Beating Fatigue in Bone Marrow Failure Diseases

Lillian M. Nail, PhD, RN, CNS, FAAN

Rawlinson Professor & Sr. Scientist, School of Nursing Member, OHSU Knight Cancer Institute Oregon Health & Science University, Portland, OR

Symptom Management Research Center

Fatigue in Chronic Illness

- · Seen in heart failure, multiple sclerosis, fibromyalgia, anemia, lung disease, kidney failure, cancer, and most other chronic illnesses
- Most of the research to date focuses on fatigue as a side effect of cancer treatment
 - MDS pt. survey >90% reported "excessive" fatigue Fatigue is a side effect of many treatments used in
 - bone marrow failure diseases Anemia leads to fatigue and decreased quality of life

09) QoL and use of red cell transfusion in patients with MDS Am J Hematology, 84:671-7 2008) Common troublesome symptomsMDS Leuk Res, 32(9):691-8. Symptom Management Research Center

SU

OHSU

Fatigue & Physical Activity Levels

Before & After HSCT



OHSI Symptom Management Research Center



Causes of Fatigue

- Lack of physical activity (↓ muscle mass)
- Anemia
- Immune response
- Sleep problems
- Hormone shifts?
- Brain (central nervous system)?
- Dehydration?
- Other????
- Note: Most people with chronic illness have >1 of these possible causes.

OHSU

Symptom Management Research Center

Myths About Fatigue

- It will go away if you just sleep or rest more
- It means you are just depressed
- · You imagined it
- If you were really tired, you couldn't do anything
- You are tired because you are trying to do too much

OHSU

OHS1

Symptom Management Research Center

What Helps?

- Fixing problems like anemia, low thyroid, etc.
- Exercise (more info later)
- Understanding fatigue pattern and planning around it, doing things the "easy" way (energy conservation)
 - Planning activity around transfusion schedule
 - Exercise early in day if you crash and burn in the late afternoon

Symptom Management Research Center

What Helps? (cont'd)

- Stimulant drugs
 - Methylphenidate (Ritalin) helps some in studies in cancer but study results are mixed
 - Amphetamines used clinically for some patients
 - Mixed results for antidepressants interest is in drugs that target serotonin
- Dealing with related problems: Pain, sleep, etc.

Symptom Management Research Center

Exercise

- Aerobic exercise (walking, bike, swimming, etc.)
- 2008 recommendations = 150-300 mins moderate intensity aerobic exercise/wk
- Start were you are, gradually ↑ increase intensity
- · Adjust depending upon blood counts, stop if symptoms increase

www.tengtit.new, 2008 guidelines Carison, LE et al. (2006) Individualized exercises program for the treatment of severe failgue after allogeneic HSCT Apid tsuby. Bore Marrow Transplantation, 37, 945-954. Cochrane Reviews on exercise and on psychostimulants in cancer failgue, Schritz, K. et al. (2010) ACSM roundable exercise guidelines for people with cancer. MSSE, 1409-1423.

OHSI

OHS1

Symptom Management Research Cente

Current State of the Art...

- · Approaches to managing fatigue are individualized
- · Recognize that fatigue is side effect of transplant and of many drug therapies tested to treat aplastic anemia or MDS
- Few studies on symptoms in people with aplastic anemia or MDS. Current studies in cancer emphasize exercise.
- Energy conservation probably useful and not harmful

Symptom Management Research Center



Team SOAR Wasabi Paddling Club, Portland, OR Gold medal, USDBF Nationals, Tampa, FL Breast Cancer Survivor Class

Symptom Management Research Center