CONDITION

General brain tumors

General brain tumors are cancers that start in the brain or spread to it, affecting how the brain works.

WHAT IT IS
Cancer or growth in brain tissue

BODY SYSTEM
Nervous system, brain and nerves

MAIN SYMPTOMS
Headache, seizures, nausea, balance or vision changes

WHAT CAUSES IT
Mostly unknown, sometimes inherited or immune-related

HOW IT IS DIAGNOSED
MRI scan and brain tissue biopsy

MAIN TREATMENT
Surgery, radiation, and medicines

CAN IT BE CURED?
Sometimes, depends on tumor type and spread

IS IT AN EMERGENCY?
Sometimes, new seizures or sudden severe weakness

LONG-TERM OUTLOOK
Often mixed; some people live years with treatment

Overview

"General brain tumors" is a broad way people describe tumors that involve the brain more widely than a single small area. Some brain tumors start in the brain. Others begin elsewhere in the body and spread to the brain. In both cases, the tumor can affect brain function by taking up space, irritating nearby tissue, and changing normal blood flow.

Why it matters: the brain controls movement, sensation, speech, thinking, and basic body functions. Even a tumor that grows slowly can still cause symptoms when it presses on nearby structures.

This condition can look very different from person to person. The most important things that shape outcomes are the tumor's type, where it is, how much it has spread within the brain or from other parts of the body, and how it responds to treatment.

Symptoms

Symptoms often develop gradually, but they can also start suddenly. They depend on the tumor's location and whether it causes swelling (inflammation and extra fluid around the tumor).

Common symptoms include:

Some people notice "brain fog," memory trouble, or personality changes. Others have symptoms related to increased pressure inside the skull. Increased pressure can happen when tumors block fluid pathways or cause swelling.

Routine pattern vs sudden pattern

Many symptoms are managed over time in a planned way. For example, headaches may become more frequent, or seizures may happen more than once.

A sudden change is different. New seizures for the first time, or rapidly worsening weakness, can signal urgent problems that need prompt assessment.

- Headaches, sometimes worse in the morning or with coughing
- Seizures, such as jerking movements, staring spells, or confusion
- Nausea or vomiting, especially with worsening headaches
- Weakness, numbness, trouble with balance, or clumsiness
- Changes in vision, speech, or thinking

Causes and risk factors

For many brain tumors, the exact cause is not known. In most people, there is no clear reason the tumor began.

Possible contributors include:

Many brain tumors also occur "out of the blue," without a recognizable risk factor.

Risk factors vs cause

A risk factor is something that makes a tumor more likely. It does not mean the risk factor caused it. Likewise, having no risk factors does not mean you cannot get a brain tumor.

- In inherited genetic conditions: Some inherited syndromes raise risk of certain brain tumors.

- Immune-related changes: In people with certain immune system problems, some brain tumors are more likely.
- Previous radiation exposure: Past radiation to the head can increase risk later.
- Age and sex: Many brain tumors are more common in older adults, though specific types differ.
- Viral infections: Some viruses are linked to certain tumor types, depending on the person and tumor.

Diagnosis

Diagnosis usually takes a few steps. Imaging often comes first, because it can show where the tumor is and how it affects brain tissue.

Tests that confirm what it is

What "tumor type" means

Tumor type is how the cells look and behave under the microscope, plus other lab markers. This matters because tumors are treated differently. Two tumors in similar locations can have very different behavior.

- MRI of the brain
- MRI is a scan using magnets to create detailed pictures.
- It helps doctors see the tumor's location, size, and characteristics.
- It often includes contrast (a dye) to improve visibility.
- Biopsy or surgical sampling
- A biopsy means taking a small piece of tissue for lab testing.
- The lab checks cell type and features that guide treatment.
- Sometimes the entire tumor is removed during surgery, and the tissue is still tested.
- Additional tests when needed
- If doctors suspect the tumor may have spread from another part of the body, they may order scans of the chest, abdomen, or other areas.
- Blood tests may help with overall health and treatment planning, but they do not confirm brain tumor type by themselves.

Treatment and management

Treatment is focused on controlling the tumor and managing symptoms so you can function and feel as well as possible.

Main treatment options

How treatment is experienced

Many people go through cycles:

Even when treatment is effective, monitoring continues. Tumors can change over time.

Routine follow-up vs urgent needs

Follow-up imaging is usually scheduled, not done on the spot. It helps track whether the tumor is shrinking, stable, or growing.

Urgent symptoms are managed immediately (see the "When to get medical help" section). A change in symptoms can be related to treatment effects or tumor progression, but the key is that rapid changes should not be waited on.

- Surgery
- Surgery aims to remove as much tumor as safely possible.
- Sometimes only part can be removed, especially if the tumor is close to vital brain areas.
- After surgery, tissue testing helps determine next steps.
- Radiation therapy
- Radiation uses energy to damage tumor cells.
- It can be delivered to a specific area or, in some situations, in more targeted approaches.
- Side effects depend on the dose and the area treated.
- Medicines
- Chemotherapy is medicine that kills or slows fast-growing cells.
- Targeted therapy and immunotherapy may be used for certain tumor types with specific features.
- The best choice depends on the tumor's lab results and your overall health.
- Steroids like prednisone or hydrocortisone for swelling (when needed)
- Some people receive short-term steroids to reduce swelling around the tumor.
- Steroids can improve headaches, nausea, and neurologic symptoms for some people.
- Supportive care

- Seizure medicines (when seizures occur) may be used to reduce seizure risk.
- Pain control, anti-nausea medicine, and rehabilitation support may be part of care.
- tests and results
- a planned treatment phase (surgery, radiation, or medicines)
- symptom management and follow-up imaging
- adjustment based on response and side effects

Complications

Brain tumors and their treatment can lead to complications. Some are temporary, and some last longer.

Possible complications from the tumor

Possible complications from treatment

Many complications can be managed with supportive care and rehabilitation. The goal is to keep day-to-day life as functional as possible.

- Increased brain swelling and pressure
- Can worsen headaches, nausea, and sleepiness.
- Seizures
- Seizures may recur, especially if the tumor irritates brain tissue.
- Neurologic deficits
- These can include weakness, numbness, trouble speaking, balance problems, or vision changes.
- Hydrocephalus
- This means extra fluid buildup in the brain, which can raise pressure.
- Not all tumors cause it, but it can happen when fluid pathways are blocked.
- Radiation effects
- Radiation can affect normal brain tissue around the treated area.
- Medication side effects
- Different medicines cause different side effects, such as fatigue, nausea, blood count changes, or skin issues.

- Post-surgery complications
- These can include infection, bleeding, or temporary worsening of neurologic symptoms.
- Emotional and thinking changes
- Some people notice stress, mood changes, and cognitive changes during and after treatment.

Prevention

For "general brain tumors," there is no single way to prevent them in most cases. The exact cause is often unknown, and not all risk factors are modifiable.

What can be done (when relevant):

In short: you cannot reliably prevent most brain tumors, because many occur without a clear cause.

- If you have a known inherited condition that increases risk, risk-reduction strategies may exist for specific syndromes-but prevention is not guaranteed.
- Avoiding unnecessary radiation to the head is a general health principle.
- Managing immune system health and infections is important for overall wellbeing, but it does not ensure you will not develop a tumor.

Living with it and what to expect

Living with a brain tumor often means living with change-symptoms, treatment schedules, and the way your body responds over time.

Over months

At first, you may notice:

During treatment, fatigue and symptom fluctuations are common. Some people have periods of feeling better after steroids or after tumor removal. Others find that symptoms change more slowly.

Rehabilitation may help with mobility, speech, or strength, especially if you have lingering neurologic deficits.

Over years

Follow-up imaging and clinical checks are usually ongoing. Tumors may:

It's also possible for treatment to affect thinking, energy, or balance even when the tumor is controlled. These changes can improve, stay stable, or sometimes slowly worsen depending on the tumor type and treatment approach.

What most people's days look like

Daily life often includes:

Support from family, friends, and community resources often makes a big difference. Many people also use symptom tracking (for example, headache timing or seizure logs) to help communicate patterns to their care team.

- symptoms that lead to scans and diagnosis
- treatment planning and possible surgery
- follow-up visits that become routine
- shrink with treatment
- stay stable for a time
- grow despite treatment
- managing symptoms (headaches, seizures, fatigue)
- planning around appointments and recovery time
- coping with uncertainty and changes in work or responsibilities

When to get medical help

Some symptoms can be handled through planned appointments. Others need urgent attention.

Urgent or emergency symptoms

Seek urgent medical help (emergency care or urgent evaluation) if you have:

If you are already receiving cancer treatment, these symptoms still warrant prompt assessment, because they can reflect swelling, bleeding, infection, or other urgent problems.

Routine follow-up symptoms

Contact your healthcare team soon (but not necessarily emergency) if you have:

These can often be reviewed during planned visits or arranged sooner if the pattern is changing.

- a new seizure (first-time seizure) or a seizure that does not stop

- sudden weakness on one side, trouble speaking, severe confusion, or fainting
- sudden vision loss or rapidly worsening vision
- a new, severe headache unlike your usual headaches
- repeated vomiting with worsening headache or increasing sleepiness
- any fast neurological change over hours to a day (balance, walking, strength, speech)
- headaches becoming more frequent or harder to control
- seizures increasing in frequency or becoming harder to describe
- gradual worsening weakness, numbness, or balance over weeks
- ongoing nausea, appetite changes, or increasing fatigue
- new cognitive or speech difficulties that slowly progress

Common questions

"What does 'general brain tumor' mean?"

It usually means a tumor that involves the brain more broadly rather than a tiny, single spot. It can include tumors that start in the brain and tumors that spread to the brain.

"How fast do brain tumors grow?"

Some grow slowly, and others grow faster. Growth speed depends on the tumor type and its biology, not just where it is. MRI features and, more importantly, tissue test results help predict behavior.

"Can brain tumors cause seizures?"

Yes. Tumors can irritate brain tissue and trigger seizures. Seizures may appear before diagnosis, during treatment, or sometimes after treatment, depending on the situation.

"What happens after surgery?"

After surgery, you typically have a recovery period and then follow-up planning based on the tissue results. Additional treatment such as radiation or medicines may be recommended for some tumor types, but the plan is based on what the lab found.

"Do symptoms always mean the tumor is getting worse?"

Not always. Symptoms can also change because of swelling, treatment effects, or seizures themselves. Still, any meaningful or fast symptom change should be reviewed.

"Is treatment mainly about curing, or about control?"

For some tumor types, the goal can be cure. For others, the goal may be long-term control and symptom relief. Which goal fits depends on the tumor type and how it behaves over time.

Sources

- National Cancer Institute. Brain Tumors (PDQ) and related patient information summaries.
- National Cancer Institute. Cancer Stat Facts: Brain and Other Nervous System Tumors.
- National Comprehensive Cancer Network (NCCN). NCCN Guidelines for Central Nervous System Cancers (patient-facing summaries and principles as available).
- American Cancer Society. Understanding Brain Tumors and Treatment information.
- American Society for Radiation Oncology (ASTRO). Patient education on radiation therapy for brain tumors.
- National Institute of Neurological Disorders and Stroke (NINDS). Brain Tumors information and symptom pages.
- European Society for Medical Oncology (ESMO). Patient information on gliomas and brain tumor management principles.
- WHO Classification of Tumours Editorial Board. Classification framework for central nervous system tumors (for terminology and general approach).