WHAT TO EXPECT BEFORE RADIOSURGERY

Before Your First Visit

Making an appointment
You will need a referral from your doctor before coming to the clinic. You or your doctor may call the Radiation Oncology Department at (650) 498-6339, or the Neurosurgery Department at (650) 723-5573 to schedule an evaluation. Most radiosurgery consultations will take place on a Tuesday morning.

Medical Records
On the day of your appointment, you will need to bring (or have previously sent) copies of all your imaging studies. It is also helpful to have copies of your medical records, including past surgical or radiation treatment histories. Correspondence and records should be addressed to:

C/ O Chief Resident in Radiation Oncology
Stanford Health Care
Department of Radiation Oncology
300 Pasteur Drive, A013
Stanford, CA 94305

Stanford Health Services
John R. Adler, M.D., C/ O Barbara or Elizabeth
Department of Neurosurgery, R205
300 Pasteur Drive
Stanford, CA 94305-5327

On the Day of Your Appointment

Where to Go
You will receive a letter informing you of the treatment date, location and the various arrangements that have been scheduled for you. Most stereotactic radiosurgery is done on an outpatient basis. Frame-based radiosurgery treatments will be done in Radiation Oncology, located in the basement of Stanford Hospital, and frame-less radiosurgery will take place at Blake Wilbur Outpatient Clinic. Arrangements for inpatient accommodations will be made and noted on your letter.

During your appointment
Your first visit may last two to three hours, because several doctors will interview you. They will also confer together to discuss your case and review your medical information. It is often helpful
to bring along a family member or friend to this session, along with a list of questions that you may have.

If you are considered a candidate for radiosurgery, the physicians will discuss your treatment plan with you. A decision between using the frame versus the frame-less system will also be decided along with the potential risks and benefits. Detailed arrangements for your radiosurgery will also be presented. A letter describing your evaluation will also be addressed to your referring physician so that he/she may be informed regarding your care.

For frame-based radiosurgery patients: After arriving in Radiation Oncology, a nurse will obtain your vital signs, have you put on a hospital gown and start an IV. A stereotactic frame (a metal ring that hangs around your head) will be attached to your head by means of four small pins that press into the skull. These are placed using local anesthesia. After the frame is placed, imaging studies will be performed to localize the area of interest. Imaging studies could include CT or MRI brain scan or an angiogram (blood vessel dye study). You will then be taken to the radiation oncology department while your treatment is being planned. The planning session involves transferring the images of your scans to special, high-powered computers. These are used to design the treatment plan for radiosurgery. The planning process frequently takes several hours to complete.

For frame-less radiosurgery patients: A planning session will be scheduled a week or two before your radiosurgery treatment. This session is necessary in order to create an immobilization device and image the tumor(s) or area of interest. Immobilization is used to keep you relatively still during treatment. You will lie on the treatment table while immobilization is taking place and then an x-ray with special cameras will also be taken while you are holding still. CT and/or MRI scans are needed for treatment planning. Once immobilization is completed, you will be escorted to the hospital where you will have the appropriate scan. This will be a relatively quick study (10-15 minutes). It is usually necessary to have an injection of contrast (dye) to visualize the tumor(s)/lesion to be treated. After the scan, you will go down to the Radiation Oncology Department to give your consent for radiosurgery. That portion of the planning session involving you is completed after the doctors have reviewed the consent form with you.
**Radiosurgery**

For frame-based radiosurgery patients: After your physicians and their physicist colleagues have completed the plan for your therapy, you will be taken to the treatment room. During treatment, the frame that is attached to your head will be bolted securely in place while you lie on the treatment table. After confirming that you have been positioned precisely, radiosurgery will be performed. Treatment is painless and lasts from 20 minutes to 1-1/2 hours. Once completed, the stereotactic frame will be removed from your head. Most patients will be asked to wait in the radiation oncology area for an additional 30-60 minutes before leaving to go home. The entire treatment will take approximately six to eight hours. However, some patients with AVMs or large brain tumors may be admitted to the hospital for overnight observation.

For frame-less radiosurgery patients, you will meet the stereotaxis team at the Blake Wilbur Outpatient Clinic on the day of surgery. During treatment you will lie on a treatment table much as you did on the day of initial planning. An immobilization device will be placed, images will be taken and adjustments made before treatment commences. Treatments last between 45 minutes to 1-1/2 hours. When the radiosurgery is completed, the mask will be removed and you will be able to leave as soon as you feel you are able.

**After Radiosurgery**

**Side Effects**
Major side effects or risks associated with stereotactic radiosurgery are generally uncommon and tend to be delayed. They consist primarily of damage to the brain tissue next to the tumor or AVM and swelling of the irradiated brain or tumor. Possible problems immediately after treatment include headache, nausea, and/or seizures --symptoms that typically appear identical to your original symptoms. Your physician may order medications to control brain swelling or seizures, if indicated.

**Follow-up**
You will continue to have follow-up appointments in the radiosurgery clinic. If the tumor treated was benign, you will be seen after six months, and again at one year after treatment, with follow-up CT or MRI scans. If the tumor was malignant, you may be followed more frequently.