



Cancer Survivorship Patient Education on Post-Treatment Care

Cognitive Impairment in Cancer Survivorship

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What is it?

Cognitive impairment or difficulties in mental functioning that is noticed by the patient and/or their family/friends/caregivers.

How is it diagnosed?

Cognitive impairment is diagnosed initially by assessment by a physician or psychologist which may or may not include a brief cognitive screening. This assessment may result in a referral to a neuropsychologist for further evaluation and recommendations.

How common is it among head and neck cancer patients?

There is limited data specific to patients with head and neck cancer, with most of the research focused on patients who received radiation or chemoradiation as treatment. Estimates in the general population with cancer range from 15-75% during treatment. Up to 35% of patients report ongoing cognitive impairment after treatment is complete. Estimates in patients with head and neck cancer range from 50-80%. The higher incidence in patients with head and neck cancers prior to cancer treatment may be due to higher incidence of alcohol use in this population. Alcohol use, in particular heavy alcohol use, is related to cognitive impairment, particularly in areas of memory, planning, and decision making. Continued alcohol use throughout cancer treatment may increase the risk of cognitive impairment in cancer survivorship. It is recommended that alcohol be avoided during and following cancer treatment in order to avoid increased risks of cognitive impairment. There is a higher incidence of cognitive impairment related to area of head treated with radiation, with those areas which involve the temporal lobe and cerebellum receiving radiation being worse.

What are the signs and symptoms?

Symptoms of cognitive impairment in cancer survivorship include fatigue and tiredness, which occurs in 70-100% of patients during treatment. Other symptoms include disruptions in thinking and memory, problems with short-term and/or long-term memory, problems with remembering new information, slowed thinking, problems with paying attention or focusing, problems with multi-tasking, and problems with math, organizational, and language (e.g., not being able to organize thoughts, find words, do simple math calculations). Behavioral and emotional changes (e.g., being more irritable, tearful, easy to anger, socially inappropriate behavior) and severe confusion can also be reported.

Cognitive impairment can be associated with decreased physical abilities and independence in activities of daily living, decreased psychosocial functioning (e.g., relationships, socializing), and decreased likelihood of returning to employment or hobbies. It also negatively impacts the patient and their caregivers/families.



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How is it treated?

Treatment for cognitive impairment in cancer survivorship involves addressing reversible causes. These may include management of anemia, optimizing nutrition (dietitian consultation and follow up), avoiding alcohol/tobacco/other drugs, correcting metabolic/endocrine abnormalities, managing pain (with medication, exercise, and psychotherapy), treating insomnia (with cognitive behavioral therapy and/or medication). It is also important to manage depression (with psychotherapy and/or antidepressants), anxiety (with psychotherapy and/or anxiolytics), and fatigue (with exercise, physical therapy, medications). Some non-pharmacologic treatment options to manage cognitive impairment include exercise, yoga, acupuncture, psychotherapy/counseling, occupational therapy, and cognitive rehabilitation/training.

There are a number of Important tips to help cope with cognitive impairment. Some helpful tips are to keep a daily checklist, avoid multi-tasking, carry a calendar and note pad to write things down as you think of them, using a multi-day pill organizer, get plenty of rest, make time for physical activity, and do brain-strengthening mental activities such as do crosswords/word searches/Sudoku. It is important to take a family member or friend with you to medical appointments. You should talk with your employer if you are having problems at work and discuss ways your employer could support you (e.g., changing workload or deadlines, delegating duties). Ask for help from others and allow family and friends to help.

When should I call my doctor?

Talk to your doctor about any cognitive concerns and discuss options for coping with or managing both short term and long-term cognitive impairment.

Where can I learn more?

www.cancer.net/navigating-cancer-care/side-effects/attention-thinking-or-memory-problems