Caring for Your Child
Radiation Treatment with General Anesthesia

What is general anesthesia?

General anesthesia is medicine that helps your child sleep and stay still during the radiation treatments. Your child will not be aware of what is going on around him.

Why does my child need general anesthesia during radiation treatment?

Some children may need to have general anesthesia for each radiation treatment. It is important that your child stays still during radiation treatments. The amount of anesthesia given is just enough to let your child sleep and remain still during the treatment. If general anesthesia is used during the CT simulation, it will be used during all treatment sessions for your child. General anesthesia will be given by the anesthesia team from The Children’s Hospital of Philadelphia (CHOP), which is led by a CHOP pediatric anesthesiologist. The anesthesia plan for your child’s care is developed by this team.

Who is on my child’s CHOP anesthesia team?

This team is made up of doctors and nurses from CHOP. They specialize in giving anesthesia to children and adolescents. Members of your anesthesia team may include:

- **Pediatric Anesthesiologist**: A doctor who has received advanced education in giving anesthesia to children and adolescents.
- **Pediatric Nurse Anesthetist**: A nurse who has received advanced education in giving anesthesia to children and adolescents and works closely with the anesthesiologist.
- **Senior Anesthesia Resident/Fellow**: A doctor with anesthesia training who is closely supervised by the pediatric anesthesiologist.
- **Post Anesthesia Care Nurses**: Nurses who have received special training in the care of pediatric patients receiving anesthesia. They have experience helping children recover after anesthesia.
- **Anesthesia Technician**: A person who helps the anesthesia team set up the equipment.
How can I prepare my child for radiation treatment?

Before Treatment

Here are some important things you can do:

- Before every treatment it is very important that your child follow the instructions about eating and drinking. Your anesthesia team from CHOP will give you these instructions. If your child eats or drinks on the morning of treatment, we will need to cancel the treatment.
- Do not use lotions or creams anywhere on your child’s skin for 4 hours before the scheduled treatment.
- It is important to tell the anesthesia team about any home medicines that your child is taking. If your child’s medicine schedule needs to be changed, the anesthesia team will give you instructions.

The following are a few helpful suggestions to prepare for your child’s visit:

- Your child will need to change into a hospital gown or shirt before the treatment. It is best for him to wear clothes that are easy to take on and off. It might be helpful to have a change of clothes for your child and yourself.
- You may bring a favorite blanket or comfort item. Bring your child’s favorite drink or formula and snack for after the treatment. We cannot store food or provide snacks. Having a favorite blanket, juice or snack can be comforting when your child wakes up.
- It may be helpful to bring your stroller. Your child may still be a little sleepy after his treatment and may not feel like walking.
- Feel free to bring books, CDs, video games or any other items that will help you and your child pass the time.
- Most families spend up to 3 hours in the Radiation Oncology Department on each day of treatment. Treatments are usually given once a day, Monday through Friday, for a number of weeks.

What happens during Radiation Treatment?

Although everyone’s plan is different, this is generally what will happen during your treatment visit:

- When you arrive at the Radiation Oncology Department, you will stop at the front desk in the main waiting room. This is where you will register your child and get your parking ticket validated. Then you will go to the children’s waiting room.
- We will check your child’s vital signs (temperature, blood pressure, heart rate, oxygen, and breathing).
What happens during radiation treatment? (Continued)

- If your child has a port, we will access it on the first day of treatment and de-access it on the last day of treatment that week. The port will remain accessed all week. If your child does not have a central line, the CHOP team will ask for a central line to be placed before the start of radiation therapy. We will give the anesthesia medicines through your child’s central line. You may go to the induction room with your child. You may hold your child until he is asleep. The anesthesia team will monitor your child until he is awake.
- We will have you wait in the waiting room until your child recovers from anesthesia. Only your child and the health care team may be in the treatment room during the treatment.
- Once in the treatment room, your child will be positioned on the treatment table. The radiation therapist will go to an area right outside the treatment room. This area is called the console area. After checking all the settings to make sure that the machine is working exactly as planned, the therapist will turn on the machine.
- Throughout the treatment, the radiation therapist and the anesthesia team will carefully check your child at all times. They will watch your child on a TV monitor.
- The radiation therapist controls the movement of the machine.
- Your child will not become radioactive. External radiation treatment affects cells only for a moment. It is safe for your child to be around other children and adults.
- We will take pictures (X-ray or CT scans) during the radiation treatment to make sure your child is in the correct position for treatment. These pictures will also be taken if there is a change in the treatment field or plan. They are not used to measure the response to the radiation.
- If you have questions about anything that happens in the treatment room, ask your nurse to explain.
- Once the treatment is over, your child will recover in the PACU. The staff will come and get you when your child is in a safe phase of recovery.
- Once your child is fully awake, you will be discharged from the Radiation Oncology Department.

About Treatment Visits

At least once a week, you will be seen by your radiation oncologist. This visit is called your On Treatment Visit or (OTV). These visits are important because they give the team the chance to:

- Check your child’s physical condition
- Discuss any side effects
- Answer any questions you may have about radiation treatment
- Schedule future treatments

If you have any questions during your child’s radiation treatments, you may contact the radiation oncology nurse practitioner or stop at the nurses’ station for assistance. You do not have to wait for your weekly visit to ask questions.
Follow-Up Care

A follow-up care visit will be scheduled when therapy is finished. Your child will see the radiation oncology team at regular intervals. Your CHOP oncologist will also follow your child’s progress on a regular basis. Although you may be seeing other physicians, it is important for you and your child to continue to visit your radiation oncologist. This will help us to notice any radiation-related problems as early as possible. Your radiation oncologist will stay in touch with your other cancer specialists.

We strongly recommend that children receiving proton therapy to the brain have a neuropsychological evaluation before treatment begins and at specific follow-up periods after treatment has ended. Neuropsychological testing provides important information about your child’s cognitive development (thinking and processing information) after a cancer diagnosis and treatment.

We also suggest that you have your child checked when you, another caregiver, or any adult in your child’s life notices that your child is struggling. Areas of difficulty include problems keeping attention, difficulty with school or homework, and difficulty in social situations.

Important Information for Treatment Days

If you are late or having trouble getting to the hospital:

- It is important that you come to every therapy appointment and to be on time. Please call us as soon as you realize that you are going to be late or unable to come to your appointment. We will discuss the best option for you.
- We understand that you may have to juggle many appointments for your child. We have many child and adult patients who are scheduled for radiation therapy appointments. Every appointment slot is very valuable.
- Please call the Radiation Oncology PACU Nurses Station: (215) 615-5691.
If your child is feeling ill or you have an urgent concern:

- Call if your child is having radiation-related problems or concerns.

- **Always** call if your child has a fever and is scheduled for radiation that day or the next day. It is also important to inform your oncology team of any fevers.
  - Fever of 101.3 degrees F (38.5 degrees C) once, or
  - Fever of 100.4 degrees F (38 degrees C) three times in a 24 hour period, taken at least 2 hours apart

- The decision to go ahead with treatment will be made by the radiation oncologist and the anesthesiologist after discussion with your medical oncologist. Sometimes it is better that your child not have treatment if he is very sick. We will add any missed days to the end of the treatment schedule.

**Important Phone Numbers:**

- 7 days a week (including holidays) 8:30am-5:00pm:
  - Call the Oncology Triage Nurse at **215-590-2299**.
- After 5pm:
  - Call the hospital operator at **215-590-1000**. Ask for the Oncology Fellow on call.
- If your child eats or drinks by mistake before anesthesia: Call the Radiation Oncology PACU Nurses Station: **215-615-5691**
- If you are unable to reach one of the PACU nurses, please call the front desk in the Pediatric Waiting room: **215-615-5678**. We will discuss the best option with you.

**If there is a problem with the machine and treatment needs to be rescheduled:**

Someone from the Radiation Oncology Department will call you.

You will be asked to provide phone numbers where you can be reached. If you have a cell phone, please give this number also. Please make sure the contact information for you is correct in your child’s medical record.