

Radiation Therapy for the Prevention of Heterotopic Bone Formation

Your physician has recommended radiation treatment to prevent extra bone growth (heterotopic ossification) after your joint replacement surgery. You will receive treatments of a low dose of radiation.

Radiation is the use of x-ray to treat both cancerous and noncancerous conditions. Radiation is effective in preventing extra bone growth by not allowing the cells to grow and divide.

What to Expect

Treatment is usually done within three days following your surgery. You will meet the radiation oncologist and nurse, and a brief exam will be performed. They will explain what you can expect during and after your treatment. Prior to receiving your treatment, you will need to have some x-rays and measurements taken. They will be taken by a radiation therapist under the direction of the radiation oncologist.

These x-rays are used to help plan your treatment. After the x-rays are taken, the therapist will use a marker to outline the treatment area on your skin. Once the marks are placed, calculations will be done and then you will be ready to receive your treatment.

Treatment

The treatment itself is painless — it is just like having an x-ray. You cannot see or feel the radiation. You will not become radioactive.

The radiation treatment should take about 15 minutes from the time you enter the treatment room. Your therapist will set up your treatment according to the marks on your skin and the x-rays taken during planning.

It is very important that you lie still and allow the therapist to position you for your treatment.

You may experience slight skin redness in the treatment area several days after your treatment. It will only last a few days. Your nurse will instruct you in regard to skin care. Do not use a heating pad, hot water bottle, or ice packs in the treatment area.

What to Expect After Treatment

When the treatment is finished, you will be able to return to your hospital room and return to your postoperative activities.

Temporary Skin Changes

Temporary skin changes may occur in the area that was treated. Your skin may become red, dry, scaly, or itchy at the treatment site.

- These changes may last one to two weeks after your treatment ends.

- Use a mild soap when you shower or bathe the area that was treated. Your nurse will recommend a mild soap for you to use.
- Apply moisturizers to your skin as needed.
- Do not use a heating pad, hot water bottle, or ice packs, in the treatment area.

Permanent Skin Changes

Permanent skin changes include increased sensitivity to hot and cold temperatures. If the area being treated is exposed to the sun, apply sunscreen routinely to the treatment site whenever you are outdoors for more than 10 minutes during the summer or winter. A PABA-free sunscreen with a minimum sun protection factor (SPF) of 30 should be used.

Since the area treated will be more sensitive than the rest of your skin, protect the area from sun exposure after your treatment ends. Since the absorption of medication can be permanently changed in the area where you have received radiation, avoid putting medication patches on this skin.