious.** Fever, wound problems, or sudden calf pain/swelling need urgent evaluation per your surgeons' instructions.

Evidence in plain words

Prophylactic radiation around high-risk hip surgery has been studied as a way to reduce heterotopic ossification. A VA evidence review notes radiation may reduce HO occurrence; function outcomes vary by study. We do not invent a personal risk-reduction percentage here — your orthopedic and radiation team will cite the regimen they use and what it aims to achieve for you.

What this means for you at CureRays

If you are having high-risk joint surgery, a coordinated single radiation treatment may be offered to help keep extra bone from forming. CureRays works with your surgical team on timing and targeting.

Questions to ask

- Am I at high enough risk of HO that prophylaxis is recommended?
- Will radiation be before or after surgery, and how does that affect my wound care?
- What medicines (such as NSAIDs) are also part of the plan — or not, for my case?
- How will we watch for HO during recovery?

How to schedule or learn more

CureRays Radiation Medicine® — 300 Sierra College Drive, Suite 150, Grass Valley, CA 95945

Toll free: **(844) CURE RAYS** / (844) 287-3729 · Office: (530) 802-6400 · office@curerays.com · www.curerays.com

Learn more: www.curerays.com/conditions

Important. Educational only — not a diagnosis, prescription, or guarantee. Radiation decisions require a clinician who knows your history, exam, and imaging. Percentages appear only when tied to a named source; many handouts intentionally omit rates rather than invent them. © 2026 CureRays Global Inc. · Keep Cancer Away® · Keep Arthritis Away® · Printout v1