

Radiation Treatment for Sarcoma

This information will help prepare you and your caregiver for your treatment.

What is Sarcoma?

A sarcoma is a type of cancer that starts in tissues like bone or muscle. Bone and soft tissue sarcomas are the main types of sarcoma. Soft tissue sarcomas can develop in soft tissues like fat, muscle, nerves, fibrous tissues, blood vessels, or deep skin tissues. They can be found in any part of the body, though most of them start in the arms or legs. They can also be found in the trunk, head and neck area, internal organs, and the area in the back of the abdominal (belly) cavity, known as the retroperitoneum. Sarcomas are not common tumors.

Radiation Therapy and What to Expect

Radiation therapy uses high-energy rays, such as x-rays, or particles to kill cancer cells. This is a key part of soft tissue sarcoma treatment.

- Radiation is used before surgery to shrink the tumor and make it easier to remove
- Radiation can also be given after surgery; this is done to kill any cancer cells that may be left behind after surgery
- Radiation can affect wound healing, so it may not be started until a month or so after surgery

Radiation can be the main treatment for sarcoma for patients who are not healthy enough to have surgery. Radiation therapy can also be used to help ease symptoms of sarcoma when it has spread.

There are different types of radiation, which include:

- **External Radiation (external beam radiation):** A machine that will direct high-energy rays from outside the body into the tumor. This is done during outpatient visits and is given over many weeks, or at times twice a day for several weeks. A person receiving external radiation is not radioactive and does not have to follow special safety precautions at home.
- **Internal Radiation:** Also called brachytherapy, a radioactive source is placed inside the body into or near the tumor. With some types of brachytherapy, radiation might be placed and left in the body to work. Sometimes, based on the type of cancer, it is placed in the body for a period of time and then removed. Special safety precautions are needed for this type of radiation for a period of time. It is important to know if the internal radiation is left in the body, as after a while it is eventually no longer radioactive.
- **Interoperative Radiation (IORT):** Radiation is given to the areas that are at highest risk, a decision made between the surgeon and radiation oncologist. This occurs while the patient is in the operating room under anesthesia. A person receiving IORT is not radioactive and does not have to follow special safety precautions at home.
- **Systemic Radiation:** Radioactive drugs given by mouth or put into a vein are used to treat certain types of cancer. Once taken or received, these drugs travel throughout the body. You might have to follow special precautions at home for a period of time after these drugs are given.

Side Effects

- Skin changes, such as redness, blistering, or peeling, where the radiation went through the skin
- Fatigue
- Nausea and vomiting
- Diarrhea
- Pain with swallowing (from radiation to the head, neck, or chest)
- Lung damage leading to problems breathing
- Bone weakness, which can lead to future fractures or breaks

Caution

- Report any skin changes to your doctor, nurse, or therapist
- Heating pads and/or very hot water can cause pain or skin irritation to the treatment area
- Hot tubs or saunas are not encouraged while receiving radiation treatment
- **DO NOT** use products with alcohol, including alcohol pads, on your skin in the areas being treated
- **DO NOT** use makeup, perfumes, or powders in the area being treated

Care

- Bathe and shower using warm water and mild unscented soap, such as Dove[®], Cetaphil[®], or baby soap
- **DO NOT** use a washcloth, scrubbing cloth, or brush when bathing
- Pat skin dry with a soft towel or allow to air dry
- **DO NOT** use moisturizers within 2 hours before your radiation treatment
- **DO NOT** dye your hair or use color treatment products (i.e. color treatment shampoos and conditioners)
- Avoid tanning or burning your skin during and after treatment
- Avoid extreme temperatures to the area being treated (hot tubs, heating pads, ice pack)
- A daily vitamin is OK during your treatment; however, **DO NOT** take other vitamins or any supplements, including both nutritional and herbal supplements without talking to your physician

Follow-Up Care

When treatment ends, your physician will still want to watch you closely. It's very important to go to all of your follow-up appointments. During these visits, your physician will ask questions about any problems you have and might do additional testing, such as x-rays and scans, to look for signs of cancer or treatment side effects. Almost any cancer treatment can have side effects. Some may last for a few weeks to months, but others can last the rest of your life. This is the time for you to talk to your

cancer care team about any changes or problems you notice and any questions or concerns you have.

Follow up with your radiation oncologist at 3 and 6 months. After 2-3 years you may go twice a year for another few years. You can expect at least yearly checkups for a long time after that. During this time, it's very important to report any new symptoms to your physician right away so that any problems can be found early when they are easier to treat.

Depending on the type of treatment you had, physical therapy and rehabilitation may be a very important part of recovery.

Contact Us

For any questions or concerns, please reach out to the radiation oncology clinic on MyChart or call **214-645-8525**.