



**Dana-Farber**  
Cancer Institute



**BRIGHAM AND  
WOMEN'S HOSPITAL**

## DANA-FARBER/BRIGHAM AND WOMEN'S CANCER CENTER

### Concentration and memory problems (chemobrain)

Many patients experience mental clouding or fogginess during and after cancer treatment. Even though its exact cause isn't always understood, this mental fog is commonly called "chemobrain" by patients.

Physicians often describe it as chemotherapy-related "cognitive impairment." Cognitive symptoms can be related to chemotherapy, or they may be caused by other issues that cancer patients commonly experience. Either way, researchers have found that the cognitive changes are real – not imagined – and for some patients they can cause problems in everyday life.

#### **Here are a few examples of what patients may experience with chemobrain:**

- Trouble with memory, such as recalling details or events
- Problems remembering or finding common words in everyday conversation
- Trouble concentrating or "spacing out"
- Taking longer to finish things; slower thinking and processing of information
- Having a hard time doing more than one thing at a time (multitasking)

#### **Along with chemotherapy, other issues can cause cognitive problems**

- Tiredness or fatigue
- Low blood counts
- Aging
- Pain
- Difficulty sleeping
- Stress
- Anxiety
- Depression
- Medications you are taking to help with side effects of treatment
- Hormonal changes or hormonal treatments

Chemobrain is not considered a progressive condition. For most people, it gradually disappears over time. Persistent, long-term symptoms are uncommon, but may occur in a small number of patients.

#### **When to get help?**

An evaluation may be helpful if you completed active treatment (such as chemotherapy and/or radiation) more than six to nine months ago and you continue to experience cognitive changes that impact your quality of life or ability to function at home, school, or work.



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### **How should I be evaluated?**

If you completed active treatment (such as chemotherapy and/or radiation) more than six to nine months ago and you continue to experience cognitive changes that impact your quality of life, you may want to ask your doctor about these options:

- **Chemobrain consultation with a psychiatrist:** If you have anxiety, depression, or sleep problems in addition to cognitive changes, a psychiatry consultation may be helpful. A psychiatrist with expertise in cancer issues will assess your symptoms, help identify the most likely causes of your cognitive changes and recommend treatment strategies.
- **Neuropsychological testing:** Before or after a chemobrain consultation, your health care provider may refer you to a neuropsychologist for neuropsychological testing. This test will assess your cognitive skills in great detail, and the neuropsychologist will also give you recommendations for treating and coping with symptoms.

### **Strategies for treating and coping with your symptoms**

- **Exercise your brain.** Try word puzzles, sudoku, or learning a new language.
- **Address anxiety, depression and sleep issues.** Talk with your health care team about treatments that may help.
- **Get organized.** Use a daily planner. Keep a to-do list. Take notes. Follow a daily schedule.
- **Focus on one activity at a time.** Avoid multitasking.
- **Optimize your health.** Exercise regularly and follow a well-balanced diet.
- **Find ways to reduce stress in your life.** Ask for help when necessary.
- **Cognitive rehabilitation.** This is a professional program that will usually require a referral from your doctor.

### **Recommended reading**

- *Harvard Medical School Guide to Achieving Optimal Memory*, Aaron Nelson and Susan Gilbert
- *Your Brain After Chemo: A Practical Guide to Lifting the Fog and Getting Back Your Focus*, Dan Silverman and Idelle Davidson