

# When Cancer Spreads to the Brain

## What are brain metastases?

As a cancerous tumor grows, cancer cells may break away and be carried to other parts of the body by the blood or lymphatic system. This is called metastasis, or metastases when there are multiple areas of spread. Metastatic brain tumors are one of the most common kinds of brain tumor. Although brain metastases can develop from almost any kind of cancer, breast, lung, and kidney cancers, along with melanoma, are the ones most likely to metastasize to the brain. When a new tumor metastasizes to the brain, it isn't called brain cancer. Instead, it's named after the area in the body where the cancer started. For example, lung cancer that spreads to the brain is called metastatic lung cancer.



## What are the symptoms of brain metastases?

Cancer that spreads to the brain can compress the brain and cause swelling inside the skull, leading to headaches. It can also interrupt the brain's electrical activity, causing seizures, speech problems, numbness, or tingling. When a tumor interrupts signals from the brain to the muscles, it can result in coordination problems. Other symptoms can include personality changes, rapid emotional changes, vision changes, vomiting, and weakness.

## How are brain metastases detected?

Brain metastases may be found when the primary cancer is diagnosed. Or, if a person has symptoms, a doctor may recommend specific tests depending on these symptoms. Tests can include computerized tomography (CT) and magnetic resonance imaging (MRI) scans.

## How are brain metastases treated?

The main types of treatments for brain metastases are surgery, radiation therapy, and medical therapy. The type of treatment depends on several factors, including the type of primary cancer that was diagnosed, the number of tumors and location in the brain, the genetic changes found in the cancer cells, the person's overall health, which treatments the person already received, and other factors. Patients may also consider a clinical trial. Patients will often receive steroids to help reduce swelling.

Surgery will often be considered as a first option if the number of metastases is limited, the patient's disease is controlled, and the patient is in good overall health. There are different types of radiation therapy, including radiosurgery and whole-brain radiation. Radiosurgery is a common treatment when the cancer has spread to only a few areas. When patients have large lesions deep in the brain or many lesions throughout the brain, whole-brain radiation therapy is the best treatment option. The treatments are administered over a course of weeks to minimize side effects. Chemotherapy is rarely used to treat brain metastases. Targeted therapy and immunotherapy have been shown to benefit some patients with brain metastases.

Talk with your doctor about all treatment options. Side effects of treatment and the tumor(s) can often be managed with the help of your health care team. This is called palliative care and is an important part of the overall treatment plan.

## Questions to ask the health care team

Regular communication is important in making informed decisions about your health care. Consider asking your health care team the following questions:

- Where in my brain has the cancer spread? Is there more than one tumor?
- Can you explain my test results to me?
- What does this mean for my prognosis (chance of recovery)?
- Would you explain my treatment options?
- What clinical trials are available for me? Where are they located, and how do I find out more about them?
- Which treatments, or combination of treatments, do you recommend? Why?
- What is the goal of each treatment? Is it to eliminate the cancer, help me feel better, or both?
- Would you explain the options for managing pain, brain swelling, or seizures with medication?
- In addition to medication, what other strategies can I use to manage my quality of life?
- How can a palliative care specialist help manage my quality of life while I'm getting treatment?
- What follow-up tests will I need?
- How will brain metastases affect my daily life?
- What long-term side effects may be associated with my cancer treatment?
- If I'm worried about managing the costs of cancer care, who can help me?
- Where can I find emotional support for me and my family?
- Whom should I call with questions or problems?
- Is there anything else I should be asking?

**For a digital list of questions, download Cancer.Net's free mobile app at [www.cancer.net/app](http://www.cancer.net/app).**

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## WORDS TO KNOW

### Computerized tomography (CT) scan:

A test that creates a 3-dimensional picture of the inside of the body with an x-ray machine

### Chemotherapy:

The use of drugs to destroy cancer cells

### Clinical trial:

A research study that tests a new treatment or drug

### Edema:

Swelling caused by fluid in the body's tissue

### Lesion:

An area of cancer

### Magnetic resonance imaging (MRI) scan:

Test that uses magnetic fields, not x-rays, to produce detailed images of the body

### Oncologist:

A doctor who specializes in treating cancer

### Primary cancer site:

The location of the original cancer

### Radiation therapy:

The use of high-energy x-rays to destroy cancer cells

### Radical surgery:

A type of radiation therapy that is aimed directly at the tumor

### Secondary (metastatic) tumor:

A tumor that starts in one part of the body and spreads to another

### Tumor:

An abnormal growth of body tissue

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