Cancer Related Fatigue:

Addressing Clinical Symptoms
Before, During and After Cancer Treatment

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CLINICAL DIRECTOR OF OUTPATIENT REHABILITATION

CO-COORDINATOR STAR PROGRAM

WINCHESTER HOSPITAL CENTER FOR CANCER CARE

A MEMBER OF LAHEY HEALTH
Learning Objectives

1. What is cancer related fatigue (CRF) and how does it differ from other forms of fatigue?

2. Discuss why waiting to address cancer related fatigue is not always the best option even when “the numbers look good.”

3. What are the non-pharmacologic interventions that have the strongest evidence in the treatment in strategies for managing cancer related fatigue?

4. When is the best time to address Cancer Related Fatigue?
**Category 1:** Based upon high-level evidence, there is uniform NCCN consensus that the intervention is appropriate.

**Category 2A:** Based upon lower-level evidence, there is uniform NCCN consensus that the intervention is appropriate.

**Category 2B:** Based upon lower-level evidence, there is NCCN consensus that the intervention is appropriate.

**Category 3:** Based upon any level of evidence, there is major NCCN disagreement that the intervention is appropriate.

All recommendations are category 2A unless otherwise noted.
Cancer related fatigue (CRF)

- NCCN defines CRF as a distressing persistent subjective sense of tiredness or that’s not proportional to recent activity in interferes with usual functioning.

CRF characteristics

- Source of much distress and less likely to be relieved by rest.
- Important to note subjectiveness.
- **Significant affect on physical functioning**
  - uncertain whether patients regain full functioning in severe cases
“It’s tough to make predictions, particularly about the future.” Yogi Berra

“Cancer Related Fatigue is nearly universal.”
- 80% who receive chemo and or radiotherapy.
- 45% report moderate/severe fatigue
- 29% report fatigue even with complete remission from breast, prostate, colorectal or lung cancer.

Source: NCCN Guidelines Version 1.2016 Cancer Related Fatigue
NCCN: Standards of Care

“Fatigue in patients with cancer has been under-reported, under-diagnosed, and under-treated.”

Why is that?

- Screening is not systematic
- Patient barriers
- Clinician barriers
NCCN CRF Guideline;
“if fatigue intensity is mod-to-severe” (>4) perform “more focused history and physical”.

- Normal activity tolerance
- Dyspneic with minimal exertion
- Stops climbing stairs
- Stops walking outside the home
- Stops walking
- Bed-bound/immobile
Gillis:

“The length of time it takes the patient to recover impacts cancer treatment.”

Gillis:

“Ultimately, it affects the patient’s ability to be cured or palliated successfully.”

• Ultimately it affects quality of life.

Theresa A. Gillis, MD, Helen F. Graham Cancer Center, Newark, Delaware.

www.SupportiveOncology.net
VOLUME 5, NUMBER 2 ■ FEBRUARY 2007
Distress Thermometer

NCCN Guidelines™ Version 1.2011
Distress Management

SCREENING TOOLS FOR MEASURING DISTRESS

Instructions: First please circle the number (0-10) that best describes how much distress you have been experiencing in the past week including today.

Extreme distress

10
9
8
7
6
5
4
3
2
1
0

No distress

Second, please indicate if any of the following has been a problem for you in the past week including today. Be sure to check YES or NO for each.

YES NO Practical Problems

- □ Child care
- □ Housing
- □ Insurance/financial
- □ Transportation
- □ Work/school
- □ Treatment decisions

Family Problems

- □ Dealing with children
- □ Dealing with partner
- □ Ability to have children
- □ Family health issues

Emotional Problems

- □ Depression
- □ Fears
- □ Nervousness
- □ Sadness
- □ Worry
- □ Loss of interest in usual activities

- □ Spiritual/religious concerns

YES NO Physical Problems

- □ Appearance
- □ Bathing/dressing
- □ Breathing
- □ Changes in urination
- □ Constipation
- □ Diarrhea
- □ Eating
- □ Fatigue
- □ Feeling Swollen
- □ Fevers
- □ Getting around
- □ Indigestion
- □ Memory/concentration
- □ Mouth sores
- □ Nausea
- □ Nose dry/congested
- □ Pain
- □ Sexual
- □ Skin dry/itchy
- □ Sleep
- □ Tingling in hands/feet

Other Problems: ____________________________

Version 1.2011, 10/12/10 © National Comprehensive Cancer Network, Inc. 2010. All rights reserved. The NCCN Guidelines™ and this illustration may not be reproduced in any form without the express written permission of NCCN.
Distress Thermometer: Audit 2014
(575 surveys reviewed)

Screen for Distress >4
120 responses (20%)

Categories
Practical Problems
Family Problems
Emotional problems
Spiritual Religious Concerns
Physical Problems

Top 5 Complaints:
1. Fatigue 67%
2. Worry 67%
3. Sleep 55%
4. Fears 48%
5. Pain 46%
2014 Distress Thermometer Audit: “Fatigue”

Positive for fatigue with or without distress

- 233 responses or 40% of the total
- Correlated with our dual screening in MTOC.
  - NCCN: “Fatigue is the source of much distress.”
2015 Distress Thermometer
(598 Surveys Completed)

240 Positive for Fatigue
• 75% negative distress
• 25% with distress

Fatigue index break down
  0-1 (65%)
  2+ (20%)
  15% inconclusive

Fatigue Severity Index:
0 - I have no fatigue.
1 - I have fatigue but I recover with rest.
2 - I have fatigue and at times it prevents me from instrumental ADLs.
3 - I have fatigue and it affects my activities of daily living.

Reproduced; Common Terminology Criteria for Adverse Events
Systematic Dual Screening for CRF

Screening for fatigue and intensity level

I. Distress thermometer during infusion area
   ◦ Nurse and Social Worker

II. At MD visit

III. Dual Screening in the MTOC (prior to seeing MD and reviewed by navigator)

IV. During Rehab visits
**Dual Screening**

**NCCN:**
“All patients should be screened for fatigue at their initial visit, at regular intervals.”

### IMPAIRMENT SCREENING (MTOC)

**Specific Problem or Goal?** ____________________________________________________________

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are you having any pain, headaches, joint pain or muscle pain?</td>
<td></td>
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<tr>
<td><strong>Do you have a limited shoulder motion or shoulder pain?</strong></td>
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<tr>
<td><strong>Are you getting short of breath when climbing stairs?</strong></td>
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<tr>
<td><strong>Do you have to stop and rest when walking for more than 5 minutes?</strong></td>
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<td>Do you have difficulty rising from a seated position without use of arms?</td>
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<tr>
<td>Are you having problems with household chores or shopping?</td>
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<tr>
<td><strong>Do you feel like you might trip or fall?</strong></td>
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<tr>
<td>Are you having trouble swallowing or speaking?</td>
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<tr>
<td>Are you having trouble eating or maintaining a normal diet?</td>
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<tr>
<td>Are you having trouble getting restful night sleep?</td>
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<td></td>
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<tr>
<td>Do your hands and/or feet feel numb or tingle?</td>
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<td></td>
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<tr>
<td>Are you having difficulty exercising or wish to start exercise but cannot?</td>
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<td></td>
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<tr>
<td>Does any part of your body feel swollen or larger than usual?</td>
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<tr>
<td>Are you having trouble concentrating, thinking or remembering things?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Below:** please use P for present, W for worst or A for average

<table>
<thead>
<tr>
<th>Scale</th>
<th>Present</th>
<th>Worst</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distress Scale</td>
<td>no distress</td>
<td>0  1  2  3  4  5  6  7  8  9  10 worst distr</td>
<td></td>
</tr>
<tr>
<td>Fatigue Scale</td>
<td>no fatigue</td>
<td>0  1  2  3  4  5  6  7  8  9  10 worst fatigue</td>
<td></td>
</tr>
<tr>
<td>Pain Scale</td>
<td>no pain</td>
<td>0  1  2  3  4  5  6  7  8  9  10 worst pain</td>
<td></td>
</tr>
</tbody>
</table>
Multi-D Thoracic Oncology Clinic Impairment Screens

Top 3 problems (324 screens 4/15-12/15)

- 52% - Shortness of breath while climbing stairs
- 36% - Trouble getting restful night sleep
- 35% - Pain, headaches, joint pain, muscle pain

Patients reporting:

- fatigue 4 > 32%
- pain 4 > 20%
- distress 4 > 25%
## CRF Clusters With Other Conditions

<table>
<thead>
<tr>
<th>Often Treated</th>
<th>Addressed? how/when?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anemia</td>
<td>Nerve Problems</td>
</tr>
<tr>
<td>Appetite Loss</td>
<td>Peripheral Neuropathy</td>
</tr>
<tr>
<td>Bleeding and Bruising</td>
<td>Gait</td>
</tr>
<tr>
<td>Thrombocytopenia</td>
<td>Balance</td>
</tr>
<tr>
<td>Constipation/Diarrhea</td>
<td>Weakness</td>
</tr>
<tr>
<td>Delirium / Fatigue</td>
<td>Subjective</td>
</tr>
<tr>
<td>Edema</td>
<td>Functional issues</td>
</tr>
<tr>
<td>Infection and Neutropenia</td>
<td>Fatigue to tired to go out</td>
</tr>
<tr>
<td>Mouth and Throat Problems</td>
<td></td>
</tr>
<tr>
<td>Nausea and Vomiting</td>
<td></td>
</tr>
</tbody>
</table>
NCCN: Standard of Care
“Patients and families should be informed that management of fatigue is an integral part of total health care and that fatigue can persist following treatment.”

TREATABLE CONTRIBUTING FACTORS

MANAGED WITH STRATEGIES

FIGURE 1: Contributors to fatigue in cancer patients
Unprepared for Fatigue; “Now What?”

Circle of Distress

- Not Focused
- Ignoring your feelings
- Financial
- Always tired
- Not asking for help
- Unanswered questions
- Did I make the right choice?
- Other’s reaction
- Still smoking

Not asking for help
Standards of Care

Implementation of guidelines for fatigue management is best accomplished by interdisciplinary teams who are able to tailor interventions to the needs of the individual patient.
Strongest evidence for non-pharmacologic interventions during active cancer treatment:

- physical activity (category 1)
- physically based therapies (category 1),
- psychosocial interventions (category 1)

Nutritional consultation and cognitive behavioral therapy for sleep have some supporting evidence.
NCCN Guideline Non Pharmacological Interventions Physical Activity (category 1)

Maintain optimal level of activity

• What is optimal?
• What if you have moderate to severe fatigue, “to sick to exercise?”

• Tailor our efforts to the patient’s illness trajectory.
  • Patients on Active Treatment
  • Patients Post-Treatment
  • Patients at the End of Life
What Happens If We Don’t Tailor Our “Treatments”? 

- Patients don’t get what they need or want. 
  - Patients cancel and therapist get frustrated. 
  - Administration sees unproductive time. 
  - Doctors lose confidence referring their patients. 

- Honoring choices, it’s a balance. 
  - Amy Berman Story 
  - Supportive care is an essential part of cancer treatment.
Standards of Care 2015

“Rehabilitation should begin with the cancer diagnosis.”

Standards of Care 2016

“Consider referral to rehabilitation as indicated”: physical therapy, occupational therapy, and physical medicine from diagnosis to end of life.
INNOVATIONS in PRACTICE
Nicole Stout, PT, MPT, CLT-LANA
Oncology: federal government medical center
Source APTA website 2007
How are we doing addressing CRF?

NCCN:

Fatigue is under reported and under treated.

Education and counseling are believed to be central to the effective management of fatigue.

All patients should be screened for fatigue at their initial visit, at regular intervals as a vital sign.

LEARN ABOUT CANCER FATIGUE MANAGEMENT

Fatigue education for patients and families

Fatigue during cancer treatment is common and nearly universal in those receiving chemotherapy, radiation therapy, bone marrow transplants and other invasive cancer treatments. Cancer survivors report that fatigue is a disruptive symptom months or even years after treatment ends. Learn what you can do now to help yourself.

Effective habits for Survivorship with quality of life

Patients and families should be informed about fatigue management

Fatigue has been under reported and undertreated

Fatigue should be managed according to clinical practice guidelines

WINCHESTER HOSPITAL
Center for Cancer Care
620 Washington St.
Winchester, MA
Call 781 756 5040
Find Meaning in the Current Situation
Creating effective habits to “participate in life's meaningful activities”

Knowledge (what and why to do)

Habits (within our influence)

Skill (how to)

Desire (want to)
Establishing Habits Within Your Circle of Influence

Circle of Influence

PREHAB
- Activity level
- Distress level
- Smoking
- Alcohol

REHAB
- Energy C
- Sleep habits
- Nutrition
- Your response

WINCHESTER HOSPITAL A MEMBER OF LAHEY HEALTH
### Energy Conservation

<table>
<thead>
<tr>
<th>Urgent</th>
<th>Not Urgent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Necessary</strong>&lt;br&gt;Your best action: “Manage”</td>
<td><strong>Preparation and Planning</strong>&lt;br&gt;Response: “Focus”</td>
</tr>
<tr>
<td><strong>Common actions:</strong>&lt;br&gt;• Medical Appointments/Emergencies&lt;br&gt;• Unforeseen crises and trauma&lt;br&gt;• Acute and Chronic Pain&lt;br&gt;• Fatigue/ Your health</td>
<td><strong>Common actions:</strong>&lt;br&gt;• Treatment options and transportation&lt;br&gt;• Nutrition/Exercising/Walking&lt;br&gt;• Relationships/Support/ Spiritual Guidance&lt;br&gt;• Financial Planning&lt;br&gt;• Recreation/Rest&lt;br&gt;• Self Renewal</td>
</tr>
<tr>
<td><strong>Deception</strong>&lt;br&gt;Response: “Use Caution” or “Avoid”</td>
<td><strong>Waste</strong>&lt;br&gt;Response: “Avoid”</td>
</tr>
<tr>
<td><strong>Common actions:</strong>&lt;br&gt;• Meeting other’s expectations:&lt;br&gt; • Can lead to overexertion&lt;br&gt;• Emotional Ambushes/Depression&lt;br&gt;• Unsafe Weight Loss/Gain</td>
<td><strong>Common actions:</strong>&lt;br&gt;• Excessive Sleeping (try to keep a schedule)&lt;br&gt;• Processed Food (review diet)&lt;br&gt;• Harmful Habits or Addictions&lt;br&gt; • alcohol-smoking</td>
</tr>
</tbody>
</table>

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**WINCHESTER HOSPITAL A MEMBER OF LAHEY HEALTH**

29
Managing Stress

Having a balanced approach for self renewal
Fighting Fatigue Due To Cancer Treatments

Take part in your recovery

Group exercise class to help restore your energy!

A cancer treatment can leave your body mentally and physically drained. Recent studies have found that exercise during cancer treatment can:

- Increase your energy
- Reduce fatigue and enhance sleep patterns
- Improve muscle strength and function
- Enhance your immune system and promote body healing

Classes will be held on Mondays 11-11:45am at 620 Washington Street Center for Cancer Care

**Instructors:** Sandy Dale, Physical Therapist, STAR Certified cancer rehab specialist
Jo Calnan, Certified Medical Exercise Specialist

**Classes are designed for:**
- Adults beginning cancer treatment – Preparation for upcoming treatments
- Adults currently in cancer treatment – Combat physical decline
- Adults who have finished cancer treatment - Exercise after treatment will help you return to a level of function promoting a lasting and positive change

**Class Instruction Includes:** Warm up, followed by an exercise program that can be modified for all levels. Each class will finish with focused breathing and meditation to leave you feeling invigorated and energized.

**Class Goal:** In addition to fighting fatigue, the class will enable participants to gain confidence for independent exercise with an improved sense of well-being.
STAR Program
Fighting Fatigue Class

Goal
- is to enable participants to gain confidence with an improved sense of well-being, self-care and ability to exercise independently.

Eight participants for two- six week sessions.

“Fighting Fatigue” Class designed for:
- Adults in preparing for upcoming cancer treatments.
- Adults currently in cancer treatment; combat physical decline.
- Adults who have finished cancer treatment.
# Fighting Fatigue Class Survey

**Winchester Hospital**  
A member of Lahey Health  
Center for Cancer Care

**Name:** (optional) Nancy FF  
**Date:** 10/12/15

## Confidence Scale:  
(0 represents no confidence and 10 represents complete confidence)

How confident are you that you will not lose your balance or become unsteady when performing the below?

**Example:** (No confidence) 0 1 2 3 4 5 6 7 8 9 10 (Complete confidence)

<table>
<thead>
<tr>
<th>Activity</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
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</thead>
<tbody>
<tr>
<td>Walk around the house?</td>
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<td>10</td>
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<tr>
<td>Walk up or down stairs?</td>
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<td>10</td>
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<tr>
<td>Bend over and pick up a slipper from the front of a closet floor?</td>
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<td>10</td>
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<tr>
<td>Walk outside the house to a car parked in the driveway?</td>
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<td>10</td>
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<tr>
<td>Get into or out of a car?</td>
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<tr>
<td>Walk across a parking lot to the mall?</td>
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<td>10</td>
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<tr>
<td>Walk up or down a ramp?</td>
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<td>10</td>
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<tr>
<td>Walk outside on icy sidewalks?</td>
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<td>10</td>
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<tr>
<td>Bumped into by people as you walk through a crowded mall?</td>
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<td>10</td>
</tr>
</tbody>
</table>

**Please answer the following questions by circling your answer:**

- Do you have more confidence performing daily activities since beginning Fighting Fatigue Class?  
  - YES  
  - NO

- Are you finding an improvement in your energy levels?  
  - YES  
  - NO

- Are you able to exercise independently in your home environment?  
  - YES  
  - NO

- Are you sleeping better?  
  - YES  
  - NO

**Did you participate in class:**
- Pretreatment (prehab)  
- Post treatment (chemo, rad, surgery completed)  
- During treatments (ongoing or not)?

**Which of the following class tools do you use to assist with fatigue/stress reduction?**
- Exercise/Flexibility  
  - YES  
  - NO
- Meditation  
  - YES  
  - NO
- Breathing techniques  
  - YES  
  - NO

**Comments:** Please use back if needed.

> Sandra Dale & Jo were terrific at showing (modifying) stretches exercises. Thank you for letting me participate.

10/15
When is the Best Time to Address Cancer Related Fatigue?

**PREHAB**

- In parallel with medical management.
- Some of this is very predictable!
- Tailored to your patients.
  - What is important to your patient?
  - What are they capable or willing to do?
  - What is the level of support from medical staff?
“If you find yourself going through Hell, keep going.”

Winston Churchill

Thanks for listening.
Fatigue Severity Index:

Reproduced from:

**Common Terminology Criteria for Adverse Events (CTCAE), Version 4.0, June 2010, National Institutes of Health, National Cancer Institute.**

Available at:  
References

References

References


• Cancer-Related Fatigue Version 1.20 I 6 NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®)


Putting Evidence Into Practice: An Update of Evidence-Based Interventions for Cancer-Related Fatigue During and Following Treatment Supplement to December 2014 Volume 18, Number 6 Clinical Journal of Oncology Nursing