

Ready to start planning your care? Call us at [800-525-2225](tel:800-525-2225) to make an appointment.

×



Memorial Sloan Kettering
Cancer Center

[Make an Appointment](#)

[Back](#)

[Primary Brain Tumors](#)

[Brain Aneurysms & Treatment](#)

[Refer a Patient](#)

Primary Brain Tumors

ABOUT US

[Our mission, vision & core values](#)

[Leadership](#)

[History](#)

[Equality, diversity & inclusion](#)

[Annual report](#)

[Give to MSK](#)



Chair of the Department of Neurosurgery Viviane Tabar (left) is part of a multidisciplinary team that works seamlessly to provide the best in surgical care for people with brain tumors.

Brain Cancer Diagnosis Procedures

To properly treat a primary brain tumor, it's crucial that we have an accurate diagnosis. There are approximately 125 [types of brain tumors](#) and the treatment for each type is in many cases unique.

We'll assess your condition and base a diagnosis on a number of factors, including:

your [symptoms](#) and medical history

- results of your neurologic examination and other tests
- the size, location, and grade of the tumor as determined through diagnostic imaging
- the condition of your overall health

If your doctors suspect that you have a brain tumor, they may recommend [diagnostic imaging](#). Our Brain Tumor Center specialists use CT, PET, and MRI scans to identify a brain tumor as well as determine its size, location, and grade (how quickly it's growing). Knowing the size and location of the tumor helps your doctor plan the best treatment approach.

The first treatment for a brain tumor is often surgery. The goal of brain tumor surgery is to remove as much of the tumor as possible without causing harm to normal tissue. Surgery can also provide an opportunity to biopsy the tumor to learn more about what type it is and whether it's cancerous.



Brain Tumor Remote Second Opinions from Neurosurgeons at MSK

Learn how to get a remote second opinion about your brain cancer or benign tumor diagnosis from MSK neurosurgeons.

[Learn more](#)

Brain Tumor Biopsy

In a biopsy, we remove a tissue sample from the affected area and send it to a pathologist to analyze under a microscope. The pathologist determines what type of tumor it is and provides any other information that can help your doctors customize the most effective plan of care for you. The location of the tumor in your head determines which biopsy approach would be best for you. Some of the ways we perform biopsies include:

Craniotomy

Your surgeon removes a piece of your skull bone to access the tumor, and removes a sample of the tissue to send to the pathologist for analysis.

Needle Biopsy

Your surgeon uses 3-D imaging to guide a very thin needle into the tumor and remove a tissue sample. This procedure is good for tumors located deep in the brain, and it helps protect healthy brain tissue.

Neuroendoscopy

Your surgeon uses an endoscope (a thin tube with a light and lens on its tip) to operate and retrieves tissue through a small opening in the skull. This is a minimally invasive procedure.

Lumbar Puncture (Spinal Tap)

Our experts take a sample of spinal fluid to look for abnormal cells, which may indicate the presence of a tumor. [Learn more about this procedure.](#)

Surgery for Primary Brain Tumors

VIDEO | 04:00

Awake Surgery for Brain Tumors

Learn how awake brain surgery can make treatment safer and more effective for some patients.

[Video Details](#) →

At MSK, you will be cared for by one of the [most experienced neurosurgery teams](#) in the United States. Your neurosurgeon's top priority is to keep you safe and make sure you have a good quality of life after your operation. Our surgeons perform more than 800 brain tumor operations each year.

Improvements in surgical techniques and imaging technologies have revolutionized brain surgery in recent years. Our neurosurgeons take a multidisciplinary approach to care and use the most-advanced surgical technologies, including:

Common Brain Surgery Imaging & Surgical Techniques

Functional MRI: Brain Mapping in Surgical Planning

+

MRI during Surgery

+

MRI Surgical Navigation with Frameless Stereotactic Surgery

+

Awake Brain Surgery

+

Neuroendoscopy

+

Telemedicine Appointments

We know that rest is an important part of the healing process, and that travel to and from appointments can take a lot of time and energy. That’s why, for some neurosurgery visits, you may be able to see your MSK care team through our telemedicine program. If we determine that telemedicine would be appropriate for you, a member of your care team will reach out.

Telemedicine is the use of video technology to connect you with members of your MSK care team. We use secure technology to make sure all of your information stays private. You can communicate through face-to-face video conferencing via a desktop computer, laptop, or tablet device at several MSK locations. We can also use telemedicine while you or a loved one is in the hospital, either to connect you with your provider or to include someone who is not able to visit in person. During your appointment, your provider will be able to check how you’re doing, assess your follow-up needs, and discuss problems you may be having. You will be able to see and hear your MSK specialist, and they will be able to see and hear you — the only difference is that you won’t be in the same room.

A virtual visit saves you time and stress. It may also help prevent an unnecessary trip to an emergency room or urgent care center. In addition, telemedicine can help cut down on missed work days for both patients and caregivers due to travel for appointments.

New Patient Appointments

Call [212-639-6767](tel:212-639-6767)
Available Monday to Friday, 8:00 a.m. to 6:00 p.m. (Eastern time)

[Make an Appointment](#)

PREVIOUS

[Signs & Symptoms of Primary Brain Tumors](#)

NEXT

[Other Treatments for Primary Brain Tumors](#)

Connect

Contact us

Locations

APPOINTMENTS

800-525-2225

About MSK

About us

Careers

Giving

Cancer Care

[Adult cancer types](#)

[Child & teen cancer types](#)

[Integrative medicine](#)

[Nutrition & cancer](#)

[Find a doctor](#)

Research & Education

[Sloan Kettering Institute](#)

[Gerstner Sloan Kettering Graduate School](#) ■

[Graduate medical education](#)

[MSK Library](#) ■

[Communication preferences](#)

[Cookie preferences](#)

[Legal disclaimer](#)

[Accessibility statement](#)

[Privacy policy](#)

[Price transparency](#)

[Public notices](#)

© 2024 Memorial Sloan Kettering Cancer Center