Radiation Therapy

Radiation therapy is a special kind of X-ray treatment. It is different from regular X-rays because it does not take pictures of what is inside the body. Instead, it uses high-energy rays. These rays get rid of cancer cells in your child’s body that make him or her sick.

A doctor with special training, a radiation oncologist, will give the X-ray treatments.

Where Your Child Will Have Treatments

Nationwide Children’s Hospital does not offer radiation therapy. Most children go to The James Cancer Hospital in Columbus for radiation treatments.

If your child is not well enough at first, he might go there in an ambulance. When he feels better he can ride there in a van. A nurse will go with him. After he is home from the hospital, you can drive your child there.

Your first visit to The James Cancer Hospital may take 3 to 4 hours.

- The radiation doctor will explain what to expect during treatments. The doctor will explain side effects your child may have.
- You will meet another doctor from The James who will give your child medicine if he needs it to lie still during the treatment.
- You will sign forms that give permission to start your child’s treatments.
- You will make an appointment to return to plan the treatments.

When you return, your child will have regular X-rays to find the exact spot to give treatments.

A dosimetrist (do SIM e trist) uses a large machine called a simulator to plan radiation treatment (Picture 1). He or she takes measurements and uses ink to mark the part of the body to treat.

Do not wipe off these ink marks during bathing. That way, the doctor can find the exact spot for every treatment. The markings will not hurt your child. Treatments are usually given every day, Monday through Friday for several weeks.
What It Is Like to Have a Treatment

The machines are very large. Computers help the doctor figure out how much radiation your child will need. When your child has treatments, he will lie on a table and be asked to stay very still (Picture 2). The machine will not hurt at all. If your child is too young to lie still, he will receive medicine to make him sleepy during the radiation treatment.

The treatment lasts only a few minutes. You cannot go into the X-ray room with your child but you can see him on a TV monitor outside the room. You can talk to your child while he is being treated. Your child can also listen to music.

Side Effects

Radiation therapy affects some healthy cells as well as cancer cells. However, most of the healthy cells repair themselves while cancer cells usually cannot. Side effects may happen. Side effects depend on the area that is treated. Symptoms may be mild to severe or there may be none at all. Symptoms are not the same for every person.

Sometimes the skin at the radiation site can look sunburned or turn dark. It may be dry or itchy. The radiation doctor can tell you what to do to help your child’s skin. Do not use any lotions until you talk with the radiation doctor.

If radiation is in the stomach area, your child may be sick to his stomach. Avoid food 2 hours before the treatment and 2 hours after. Also, the doctor may write a prescription for a medicine that works against nausea.

If your child has chemotherapy at Nationwide Children’s he will have blood tests there. If he does not go to Nationwide Children’s Hospital for chemotherapy he can have the blood work done at the radiation center.

Help Your Child Feel Better during Treatment

- Offer well-balanced, nutritious meals.
- Encourage him to drink 4 to 6 glasses of liquids each day.
- Do not use heating pads, direct sunlight, sunlamps and ice bags on the area of the body that is treated.
- Tell the doctor if your child starts a new medicine.
When to Call the Doctor

Call the hematologist, radiation oncologist and surgeon if your child has any of these side effects from the treatment:

- Vomiting that lasts more than one day
- Fever equal to or more than 100.5° F
- Mouth sores or painful areas in the mouth
- Headaches, nausea or any of the same symptoms your child had when you first found out about the tumor.

If you have any questions, be sure to ask the doctor or nurse, or call _________________. 