

## What is Chemo Brain?

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According to the American Cancer Society, up to 30 percent of cancer patients who receive chemotherapy may experience chemo brain. Exactly how it occurs isn't certain, but some experts think that some chemo drugs may slip past the "blood-brain" barrier, which separates chemicals that belong in the brain from those that do not. Once that happens, your cognitive skills can be affected.

### **What cognitive skills are most affected?**

- Memory lapses -forgetting things that you usually have no trouble recalling
- Trouble concentrating -you can't focus on what you're doing, have a short attention span or may "space out"
- Trouble remembering details - like names, dates, and sometimes larger events
- Trouble multi-tasking - answering the phone while checking email
- Taking longer to finish things - disorganized, slower thinking and processing
- Trouble remembering common words - unable to find the right words to finish a sentence

### **What causes brain problems during cancer treatment?**

Studies suggest that there may be more than one cause of chemo brain, especially for the short-term symptoms. Some people with cancer have very real brain problems even though they have not had chemo. Still others notice problems when getting hormone treatments. For some, problems start after surgery. Along with chemo, many different things can worsen brain function.

For example, brain function problems could be caused or made worse by:

- The cancer itself
- Other drugs used as part of treatment, such as steroids, anti-nausea, drugs used during surgery (anesthesia), or pain medicines
- Low blood counts
- Sleep problems
- Infection
- Tiredness (fatigue)
- Hormone changes or hormone treatments
- Other illnesses, such as diabetes or high blood pressure
- Poor nutrition
- Patient age
- Depression
- Stress, anxiety, worry, or other emotional pressure

#### **Chemo brain: What to do at work**

- Stress can impair your performance and thinking skills.
- To reduce stress during work, practice “Belly Breathing”. Focus on breathing in deeply and exhaling deeply until you feel more in control.
- Make a list of a list of priorities for the day.
- Once you prioritize, tell yourself you will focus only on the first task that needs to be done. Try not to think about anything else. Otherwise, your concentration will suffer. As distractions decrease, concentration increases.
- If you were good at multitasking before the cancer diagnosis--stop for a while, at least until you regain a better memory and other cognitive skills.
- Use memory assists like computer-based calendar alerts. You can use these "alerts" to remind you of upcoming meetings, a project due date or other details. Learn the features of your "smart phone" that can help you stay on track.

- Set up your work environment to boost concentration. That means clearing everything off your desk or your immediate work area except what you are working on first. Some people create an "auto reply" message for their email that tells people you will respond at a specific time each day. Then, when you do turn your attention to email, stay focused on that task. You can do the same with your voicemail message, choosing to return calls at a specific time.
- Get in a rut. Put your keys, files, coat and other items in the same place day after day. It will reduce the "Where is it?" stress when you are under fire and running late. Do the same at home. This will reduce that early morning stress and allow you to concentrate and focus.

### **How can my coworkers help?**

- Ask for input from coworkers you know and trust. Tell them you need input to see if your work is up to organizational standards. For example, when you write a report, show one of them a rough draft and ask for comments. Ask them to check and see if you've missed any important points or if you need to improve grammar, spelling and punctuation.
- Ask a coworker you trust to help "retrain" you on the tasks you've forgotten. If you generally distribute the mail in the morning, or organize an office party, ask someone to walk you through the steps if you are having difficulty. If a coworker offers to do the task for you, gently decline and tell them that you are trying to relearn.
- Ask a coworker you trust to "prompt" you when he or she notices you need help remembering names, facts, schedules or other details.
- Interact with coworkers. Being in a socially stimulating environment for some of the workday helps brain function. This "real world" connection is part of the recovery process. Somehow, the combination of thinking and talking is good for repairing the brain.

## What improvements can I make to my lifestyle?

Take stock of how you're doing on basic lifestyle habits to keep chemo brain problems to a minimum. For example:

- Get 6-8 hours of sleep.
- Maintain a healthy diet or improve your diet.
- Fit in physical activity most days of the week. It doesn't have to be an hour workout at the gym, focus on taking the stairs instead of the elevator, parking farther away from your office, or going for a 15 minute walk. Exercise is often the first thing people give up when stressed for time, but it should be the last. Getting regular exercise:
  - helps you sleep better
  - reduces stress
  - improves energy level and
  - improves overall sense of well-being
- Manage your stress by:
  - Joining a support group
  - Making time to relax every day
  - Doing things you enjoy
  - Writing in a journal
  - Learning a new hobby
  - Practicing yoga, meditation, deep breathing and/or progressive muscle relaxation and biofeedback

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