Gamma Knife Procedure-Patient Instructions

Procedure Date: 
Neurosurgeon: 
Radiation Oncologist: 
Arrival Time: 

Pre-Procedure

Food and Drink: DO NOT eat or drink anything after midnight before your scheduled procedure. You may be asked to take your morning medications with sips of water. Please review these medications with the Gamma Knife nurse at your consultation appointment.

Clothing and Valuables: Wear comfortable clothing and dress warm. Sweat pants and warm socks are suggested. DO NOT place any keys, wallet, or metal items in your pockets. This will affect the MRI. DO NOT bring any valuables such as a watch, jewelry, purse, etc.

Appliances: DO NOT bring any electrical appliances. iPod, CD player or other battery operated appliances are allowed in the Gamma Knife suite during the procedure.

MRI: Notify the Gamma Knife nurse if you are unable to have an MRI due to a pacemaker or metal implant, or if you are claustrophobic or anticipate experiencing any problems with completing the exam.

Day of Procedure

> Arrive at the Advanced Technology Pavilion (ATP) on the date and time indicated. Parking provided next to the main entrance.
> When you enter the main entrance, check in at the reception desk.
> A Gamma Knife nurse will complete an assessment, ensure all paperwork is completed, and start an intravenous line (IV). The nurse will be available to answer any questions you may have before your procedure.
> Before the procedure starts, your family will be escorted to a waiting room.

Procedure

The procedure requires placement of a headframe secured to the skull by four pins.

> The headframe will be secured using anesthesia. The anesthesiologist will answer any questions you may have prior to the procedure.
> The nurse will attach a monitor to evaluate your blood pressure, pulse and respirations during the procedure. The forehead and back of your head will be cleansed with an alcohol based solution to prepare the area for pin placement.

Headframe placement: The anesthesiologist will administer medication thru the IV line providing a light sedation. The medication will make you feel sleepy and relaxed. While you are sedated, the neurosurgeon will inject a local anesthetic to the areas where the pins are going to be placed. Most patients do not remember this part of the procedure.

Radiology: Once the headframe is secured, you are awakened and transported to the onsite MRI/CT.

Gamma Knife treatment: Upon completion of the radiology exam, you will be transported to the Gamma Knife suite for treatment. The planning may take up to one hour. Treatment may range from 10 minutes to two and a half hours or more. While you wait, it is important to notify the nurse if you experience any pin site discomfort or headache. The pin sites can be re-injected with a local anesthetic or pain medication can be offered. The details of the treatment will be explained to you during the consultation.

*Note: Depending on the number of patients being treated, you may be transported back to your room after the radiology exam is completed. The Gamma Knife nurse will give you an estimated time of treatment.

Post Procedure

Upon completion of the treatment, the headframe is removed. Antibiotic ointment, bandages, and dressing are applied to the pin sites. The nurse will review all of your discharge instructions with you. You may be discharged home after you have eaten, pain or discomfort is managed, and vital signs are stable. Any changes in your medications will be reviewed with you prior to discharge. Most patients leave by 2pm. You must have a ride home.

Home Care

The head wrap dressing may be removed the evening of your treatment. The bandages may be removed the next day. You may also shower and wash your hair the next day. There is no special treatment for the pin sites, keep them clean and dry with soap and water. The pin sites should heal within 7 to 10 days.

Bleeding at pin sites: You may notice some bleeding or clear drainage from the pin sites. If so, keep your head upright and apply pressure. Put a towel on your pillowcase the first night in case there is any drainage.

Pin site swelling: Pin site swelling is rare. If it occurs, it may affect pin site eyes and/or face. Apply ice off and on to affected areas throughout the day and keep your head elevated on pillows. Swelling should resolve within 3 days. If it persists, call your physician.

Any other problems or complications: Call the physician.

Follow Up

A Gamma Knife nurse will call you the day after treatment. This is a good opportunity to ask any questions you may have. You will be advised to follow up with your neurosurgeon within one to two weeks of the Gamma Knife treatment. Serial radiology exams will be obtained to evaluate the Gamma Knife treatment according to the neurosurgeon’s recommendation.

For questions or concerns after the Gamma Knife treatment, please call one of the Gamma Knife nurses at 949/764-6035 or 949/764-6036.