

Stereotactic Radiosurgery Treatment for the Brain and Skull

Your doctor has told you about a procedure called stereotactic radiosurgery (steh-ree-oh-TAK-tik RAY-dee-oh-SUR-jer-ee). Much like standard radiation therapy, this method uses a machine called a linear accelerator. This method is also given at higher doses and with less treatments.

Radiosurgery is used to treat cancerous and non-cancerous parts in the brain, head, and skull without cutting into the skull. This method works the same way as all other forms of radiation treatment. It does not surgically remove the tumor, but it works by hurting the tumor in a way that may stop it from growing. Because this method is very exact, it lessens the amount of radiation to your brain. While stereotactic radiosurgery is often done in 1 day, doctors may ask you to come back for more treatments.

You will not be able to hear or see the radiation beam during your treatment. Because the beams pass through your body, you can still be around people in public, children, babies, or pregnant women.

Getting Ready for Radiosurgery

You will meet your care team before the day of your treatment. Your care team will have a neurosurgeon, radiation oncologist, physicist, nurse, and a radiation therapist. Before your treatment can be done, you will need some tests. These tests may be blood work, magnetic resonance imaging (MRI), and/or a CAT scan (CT scan). Tell your doctor about any medicines you are taking and any allergies that you have. Please also let your care team know if you have any devices or implants, such as:

- **Pacemakers**
- **Artificial valves**
- **Implanted pumps**
- **Stents**

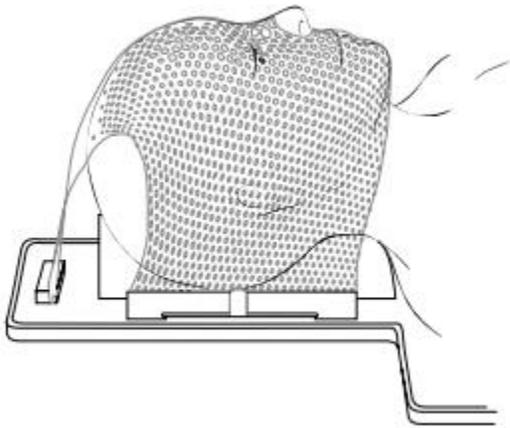
Your care team will talk with you about the treatment and give you a brochure. Be sure to ask any questions you have. You will then be asked to sign a form for your treatment.

Fitting the Special Device (called an Immobilization Device to help you stay still)

To make sure you get clear results for your treatment, you should be very still and not move during the treatment. A mask is made to help hold your head and neck in place. The mask is made of soft plastic and fits into the shape of your head and neck. The mask also has holes in it so you will be able to breathe and see through it. It takes about 15 to

20 minutes to make the mask. The doctor will fit you with your immobilization device to make sure that you stay very still for the treatment. Before you start, please let your nurse know if you have any feelings of claustrophobia (fear of closed spaces).

While you are lying down, you will get scans of the spot to be treated. These scans will be done on a machine called a simulator, which is like a computed tomography (CT) scan machine. These scans are only used to map your treatment. **They are not used to find tumors.** If you need other tests, your nurse will tell you.



Once the mask is made and your care team gets the proper scans, your team will start making a radiation plan for you. This can take up to 2 weeks to be done.

The Day of Your Treatment

You should wear loose clothing on the day of your treatment. Please do not wear any jewelry. **Do not** use moisturizers within 2 hours **before** your treatment.

There are no other restrictions before your treatment. You can eat, drink, and take all your normal medicines. If you think you will be uncomfortable lying on the table, please take pain medicine before you come that day. Tell your nurse if you are having pain on the day of your treatment. We can give you medicine before you start.

Please also let the nurse know if you have anxiety or claustrophobia (fear of closed spaces), as medicines can be given to help relax you.

A family member or friend should come with you on the day of your treatment. He or she will wait in the waiting room while you are getting your treatment.

During the Treatment

You will have to lie on a hard, flat table. The treatment can last from 30 minutes to 1 hour. If you become uncomfortable during the treatment, tell your team. You can take a short break.

The mask that was made for you will be placed on your head. The mask will stay on your head during the whole treatment. Your care team will go to an outer room during your treatment, but they will still be able to see you at all times. There is also a microphone so that they can talk with you throughout the treatment.

After Stereotactic Radiosurgery

After the treatment is done, the mask will be removed. The doctor or nurse will speak with you and your family member. You and your family member will also be given discharge instructions for your care after you leave. You will be able to go home as soon as you are done.

What to Expect After Treatment

Once you are done, the nurse will go over any limitations you will have and give you a date for your follow up visit. You will also be told when to get your next MRI of your brain.

Possible Side Effects

Most people have little to no side effects and can quickly return to their daily routines without any changes. Before your treatment, your doctors will tell you the side effects that you may have after your treatment and may give you medicines to control them if they do happen.

Short-term Skin Changes

You may have short-term changes to your scalp or neck. These changes may be redness, dryness, scaling, and itchiness of the treated spot. These skin changes often happen 1 to 2 days after your treatment and last 1 to 2 weeks. You may use moisturizers such as _____ on the treated spot. **Do not** use moisturizers within 2 hours **before** your treatment.

Long-term Skin Changes

Your skin may be more sensitive to hot and cold. If the spot being treated is exposed to the sun, put on sunscreen routinely to the treated spot when you are outdoors for more than 10 minutes during the summer and winter. Use a sunscreen that does not have PABA. It should have an SPF of 30 or more. Since the spot being treated will be more

sensitive than the rest of your skin, keep protecting the spot from the sun after your treatment ends.

Hair Thinning and Hair Loss

Hair loss from radiosurgery is rare and does not always change the whole scalp. Your doctor will tell you if he feels you may be at risk for patchy hair loss in certain spots.

If You Are Feeling Tired

- Take frequent breaks and pace yourself.
- Save time to do things that you enjoy and make them part of your day.
- Try to take a walk each day. Being less active may make you more tired.
- Tell your nurse or doctor if you become very tired.

Take Your Prescribed Medicines

- Keep taking your prescribed medicines such as dexamethasone (Decadron®) or methylprednisolone (Medrol®). These can control the swelling from brain tumors and/or the radiation.
- Do not stop taking these medicines unless your doctor tells you that you may. Be sure to refill your prescriptions before they run low.

Things to Tell Your Nurse or Doctor

Tell your nurse or doctor if you have any of these problems:

- Weak legs or arms
- Loss of bowel or bladder function
- Numbness
- Changes in your personality
- Confusion or decreased alertness
- Seizures or unusual muscle twitching
- Scalp or skin redness
- Very painful headaches
- Changes in your sight
- Skin redness, itchiness or rash
- Ear tenderness
- Mild headaches

To talk to your doctor about these problems, or if you have any questions, please call:
