



Ontario Health
Cancer Care Ontario

Symptom Management Algorithm

FATIGUE

In Adults with Cancer

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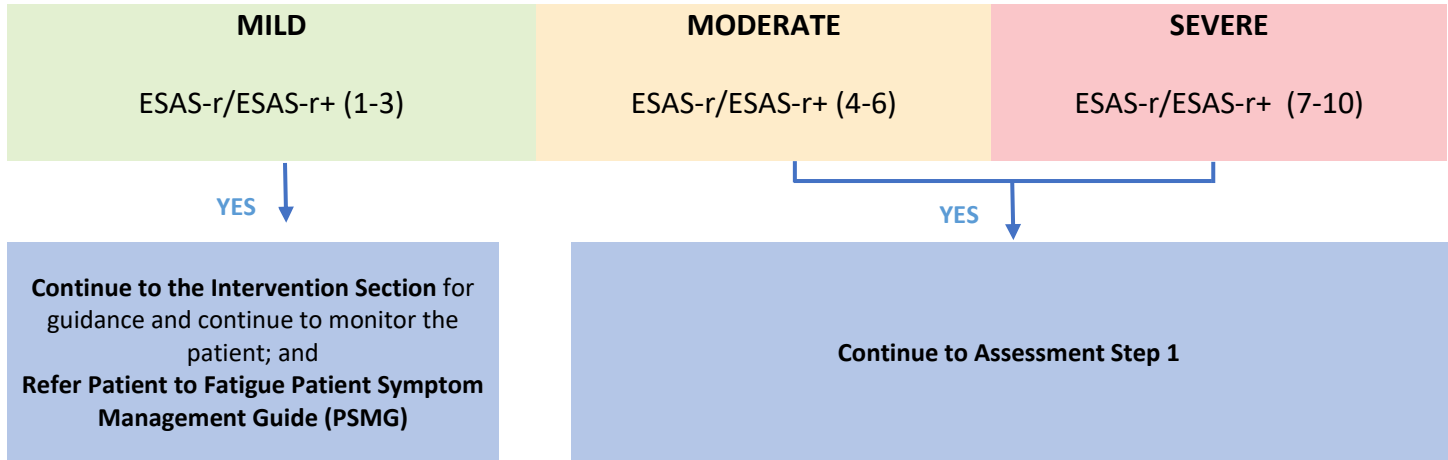
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Screening

Screen For Fatigue Using a Validated Symptom Screening Tool (e.g., ESAS-r, ESAS-r+)

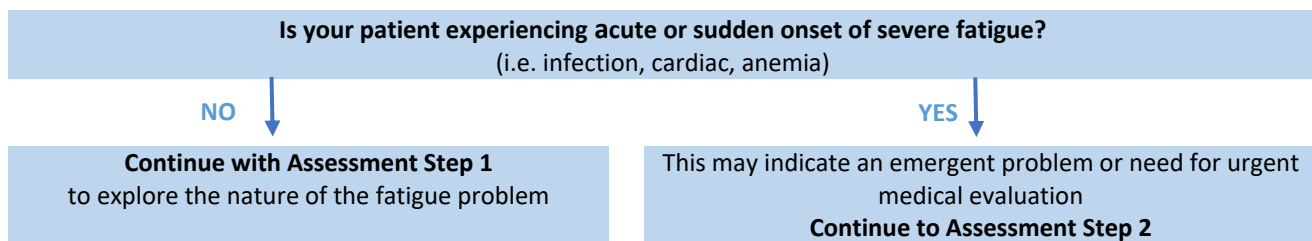
Review symptom report(s) with the patient and/or their caregiver and confirm patient's response. Address any other distressing symptoms that the patient identifies may be contributing to fatigue problems (e.g. pain, sleep, depression).



Assessment

Step 1: Explore the nature of fatigue using Acronym: OPQRSTUV

Ask the patient directly, whenever possible. Involve family and caregivers as appropriate, and as desired by the patient. Can use a validated scale such as the Brief Fatigue Inventory.



Category	Assessment Questions
Onset	<ul style="list-style-type: none"> When did your cancer or treatment related fatigue begin? How long have you had this fatigue? (i.e. since treatment initiated, continuing post-treatment as chronic survivorship fatigue =>6 months).
Provoking/Palliating	<ul style="list-style-type: none"> What do you do to relieve your fatigue? What makes your fatigue worse? Are there prescribed or over the counter medications that could be contributing to your fatigue? <ul style="list-style-type: none"> For example: opioids, antihistamines, antidepressants, alcohol/recreational drug use. What are your past and current physical activity levels? What is your amount of rest periods per day? How would you describe your daily diet? Do you have any other co-morbid illnesses (cardiac, pulmonary, metabolic, endocrine, hepatic, renal) that could be contributing to your fatigue? If so, consult with primary care provider or to appropriate specialist or health care team at your hospital: Are you experiencing other symptoms or side-effects? <ul style="list-style-type: none"> Depression (ESAS-r+ score ≥4, see Depression Algorithm) Anxiety (ESAS-r+ score ≥4, see Anxiety Algorithm) Sleep Disturbance (ESAS-r+ score ≥4, See Sleep Algorithm) Pain (ESAS Score-r+ ≥4, See Pain Algorithm)

Quality	<ul style="list-style-type: none"> How would you describe fatigue in your own words?
Related Symptoms	<ul style="list-style-type: none"> What are other symptoms that come with your fatigue?
Severity	<ul style="list-style-type: none"> How bothered or distressed are you by your fatigue? (Use of qualitative fatigue severity scale)¹
Treatment	<ul style="list-style-type: none"> What actions are you taking for fatigue, level of physical activity?
Understanding	<ul style="list-style-type: none"> What do you believe is causing your fatigue? What about it is causing you the most concern?
Values	<ul style="list-style-type: none"> How is fatigue affecting your activities of daily living? (ie. work, social life, concentration, memory, mood, physical activity levels, quality of life, etc)

Continue to Step 2 to conduct physical exam and laboratory tests to explore the nature of the fatigue problem.

Step 2: Conduct Physical Exams and Laboratory Tests for a Comprehensive Assessment

Complete a comprehensive assessment including laboratory tests if screened positive for fatigue (Score >3 on a 0-10 Numerical Rating Scale (NRS)) to determine/treat medical causes¹. Make appropriate referrals as required.

Physical	Assessment
Laboratory Evaluation	<ul style="list-style-type: none"> CBC Electrolytes (sodium, calcium, potassium, magnesium)
Gait	<ul style="list-style-type: none"> Posture Range Of Motion
Eyes	<ul style="list-style-type: none"> Conjunctival Pallor, if anemic
Oral Assessment	<ul style="list-style-type: none"> Cheilosis Angular Cheilitis Angular Stomatitis
Body Composition	<ul style="list-style-type: none"> Muscle Wasting Weight gain or loss (caloric intake)
Tachycardia (acute fatigue)	<ul style="list-style-type: none"> Shortness Of Breath At Rest On Exertion

Continue with Step 3 to determine the severity of the fatigue problem.

Step 3: Assess for Severity of Fatigue Problem

(Consider using the Cancer Fatigue Scale or Brief Fatigue Inventory – interference of daily life and severity score.)

MILD FATIGUE ESAS-r+ (1-3)	MODERATE FATIGUE ESAS-r+ (4-6)	SEVERE FATIGUE ESAS-r+ (7-10)
<ul style="list-style-type: none"> Minimal fatigue symptoms Able to carry out Activities of Daily Living (ADLs) [self care, homemaking, work, leisure] 	<ul style="list-style-type: none"> Symptoms present and cause moderate to high levels of distress Decrease in daily physical activities, some impairment in self-care and physical functioning 	<ul style="list-style-type: none"> Significant fatigue on a daily basis, excessive need to sit or sleep, Severe impairment of ADLs Experiencing shortness of breath at rest, rapid heart rate.

Intervention

Preventative-Supportive Education, Practices, and Interventions For All Patients

MILD FATIGUE

MODERATE FATIGUE

SEVERE FATIGUE

Education

All patients are likely to benefit from education and counseling with an emphasis on how to cope and self-manage fatigue and adjust their activity levels. Healthcare providers should provide education to help patients understand fatigue, apply coping and self-management skills and engage in appropriate levels of activity.

- The difference between normal and cancer-related fatigue⁴
- Treatment-related fatigue patterns/fluctuations⁵
- Persistence of fatigue post treatment⁴
- Causes (contributing factors) of fatigue⁴
- Consequences of fatigue⁴
- Signs and symptoms of worsening fatigue to report to health care professionals⁴
- Need to keep physically active during and post treatment⁴
- Assessing fatigue and understanding when to rest or perform physical activity⁴

Physical Activity Intervention

Exercise and movement are a necessary part of managing cancer-related fatigue². Physical activity plans should be developed accordingly to the level of energy and cancer treatment of patients. Recommended levels are:

- **Moderate level of physical activity** (e.g., walking, cycling, swimming, resistance training) during and after cancer treatment unless contraindicated or previously sedentary (30 minutes per day, 5 days per week as tolerated)
- Or **vigorous-intensity physical activity** for at least 20 minutes on three or more days of the week (e.g. fast walking, cycling or swimming)
- **Strength training two days a week**. Each of the days should include at least 8-10 strength training exercises of 10-15 repetitions each.

Some things that affect their ability to exercise during cancer treatment include the following:

- Patient's type of cancer, the stage and treatment, other conditions
- Patient's stamina (how long they can do an activity), strength, and fitness level
- Patient's level of fatigue prior to doing physical activity
- Baseline level of physical activity and fitness prior to cancer and treatment

Nutrition Intervention

The main goal for eating healthy include:

- **Staying hydrated** by drinking caffeine-free fluids like water and juices. Coffee and soft drinks can dehydrate you.
- **Increasing the nutrients and protein** in food to maintain a lean body (very little fat with more muscle) and improve energy levels. Ensuring consumption of protein from eating foods like chicken, fish, nuts and beans.
- **Consider referral to dietician**

Social Engagement

- Use of distraction activities such as games, music, reading and socializing

Encourage patients to use a daily diary to track severity levels

- To monitor levels and patterns of fatigue and adjust behaviours to avoid severe fatigue
- To help ascertain peak energy periods
- To help planning activities

Energy Conservation Intervention

Cancer fatigue can fluctuate even if activities are paced. If patients experience a day when fatigue is severe, they should listen to their body and rest, relax and sleep. But be sure not to rest too much. Studies show that resting too much can increase fatigue, slow down recovery, and lead to muscle weakness (body deconditioning). Resting for a short time is the correct thing to do when your body's dealing with cancer treatments.

How to Pace?

1. Break activities into smaller, more manageable tasks
2. Maximize your energy use with short, frequent periods of activity and brief rests in between (10-minute activity/10-minutes rest)
3. Adjust activities based on severity
4. Listen to your body. Stop if you are too tired to continue.

How to Prioritize?

1. List your tasks as: must do, should do and nice to do
2. Identify your must-do tasks and ask others to help complete certain tasks. Include some fun or leisure activities as tasks that must be done
3. Put your tasks in order you want to complete them. You can change or re-prioritize your tasks as needed.

How to Plan?

1. Plan your prioritized activities over a week or a month
2. Alternate a major activity day with quieter one
3. Do the most important tasks and the ones that require the most energy earlier in the day. This is when you have the most energy
4. Balance activities that demand less and more energy. Schedule times to rest (include rest times in the week at glance)
5. Find ways to reduce the steps it takes to complete a task

Preventative-Supportive Education, Practices, and Interventions for Moderate & Severe Fatigue

MODERATE FATIGUE

SEVERE FATIGUE

Psychosocial Interventions

- **Psycho-educational** therapies (individual or group class)
 - Anticipatory guidance about fatigue patterns
 - Coping skills training specific to cancer fatigue
 - Coaching in self-management and problem-solving to manage fatigue (Please see *Online CBT courses/Applications* under Resources)
 - Optimize sleep quality (Please see *Symptom Management Algorithm: Sleep Problems in Adults with Cancer*)³
 - **Referral to your supportive care team** (ie. Social worker)
- **Complementary Strategies**
 - Stress reduction strategies such as yoga and mindfulness programs, may improve fatigue
 - Attention restoring therapy may distract from fatigue—reading, games, music, gardening, experience in nature

Pharmacological Interventions

Pharmacological interventions are not recommended for treating cancer-related fatigue. Literature on pharmacological interventions do not offer robust data for firm conclusions about the effectiveness of medications for management of cancer-related fatigue.³

Resources

Ontario Health (Cancer Care Ontario) - Patient Symptom Management Guides ([Link](#))

Sleep, Fatigue, Anxiety and Depression

Online Video Resources

Doc Mike Evans - Cancer Related Fatigue ([Link](#))

Alberta Cancer and Fatigue: Video Series ([Link](#))

Online CBT courses/Applications

CBT-I Coach ([Link](#))

i-can manage ([Link](#))

Acknowledgements

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This algorithm was adapted from the Canadian Association of Psychosocial Oncology (CAPO) and Canadian Partnerships Against Cancer's guideline entitled, "A Pan-Canadian Practice Guideline for Screening, Assessment, and Management of Cancer-Related Fatigue in Adults"

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2. American Academy of Nursing. Don't neglect to advise patients with cancer to get physical activity and exercise during and after treatment to manage fatigue and other symptoms. [Internet]. [Released April 23, 2015; cited November 24, 2022]. <https://www.choosingwisely.org/clinician-lists/nursing-advising-patients-with-cancer/>
3. Ontario Health. *Symptom Management Algorithm: Sleep Problems in Adults with Cancer* [October 2022]. <https://www.cancercareontario.ca/en/symptom-management/3996>
4. Berger AM, Mooney K, Alvarez-Perez A, Breitbart WS, Carpenter KM, Cella D, Cleeland C, Dotan E, Eisenberger MA, Escalante CP, Jacobsen PB. Cancer-related fatigue, version 2.2015. Journal of the National Comprehensive Cancer Network. 2015 Aug 1;13(8):1012-39. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5499710/>
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