Radiosurgery to the Body

This information will help you prepare for your radiosurgery treatment.

What is radiosurgery?

Radiosurgery is not actually surgery. It is a treatment that uses high-powered X-rays (radiation beams) to destroy tumors. It uses 3-D planning to tailor the radiation dose to the size and shape of the tumor. The treatment machine (linear accelerator) focuses the radiation only on the area being treated and does not harm normal tissue. Radiosurgery, also called stereotactic body radiation therapy, can be used on tumors anywhere in the body.

The radiosurgery team

The radiosurgery team provides care to meet your specific needs. The team includes the following clinicians:

- Physicians
  - Radiation oncologist
  - Medical oncologist
  - Surgeon or interventional radiologist (if markers are placed)
- Medical physicist and dosimetrist (help plan the treatment with your physician)
- Radiation therapist (gives radiation treatments)
- Registered nurses (provide education and help with follow-up needs)

Social workers are available if needed to help with resources. They also offer support and counseling to you and your family.

The radiosurgery process

Radiosurgery involves:

1. Planning session
   - A CT scan will be done to locate tumors for treatment and plan where the radiation beams will focus.
BodyFix® is a cushion-like material that is used to make a mold of your body. The mold will help you stay in position for your treatment. This mold will be used during your planning session and treatment. **Tell your physician if you have trouble lying in one position for long periods of time or difficulty keeping your arms raised above your head.**

- A special dye (contrast) may be used during the planning CT. **Tell your physician if you are:**
  - Allergic to contrast dye
  - Currently taking oral medicines for diabetes

2. Treatment:
   - You will begin treatment about 1 to 2 weeks after your planning session.
   - You may need 1 to 5 treatment sessions, depending on the area of the body being treated.

Based on the area being treated, you may not be able to eat or drink before the planning or treatment sessions. Your nurse or therapist will tell you if you may eat or drink before these sessions.

**Planning session**

Please arrive at _______________ (time) on ______________________ (date) for your appointment.

Come to the Radiation Oncology Department, Galter Pavilion, 251 East Huron Street, Suite LC-178, Chicago. Parking is available for patients and visitors in the garage at 222 East Huron Street, across from the Feinberg and Galter pavilions. For discounted rates, please bring your parking ticket with you. Tickets can be validated in the Radiation Oncology waiting area.

Please leave valuables at home, including jewelry.

Once you have checked into the Radiation Oncology Department, you will be taken to a waiting area where you will change into a hospital gown.

If you will need contrast dye for the CT scan, an IV (into the vein) line will be placed, and you may have blood drawn.

After that, you will be taken to the CT scan room.

It is important to remain still during the planning and treatment sessions. Your customized BodyFix® mold will help you remain in the correct position. While lying on the BodyFix®, you will be covered with a plastic sheet that snugly fits around your body. Your head and face are not covered.

Once you are secured into the BodyFix® mold, the CT scan will be done. If you think you will have trouble lying in one position for a long time, let us know. This CT session lasts about 1 to 2 hours.
Depending on the area of your body being treated, you may also have:
- An MRI (magnetic resonance imaging)
- PET/CT (positron emission tomography) scan
- CT myelogram

These tests will be done either the same day as the planning CT scan or in the next few days.

Your treatment will begin about 1 to 2 weeks after all the tests are done. If more than one treatment is needed, you will be given a list of treatment dates and times on the day of your 1st treatment. Most treatments last about 1 to 2 hours.

In some cases, a marker may be placed on or near the tumor so it can be seen during treatment. A marker is a very small metal clip or bead (often made of gold). Markers are placed by a surgeon or an interventional radiologist before your planning appointment. If a marker is needed, your physician will provide more details.

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**Treatment**

**Day of treatment**

Before your appointment:
- Take your usual medicines as instructed by your physician.
- Your nurse or therapist will tell you if you may eat or drink before your treatment.
- You may bring a CD (compact disc) or a personal music device to listen to during treatment.

After checking in at the front desk of the Radiation Oncology Department, you will be brought to a waiting area where you will change into a hospital gown.

You will be taken to the treatment room. The radiation therapist will help you onto a special bed. The team will help position you in the BodyFix® mold that was made for you. You will be secured into the BodyFix® mold.

Please let your therapist know if you have any questions or concerns during your treatment.
Because of the radiation, the team must leave the room before the radiosurgery begins. During the treatment, you will be:

- Viewed on camera by the physician and therapist the entire time.
- Able to talk to the team through a 2-way intercom.
- Able to listen to music.

**After treatment**

You may resume your usual activities. It is important to keep all follow-up appointments as instructed.

**Common side effects**

Side effects vary based upon the area that is treated. Your physician will discuss these with you.

**When to call the physician**

Call the Radiation Oncology Department at 312.926.2520 right away if you have any of the following:

- Chest pain
- Trouble breathing
- Fever of 100.5 degrees F or greater
- Coughing up blood

During evenings, weekends or holidays, this number will forward to the answering service, and the on-call physicians will be notified.

**Northwestern Medicine – Health Information Resources**

For more information, contact Northwestern Memorial Hospital’s Alberto Culver Health Learning Center (HLC) at hlc@nm.org, or by calling 312.926.5465. Health information professionals can help you find the information you need and provide you with personal support at no charge.

For more information about Northwestern Medicine, please visit our website at nm.org.