

“Chemo Brain” What is it, really?

Presented by
Debra Arrowood, MS CCC-SLP
Speech and Language Pathologist
Aurora Medical Center Manitowoc County



What is it?

A term used to describe cognitive deficits that occur during or after cancer treatment

AKA “Chemo Fog”, chemotherapy-related cognitive impairment or cognitive dysfunction

Misleading term: Other causes beside chemo

Does it go away?

For most, it gradually disappears over time
17-34% of people continue to have problems
after chemo is done

Brain imaging shows improvement/resolution in
regional brain volumes as of three years post-
chemo

This means it can take a long time to heal

Chemo Brain versus Dementia

Chemo brain is not progressive

Chemo brain does NOT increase risk for Alzheimer's disease

Cognitive findings are different

Alzheimer's: Memory cues are not helpful

Chemo brain: Memory cues help you to remember

Symptoms

Being unusually disorganized

Confusion

Difficulty concentrating

Difficulty finding the right word

Difficulty learning new skills

Difficulty multi-tasking

Symptoms

Fatigue

Feeling of mental fogginess

Short attention span

Short-term memory problems

Taking longer than usual to complete routine tasks

Symptoms

Trouble with verbal memory, such as remembering a conversation you had or a news story you heard on the radio/TV

Trouble with visual memory, such as recalling an image or list of words, where you parked your car, or where you left your keys

What causes it?

No one knows!!!

Some research says there is a correlation (not cause and effect!) between chemo and cognitive decline

Some research says there isn't—there are people who get chemo also, and never have the cognitive deficits

Potential Cancer-Related Causes

Cancer

Stress hormones from receiving a cancer diagnosis

Certain cancers can produce chemicals that affect memory

Potential Cancer-Related Causes

Cancer Treatments

Chemotherapy

Hormone therapy

Immunotherapy

Radiation therapy

Stem Cell Transplant

Surgery, especially to the brain directly

Potential Cancer-Related Causes

Complications from Cancer Treatment

Anemia

Fatigue, Insomnia, sleep deprivation

Infection

Cancer-induced menopause/ hormonal changes

Nutritional deficiencies (Vitamin B12)

Pain due to cancer treatment

Potential Cancer-Related Causes

Emotional reactions

Anxiety

Depression

Stress

Potential Cancer-Related Causes

Others

Inherited susceptibility to chemo brain

Pain medications

Recurrent cancer that has spread to the brain

Risk factors that can increase risk

Brain Cancer

Chemotherapy that is given directly into the brain or spine/spinal fluid

Chemo and whole-brain radiation

Radiation therapy to the brain

Younger age at time of cancer diagnosis and treatment

How is it diagnosed?

There are no tests for it

Cancer survivors who experience these symptoms often score in the normal range on memory tests

Doctors can prescribe other tests to rule out other causes for memory problems

How is it diagnosed?

ANALOGY

You go to the doctor for cold symptoms: Not strep, not influenza, not anything else, so it must be a VIRUS! Doesn't make you feel any less sick.

Same for chemo brain. It may not show up on formal testing, but you still feel the effects.

Treatment

Not sure of cause, therefore no cure

In most cases, cancer-related memory problems are temporary so you focus on compensation for deficits

No standard treatment protocol

Doctor works with you to develop an individualized approach to dealing with deficits

Limiting effects of chemo brain

Control other conditions like anemia, depression, sleep deprivation and early menopause: They can cause memory problems just by themselves



Adapting and coping

Repetitive exercises to train your brain

Fit Brains and Lumosity are excellent apps for improving cognitive function

Tracking memory problems to find patterns:
worse when hungry or tired, better first thing in the morning

Complete more difficult tasks when you know you'll do better

Adapting and coping

Compensatory strategies: write things down, record important conversations for review later, tell people to call back and leave a message on the answering machine, bring someone along to doctor appointments

Stress-relief: massage, yoga, meditation, stretching, walking

Medications

None has been approved to treat chemo brain

Some medications that improve other issues may help:

Ritalin, Concerta, etc for attention deficit/hyperactivity

Aricept, for people with Alzheimer's

Provigil, for people with certain sleep disorders

Namenda, used to improve memory in people with Alzheimer's disease (may help during radiation to the brain)



For your life.

Medications

More study is needed to see how or if these medications help



When to call your doctor

If you're currently under treatment, talk to your doctor about signs and symptoms

If you're already done with treatment, make an appointment with your family doctor

You may be referred to a specialist for help
(Neuropsychologist, Speech and Language Pathologist)



Be prepared for your appointment

Keep a journal of your memory lapses: what time of day, what you were doing, what difficulty you experienced

Make a list of all your medications, including supplements and vitamins

Take a family member or friend along, or bring a recorder to help remember the visit

Write down questions to ask your doctor so you don't forget



Questions to ask your doctor

What is likely causing it?

How long will it last?

Should I see a neuropsychologist or a speech and language pathologist?

What can I do on my own to help improve my memory?

If I need brain radiation, can you do hippocampal sparing radiation?

Should I take any medications (Namenda?) during brain radiation?

Questions your doctor may ask you

When did you first begin having symptoms?

Are symptoms continuous or occasional?

How do your symptoms affect your daily life (give examples)

What, if anything, seems to improve your symptoms?

What, if anything, seems to worsen your symptoms?

Track your symptoms in a journal: time of day, situations, how it affected your ability to do what you wanted

Lifestyle and home remedies

Control your environment: reduce distractions, turn off TV or radio if you need to focus

Prepare yourself for success!

- Eat so you're not distracted by hunger

- Pick a time when you're most alert

- Get a good night's sleep

- Plan your task so you know exactly what you need to have or do

Stay organized

- Use a planner, make a to-do list, have a place for everything and keep everything in its place

- Keep a routine

 *Aurora Health Care*[®]

For your life.

Lifestyle and home remedies

Clear your mind of distractions: write down anything that pops into your head while you're concentrating on something else, and address it later

Take frequent breaks: divide tasks into manageable parts

Exercise your brain: Crossword puzzles, Sudoku, learn a new hobby, study a new language, learn to play an instrument

Exercise your body: Moderate exercise helps cope with stress, fatigue and depression. It also improves blood circulation to the brain

Lifestyle and home remedies

Clear your mind of distractions: write down anything that pops into your head while you're concentrating on something else, and address it later

Take frequent breaks: divide tasks into manageable parts

Exercise your brain: Crossword puzzles, Sudoku, learn a new hobby, study a new language, learn to play an instrument

Exercise your body: Moderate exercise helps cope with stress, fatigue and depression. It also improves blood circulation to the brain

You are NOT alone!

Memory problems happen to everyone: you may not be able to control the cancer-induced deficits, but you can control the ones common to everyone, like sleep deprivation, distraction, and disorganization

Take time every day to relax and do stress-relieving activities: exercise, write in a journal, listen to music, meditate, rest

Be honest with others about your problems: suggest ways they can help you, like writing you notes, sending you emails or leaving you a voicemail to remind you of plans



Speech Therapy can help!

We provide memory strategies to help you improve your memory

We do attention exercises to improve focus

We teach you organizational strategies to improve memory and organization

We teach you how to incorporate new skills into your daily routine



Any questions for me?

Thank you so much for your time and attention!

I hope you find some value in this information!

