

Your child will be going to the BC Cancer Agency for radiotherapy. Here we describe what usually happens during your child's visit for radiotherapy planning and treatment.

What Is Radiotherapy?

Radiotherapy is a treatment that uses high energy X-rays to destroy cancer cells. It stops the cells from growing and dividing. Radiotherapy is good for destroying cancer cells which divide more rapidly than normal cells. Normal cells have time to repair and heal during radiotherapy.

Radiotherapy may be used alone or with other cancer treatments like chemotherapy and surgery.

You can comfort your child and tell him/her that radiotherapy does not hurt.

Who Will Care for My Child During the Radiotherapy Treatment?

During radiotherapy, your child will be cared for by a team of specialists. This team includes:

- Radiation Oncologists are cancer doctors with special training in radiotherapy. Your radiation oncologist will see your child once a week while you are having your treatment to check that everything is going well.

- Radiation Therapists help plan your child's radiotherapy treatment and give the treatment. They see you everyday when your child has treatment and will help with any questions or problems that you may have.
- Radiation Physicists are experts who maintain the radiation treatment machines (Linear accelerators) and help with treatment planning.
- Pediatric Anesthesiologists from BC Children's Hospital may give your child sedation during radiotherapy planning and treatment. Sometimes children need sedation because they have to stay very still during the treatment. This can be difficult for very young or very anxious children.
- Nurses, dieticians, child-life therapists and others may also help with your child's care.
- Pediatric Oncologists from BC Children's Hospital work closely with the team and any issues are discussed with them.

What Happens During Radiotherapy Treatment?

The Planning Visit

Treatment starts with a planning visit. Usually you will visit the "mould room." A mould is a special mask or "immobilization shell" that will be made for the body part that will be treated.

This does not hurt and the shell will make sure that your child keeps very still during the radiotherapy treatment. The radiation therapist will add marks to the shell. They will use these marks as a reference for all of your child's treatments.

Your child might need sedation for this procedure. The anesthesiologist will talk to you about this before.

After the mould room, you and your child will go to either the simulator room or the CT planning unit. This is where the team either takes an X-ray or does a special CT scan to map out the area of your child's body being treated.

After this visit, the team will make a treatment plan and schedule your child's radiotherapy treatments.

Radiotherapy

Your child will get radiotherapy every day of the week (Monday to Friday) except for weekends and holidays. It will always take place at BC Cancer Agency and the radiation therapists will try to book the appointment at a convenient time for you and your family. The treatments can last from one week to six weeks. Plan to spend an hour here each day. This includes the time it takes to park and set up for the

radiotherapy and recover from sedation (if your child needs it). The radiotherapy treatment itself takes only a few minutes. The radiation doesn't hurt or cause any discomfort. During radiation treatment, you will be able to see and talk to your child, but you won't be able to be in the actual treatment room.

How Do I Get My Child Ready for SEDATION?

One of the decisions that the team will make with you is if your child needs to be sedated during the radiotherapy treatments. If this is the best thing for your child, he/she will be checked by a Pediatric Anesthesiologist at BCCH in the Pre-operative Assessment Clinic. The Anesthesiologist will decide on the best type of sedation for your child and answer any questions that you may have about the sedation.

On the Day of Treatment:

1. Six Hours Before TREATMENT

Do not give your child any food for 6 hours before his/her treatment. You may give your child clear fluids such as water or apple juice. You may give your child breast milk at this time if they are under one year of age. After this time do NOT give your child anything else to eat or drink unless it is a CLEAR FLUID.

2. Two Hours Before TREATMENT

Do not give your child anything to eat or drink.

Why Can't My Child Eat or Drink Before the Sedation for the Radiotherapy Treatment?

All medicines given for sedation block the reflex that prevents stomach contents from going into the lungs. Before sedation, your child's stomach should be as empty as possible. **This means no solid food or milk for 6 hours before the treatment and no clear fluids for 2 hours before the treatment.**

With sedation, we try to schedule your child's radiotherapy in the morning so your child does not need to go too long without food.

How do I help my child recover from sedation?

The medicines used for sedation are short acting. For safety, have your child play quietly for about 2 hours after the sedation. If your child rides in a car seat, make sure there is an adult in the back seat during the car ride home. Your child can start to eat and drink as soon as he/she wishes.

Are There Any Side Effects of Radiotherapy?

Radiotherapy is an effective treatment for cancer cells, but it can damage healthy, normal cells near the area being treated. Damage to healthy, normal cells can cause short term and long term side effects. These side effects depend on the amount of radiation used and the body part being treated. Your radiation oncologist will discuss the side effects that your child might have in detail.

Side effects may include:

- fatigue
- red, flaky, itchy skin
- nausea and vomiting
- loss of appetite
- hair loss

Your healthcare team will help you learn how to manage these side effects if they occur. Your child will routinely be given medicine (such as ondansetron) to help with nausea and vomiting if he/she needs it.

For any questions you may have about your radiotherapy treatments please call 604 877 6000 extension 2705.

How Do I Get to the BC Cancer Agency?

BC Cancer Agency is at 600 West 10th Avenue between Oak and Cambie Street. It is close to Vancouver General Hospital. There is a covered parking lot next to the Cancer Agency.

Once you arrive please take the elevator to the second floor. There, you will see a reception desk for the Planning Department. The receptionist will tell you where to meet your doctor and the radiation therapy planning team.

Additional Reading

BC Cancer Agency – Radiation Therapy.
<http://www.bccancer.bc.ca/PPI/CancerTreatment/RadiationTherapy/default.htm>
BC Children's Hospital.
www.kidscancer.bc.ca.

Developed by the professionals of the BC Children's Hospital Pediatric Anesthesiology and BC Cancer Agency Radiation Therapy with assistance from the Learning and Development Department.

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Radiotherapy at the BC Cancer Agency



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