

Chemobrain

■ What is chemobrain?

“Chemobrain” is a common term used to describe the cognitive problems that people diagnosed with cancer often face during and after cancer treatment. The term was first used to describe cognitive symptoms in people who had specifically received chemotherapy, but its definition has since been expanded to describe this problem even if chemotherapy was not part of a person’s cancer treatment.

Cognitive problems occur when a person has trouble processing information. This includes mental tasks related to attention span, thinking, and short-term memory. These problems vary in severity and often make it hard to complete daily tasks. Lots of people with cancer have cognitive problems during cancer treatment. And many cancer survivors have issues that continue for months or longer after finishing treatment. Usually, these symptoms slowly improve. In most people, symptoms disappear within 4 years.



■ What causes chemobrain?

The causes of chemobrain are not well understood. Research continues on the effect of cancer medications and other treatments on the brain. The general stress of having cancer and going through treatment may be a factor in the development of chemobrain. Hormonal changes and emotional distress may also play a role.

■ What are the symptoms of chemobrain?

Cancer survivors with chemobrain have cognitive problems that prevent them from thinking clearly. Symptoms may include trouble concentrating or focusing, mental fog or disorientation, and difficulties with judgment or reasoning. Memory loss and forgetting certain things, especially names, dates, and numbers, are also symptoms of chemobrain. The intensity of these symptoms often depends on several factors. This includes a person’s age, stress level, history of depression or anxiety, coping skills, and access to psychological support resources. There is no specific laboratory or x-ray test that can be used to diagnose chemobrain. However, before assuming that new cognitive symptoms are a result of chemobrain, it is important to make sure that the symptom is not caused by something else. Examples of other causes of cognitive symptoms include anemia, electrolyte imbalances, sleep disturbances, fatigue, depression, previous brain surgery or cancer involving the brain, and other medications, particularly pain medicine. Many of these causes can be treated quickly and effectively. Be sure to tell your health care team about any new cognitive symptoms you experience.

■ How is chemobrain managed and treated?

There is no specific treatment for chemobrain, but several approaches are often effective in managing symptoms. These may include medications, occupational therapy to help with daily tasks and job-related skills, and cognitive training to help improve cognitive skills. There are also strategies to help cancer survivors better cope with attention, thinking, and memory difficulties, such as keeping a checklist of daily reminders, performing 1 task at a time, and using wordplay to help remember things. Try brain-strengthening mental activities, like solving crosswords or puzzles, painting, playing a musical instrument, or learning a new hobby. Get plenty of rest and make time for physical activity to increase mental alertness. Don’t be afraid to ask your family and friends for help. Talk with your employer if you are having problems at work. Remember, the symptoms of chemobrain gradually improve in the large majority of cancer survivors over time.

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:

- ▶ What could be causing my cognitive problems?
- ▶ How long do these types of symptoms usually last?
- ▶ What kinds of tests can help find the cause of my symptoms?
- ▶ Are there medications that can help treat chemobrain?
- ▶ What are some ways I can manage chemobrain without medications?
- ▶ What strategies can I use to reduce or manage my cognitive problems?
- ▶ What should I do if chemobrain is causing problems at work or school?
- ▶ How can a palliative care specialist help improve my quality of life?
- ▶ Where can I find emotional support for myself and my family?
- ▶ If I have a question or problem, who should I call?

Find more questions to ask the health care team and tips to help manage chemobrain at www.cancer.net/chemobrain. For a digital list of questions, download Cancer.Net's free mobile app at www.cancer.net/app.

Words to know

Anemia: A low level of red blood cells.

Anxiety: A feeling of being nervous, on edge, worried, or overwhelmed.

Chemotherapy: The use of drugs to destroy cancer cells.

Cognitive problems: When a person has trouble with attention, thinking, or memory.

Counseling: Talking with a trained mental health professional.

Dehydration: The loss of too much water from the body.

Depression: Having a low mood and/or feeling numb consistently for more than 2 weeks.

Fatigue: Cancer-related fatigue is a persistent feeling of physical, emotional, or mental tiredness or exhaustion related to cancer and/or its treatment.

Hormone therapy: Treatment that blocks hormones that cause cancer cells to grow.

Side effects: Problems or feelings that a medicine or other treatment causes. For example, nausea can be a side effect of chemotherapy.

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