

Screening and Assessment – Fatigue in Cancer Survivors

Routinely screen for fatigue

Use a numeric rating scale as clinically indicated and at least annually.

Education and Counseling

- All patients should be offered specific education about fatigue following treatment (e.g. information about the difference between normal and cancer related fatigue, persistence of fatigue post treatment, and causes and contributing factors). All patients should be offered advice on general strategies that help manage fatigue (e.g., maintaining physical activity) and guidance on self-monitoring of fatigue levels.

Comprehensive and Focused Assessment

(for patients who report moderate to severe fatigue)

History and Physical

1) Perform a focused fatigue history, including:

- Onset, pattern, duration
- Change over time
- Associated or alleviating factors

2) Evaluate disease status by:

- Evaluate risk of recurrence based on stage, pathologic factors, and treatment history
- Perform review of systems to determine if other symptoms substantiate suspicion for recurrence

3) Assess treatable contributing factors:

- Comorbidities (e.g. cardiac dysfunction, endocrine dysfunction, pulmonary dysfunction, renal dysfunction, anemia, arthritis, neuromuscular complications, sleep disturbances, pain, emotional distress)
- Medications (consider persistent use of sleep aids, pain medications, or antiemetics)
- Alcohol/substance abuse
- Nutritional Issues
 - Weight/caloric intake changes
- Deconditioning

As a shared responsibility, the clinical team must decide when referral to an appropriately trained professional (e.g., cardiologist, endocrinologist, mental health professional, internist, etc.) is needed.

Laboratory Evaluation

- Consider performing laboratory evaluation based on presence of other symptoms, onset, and severity of fatigue
- CBC with differential
 - Compare end-of-treatment hemoglobin/hematocrit with current values
 - Assess other cell lines (WBC and platelets)
- Comprehensive metabolic panel
 - Assess electrolytes
 - Assess hepatic and renal function
- Endocrinologic evaluation
 - TSH
 - Consider more comprehensive evaluation or referral to specialist if other symptoms present

Treatment and Care Map – Fatigue in Cancer Survivors

Treat Contributing Factors

Address all medical and substance-induced treatable contributing factors first (e.g., pain, depression, anxiety, emotional distress, sleep disturbance, nutrition deficit, activity level, anemia, medication side-effects, and comorbidities). See Table 2 for more details.

Some patients may also benefit from interventions described below to treat fatigue. Currently, there are no clear standards to select among these for an individual patient. Further research is needed to establish a strategy for prioritizing, sequencing, and linking the available options. If treated for fatigue, patients should be followed and re-evaluated on a regular basis to determine whether treatment is effective or needs to be reassessed.

Physical Activity

- Initiating/maintaining adequate levels of physical activity can reduce cancer-related fatigue in post-treatment survivors.
- Actively encourage all patients to engage in a moderate level of physical activity after cancer treatment (e.g., 150 minutes of moderate aerobic exercise (such as fast walking, cycling, or swimming) per week with an additional 2 to 3 strength training (such as weight lifting) sessions per week, unless contraindicated).
- Walking programs are generally safe for most cancer survivors; the American College of Sports Medicine recommends that cancer survivors can begin this type of program after consulting with their doctors, but without any formal exercise testing (such as a stress test).
- Survivors at higher risk of injury (e.g., those living with neuropathy, cardiomyopathy, or other long-term effects of therapy other than comorbidities) should be referred to a physical therapist or exercise specialist. Breast cancer survivors with lymphedema should also consider meeting with an exercise specialist before initiating upper body strength-training exercise.

Psychosocial Interventions

- Cognitive behavioral therapy/behavioral therapy can reduce fatigue in cancer survivors.
- Psycho-educational therapies/educational therapies can reduce fatigue in cancer survivors.
- Survivors should be referred to psychosocial service providers who specialize in cancer and are trained to deliver empirically-based interventions. Psychosocial resources that address fatigue may also be available through the National Cancer Institute (e.g., Moving Beyond Breast Cancer videos).

Mind-Body Interventions

- There is some evidence that the following interventions can reduce fatigue in cancer survivors:
 - Mindfulness-based approaches
 - Yoga
 - Acupuncture
- The following interventions may offer some benefit, however additional research, particularly in the post-treatment population, is needed:
 - Biofield therapies (touch therapy), massage, music therapy, relaxation, reiki, qigong

Pharmacologic Interventions

- Evidence suggests that psychostimulants (e.g., methylphenidate) and other wakefulness agents, eg., modafinil can be effectively used to manage fatigue in patients with advanced disease or those on active treatment. However, there is very limited evidence of their effectiveness in reducing fatigue in patients who are disease free following active treatment, outside of the treatment of obstructive sleep apnea.
- Small pilot studies have evaluated the impact of supplements, such as ginseng and vitamin D, for cancer-related fatigue. However, there is no consistent evidence of their effectiveness.

Ongoing Monitoring and Follow-up

Promote ongoing self-monitoring of fatigue levels as a late or long-term cancer or treatment problem in post-treatment survivors.