

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 1 of the most common kinds of brain tumor. Although brain metastases can develop from almost any kind of cancer, the types that are most likely to spread to the brain are breast, lung, and kidney cancers and melanoma. When a new tumor spreads to the brain, it is not called brain cancer. Instead, it is 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 computed 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 therapy using medications. 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. When making treatment decisions, people may also consider a clinical trial. Clinical trials are an option to consider for all stages of cancer.

Surgery will often be considered as a first option if the number of metastases is limited, the disease is controlled, and the person is in good overall health. Radiation therapy may be recommended, including radiosurgery and whole-brain radiation. Radiosurgery is a common treatment when the cancer has spread to only a few areas. When people have large lesions deep in the brain or many lesions throughout the brain, whole-brain radiation therapy is usually the best treatment option. The treatments are given over multiple weeks to reduce side effects. Chemotherapy is rarely used to treat brain metastases. Targeted therapy and immunotherapy have been shown to benefit some people with brain metastases. People will often receive steroids to help reduce swelling.

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 or supportive care and is an important part of the overall treatment plan.

ASCO ANSWERS is a collection of oncologist-approved patient education materials developed by the American Society of Clinical Oncology (ASCO) for people with cancer and their caregivers.

Questions to ask the health care team

Regular communication is important in making informed decisions about your health care. It can be helpful to bring someone along to your appointments to take notes. Consider asking your health care team the following questions:

- ▶ Where in my brain has the cancer spread? Is there more than 1 tumor?
- ► Can you explain my test results to me?
- ▶ What does this mean for my prognosis, or chance of recovery?
- Can 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?
- If I have a guestion or problem, who should I call?

For a digital list of questions, download Cancer.Net's free mobile app at www.cancer.net/app.

Words to know

Chemotherapy: The use of drugs to destroy cancer cells

Clinical trial: A research study that tests a new treatment or drug.

Computed tomography (CT) scan: A test that creates a 3-dimensional picture of the inside of the body.

Edema: Swelling caused by fluid in the body's tissue.

Immunotherapy: Treatment that helps your immune system fight cancer.

Lesion: An area of cancer.

Magnetic resonance imaging (MRI) scan: A test that uses magnetic fields 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.

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

Secondary (metastatic) tumor: A tumor that starts in 1 part of the body and spreads to another.

Targeted therapy: Treatment that targets specific genes or proteins that contribute to tumor growth.

Tumor: An abnormal growth of body tissue.

This fact sheet was developed and is © 2021 American Society of Clinical Oncology, Inc. (ASCO). All rights reserved worldwide. No sponsor was involved in the development of the content. The mention of any company, product, service, or therapy does not constitute an endorsement of any kind by ASCO or Conquer Cancer®, the ASCO Foundation. It is the responsibility of the treating physician or other health care provider, relying on independent experience and knowledge of the patient, to determine drug dosages and the best treatment for the patient. ASCO assumes no responsibility for any injury or damage to persons or property arising out of or related to any use of the fact sheet or any errors or omissions. Information in ASCO's patient education materials is not intended as medical advice or as a substitute for medical advice. Patients with health care-related questions should call or see their physician or other health care provider promptly and should not disregard professional medical advice, or delay seeking it, because of information encountered here. ASCO believes that all treatment decisions should be made between patients and their doctors. Advances in the diagnosis, treatment, and prevention of cancer occur regularly. For more information, visit Cancer.Net (www.cancer.net).

Health Care Professionals: To order more printed copies, please call 888-273-3508 or visit www.cancer.net/estore.



MADE AVAILABLE THROUGH

CONQUER CANCER®
THE ASCO FOUNDATION

AABRM21