What to Expect During Brain Tumor Surgery

For some patients, the treatment plan will involve a surgical procedure. Prior to surgery, patients meet with the neurosurgeon to go over the films and discuss the surgical treatment plan. During this meeting, you and your surgeon will discuss why surgery is recommended as well as the risks and benefits of the surgery. A surgery date is set and arrangements are made to have a careful pre-operative medical evaluation.

Hospital stay for surgery:

Patients who are undergoing surgery for their tumors are usually admitted to the hospital the day of surgery. Often, a planning MRI scan will be obtained the night before, and removable markers will be placed to allow the surgeons to use image-guided surgery to precisely localize the tumor during surgery. Every operation is different, and your surgeon will discuss how long the surgery may take. Families often wait in the surgical waiting room at Vanderbilt and are updated frequently during the surgery by the OR staff.

Neurosurgical Intensive Care Unit:

Patients undergoing brain surgery are carefully monitored, usually in the Neurosurgical Intensive Care Unit (ICU). The Neuro ICU is staffed by dedicated neuro-intensivists, doctors who are specially trained in treating patients with neurological diseases. Patients are evaluated closely by a nursing staff that has special training in caring for neurosurgical patients. In order to make sure that patients have the highest level of skilled care in the ICU, visitation is regulated, and you should discuss this with the ICU nursing staff.

Transfer from the ICU and discharge from the hospital:

After an appropriate period of careful monitoring, patients are transferred out of the ICU to the regular Neurosurgical floor to be monitored. Typically, patients will have an MRI scan within 24 hours of their surgery. This scan will serve as an important baseline scan when comparing future MRI scans. Planning for discharge begins very early in the hospital course. Physical and occupational therapists will carry out an evaluation, and clinical social workers and case managers are assigned to each patient in order to ensure a smooth transition out of the hospital. A plan is put in place, and before discharge, family and patients will go over the plan for their follow-up care, which includes medication, follow up appointments, and discharge do's and don'ts.

After surgery:

After surgery, patients are given follow up appointments with their neurosurgeon and when appropriate, may be referred to a neuro-oncologist or radiation oncologist for further evaluation and treatment. At Vanderbilt, every patient's case is reviewed at the Neuro-Oncology Tumor Board. The Tumor Board is a regular meeting of clinicians including neuro-oncologists, neurosurgeons, radiation oncologists, pathologists, nursing and support staff.

This interdisciplinary group meets weekly to go over specific patients to develop an individualized treatment plan.

Different tumors require different treatments including chemotherapy and or radiation therapy. The type of treatment depends directly on the type of tumor. Most all patients with brain tumors continue to be followed with some form of brain imaging – MRI – at regular intervals. Patients are followed closely by either the neuro-oncologist or neurosurgeon.