



Your orthopedic surgeon has recommended a single, low-dose radiation treatment to help prevent abnormal bone growth in the soft tissue—a condition known as heterotopic ossification—following your joint injury or surgery.

Radiation Therapy to Prevent Abnormal Bone Growth (Heterotopic Ossification)

What is Radiation Therapy?

Radiation therapy involves the use of high-energy x-rays to treat both cancerous and non-cancerous conditions. In this case, it is used to prevent unwanted bone formation by stopping the growth and division of specific cells.

What You Can Expect

This treatment is typically administered between 24 hours before and 72 hours after your surgery. You will meet with a radiation oncologist and a nurse, who will conduct a brief examination and explain the procedure and what to expect afterward.

If your treatment is scheduled after surgery, the radiation therapy team will coordinate with your nurse to bring you to the treatment area. You will be transported on a cart and given medication in advance to help manage any pain, making the transfer between surfaces more comfortable.

Preparation

Before receiving radiation therapy, you will undergo a CT scan and have some measurements taken by a radiation therapist, under the guidance of your radiation oncologist. The CT scan is essential for planning your treatment accurately. After the scan, marks will be drawn on your skin to guide proper alignment during the procedure. These marks are used during setup, and final treatment calculations—which take about 30 minutes—will be completed while you rest on your cart or in the waiting room.

During Treatment

The treatment itself is painless and similar to having an x-ray. You will not feel the radiation, and it will not make you radioactive. The entire process typically takes 10 to 15 minutes once you are in the treatment room. If you are on a cart, you will be transferred from your cart to the treatment table. Your therapist will position you precisely, using the skin marks and planning images as guides. It is essential that you remain still during this time.

After the Treatment

Following your session, you can return to your hospital room and resume normal postoperative activities. If the radiation was administered before your surgery, you may leave afterward and follow the preoperative instructions provided by your surgeon.

Skin Reactions

Important: These are general skin care guidelines. If your surgeon has provided different instructions, please follow their recommendations.

Some temporary skin changes may develop in the treated area, such as redness, dryness, flaking, or itching. These side effects typically resolve within a few days. To care for your skin:

- Use gentle, mild soap while bathing.
- Apply moisturizers to soothe dryness.
- Avoid heating pads, hot water bottles, or ice packs on the treated area.

Long-Term Skin Sensitivity

The treated skin may become permanently more sensitive to temperature changes. If the area is exposed to sunlight, always apply sunscreen—preferably PABA-free and with an SPF of 30 or higher—especially during the summer months. Additionally, avoid applying medicated patches to the treated area, as the skin may absorb medication differently after radiation.