

Your doctors have decided on radiation therapy as part of your treatment plan. Radiation therapy to the brain is administered for “primary” brain tumors, those that originate in the brain or “metastatic” tumors, those that spread to the brain from other primary sites, such as the lung, breast, kidney, colon, or skin (malignant melanoma).

After your consultation appointment with your radiation oncologist, you will have an appointment for a planning simulation/CT.

## Simulation

A simulation is used to map your treatment site, ensure delivery of the right dose of radiation to the target area, and ensure that tissues near the target area get as little radiation as possible during treatment.

During the simulation, you'll be lying in one position for a long time (appointments are about 45-60 min). To help you stay in the same position for each treatment, you will wear a mask that covers your face and upper body and attaches to the treatment table. You will wear the mask during your simulation and each of your treatments.

Your radiation therapists will make your mask during the simulation appointment. A warm wet sheet of plastic mesh will be placed over your face and upper body while you're lying on the simulation table. The mesh has openings for your eyes, nose, and mouth, so you won't have any trouble seeing or breathing while it's over your face.

Over the next 15 minutes, the mesh will cool and harden. As the mesh is cooling, your radiation therapists will shape it to your face and upper body. You will feel some pressure as they do this. If you feel uncomfortable at any time, tell your radiation therapists.

During your simulation, you'll undergo a CT scan in the radiation department. Your mask will be marked by a radiation therapist. These marks will be used to help position you for your daily treatment.

Unless instructed otherwise, you may eat and drink as you normally would on the day of your simulation.

Make sure to wear comfortable clothes that are easy to take off because you may need to change into a gown. Do not wear jewelry, powders, or lotions.

## Side Effects

Some people develop side effects from radiation therapy. Which side effects and how severe depend on a number of factors: the area being treated, the dose of radiation, the number of treatments, and your overall health. Below are some side effects you may experience and what you can do if you experience them.

### Swelling in the brain

- Worsening of original symptoms
- Seizures
- Headache that doesn't go away after taking acetaminophen (Tylenol)
- Changes in vision
- Unsteady when walking
- Change in mental status
- Nausea and vomiting

### What you can do.

Notify your doctor or nurse

- A steroid medication may be prescribed
- A seizure medication may be prescribed if seizures are experienced

### Hair Loss/Thinning

- Occurs 2-3 weeks after radiation start
- May be temporary or permanent depending on radiation dose (talk to your doctor)
- Color and texture may be different when hair regrows

### What you can do.

- Wash hair gently with mild/baby shampoo
- Use a soft-bristled brush on your hair
- Don't dye your hair or use hair products

### Skin Reaction

- Dry, flaky skin
- Darkening or reddening to skin
- Blistering and/or Peeling

#### What you can do.

Notify your doctor or nurse

- Your doctor may prescribe a prescription cream
- Apply aquaphor to irritated skin
- Bathe or Shower daily with warm water and mild unscented soap
  - o Pat dry with a towel
  - o Do not rub or scrub area
- Do not use alcohol or products with alcohol on the irritated area
- Protect treatment area from sun when outside
- If your skin itches, don't scratch it. Apply moisturizer instead.
- Don't shave treatment area
- No extreme temperatures (hot or cold) should be applied to the treatment area (this includes hot tubs, hot baths, water bottles, heating pads, ice packs)

### Fatigue

#### What you can do.

- Plan time to rest or take short naps (10 to 15 min) during the day.
- Try to sleep at least 8 hours every night.
- Plan your daily activities. Do activities that are necessary and most important to you first. Do those when you have the most energy.
- Ask family and friends to help.
- Continue to do light exercise (walking, stretching, yoga).

**Contact Your Radiation Oncologist or Radiation Nurse if You Have:**

- Nausea and vomiting
- Blurred vision
- Unsteady gait
- Loss of memory
- Personality changes
- Interruption of thought process
- Incontinence of bladder or bowel
- Loss of feeling (numbness) in arms or legs
- A temperature of 100.4°F (38°C) or higher
- Chills
- Painful, peeling, blistering, moist, or weepy skin
- Pain not relieved by medication

**These guidelines are designed to help you feel your best throughout therapy. Talk to your treatment team if you have any questions or concerns.**

**Evanston Hospital: (847) 570-2590**

**Glenbrook Hospital: (847) 657-5950**

**Highland Park Hospital: (847) 480-3908**