

Where Have All My Thoughts Gone- Chemobrain

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Cognitive Impairment???

- Forgetful
- Can't remember names
- Lack of concentration
- Word retrieval

Potential Etiology

- Cytokine –induced inflammatory response
- Anemia
- Chemotherapy- induced menopause symptoms
- Direct injury to cerebral gray/ white matter

Cognitive Domains

- Memory
- Visuo spatial skill
- Attention/ performance
- Executive function (planning, decision- making, judgement)
- Information- processing speed
- Language
- Motor function
- Learning



- We Know There is a Disconnect Between Self-Report and Objective Measures

Some Insights from Research on Cognitive Impairment

- Evidence is inconsistent/ poorly understood
- Have measured both perceived cognitive impairment and objective impairment- do not usually match up
- Rarely is pretesting done prior to chemotherapy in clinical area
- When pre- testing done, low hemoglobin found to be risk factor for cog. Impairment

Insights, con't...

- 60% participants exhibited a decline in cognitive performance from baseline-6mo. Nearly 50% of those participants demonstrated improvement at one year following chemotherapy (Welfel, et al 2004)

Research Conclusions

- More research on survivors than on patients actually going through chemotherapy
- Agreement that cognition impairments do occur during chemotherapy but many differences exist between therapies , hard to pinpoint etiologies
- Age, depression, fatigue and time on hormonal therapy – significant predictors of perceived cognitive function

Research- Cancer Nursing - 2009

- Jansen, et al,,- sign. Changes in 2 cognitive domains- memory & visuospatial skill
- Thielen, - Qualitative study- 13 women- substantial problems with CI

Impairments (Jansen, et al 2005)

- Speed of information processing (83%)
- Motor function (71%)
- Visual memory (67%)
- Language memory (50%)
- Attention/ concentration (43%)
- Executive function (43%)
- Verbal memory (43%)
- Visuospatial skill (29%)

What Makes it Worse

- Fatigue
- Anxiety/ Depression
- Hormonal status
- Insomnia

What Helps....

- Work your mind...
- Work your body...
- Get organized
- Try to fix underlying issues, depression, anemia, sleep problems

Work Your Body



What Helps...

- Eat Well
- Practice good sleep hygiene
- Reduce stimulants in diet
- Reduce complexity in your life-or break complex tasks into orderly, manageable parts
- Practice deep breathing exercises-relaxation methods
- Connect with others

What May Help....

- Psychostimulant, ie ritalin
- Modafinil and dexamethylphenidate (not yet indicated)
- Vit B 6- 12, folic acid , iron
- Cognitive behavioral therapy- memory and attention adaption

When to be concerned...

- Memory lapses on more frequent basis
- Not remembering conversations, repeating conversations
- Forgetting people you really should know
- Support people may notice this before the person does





Thank You !!!