

### **Objectives**

- Participants will be able to:
- Identify validated malnutrition screening tools used within the oncology outpatient/ambulatory setting
- Describe the prevalence of malnutrition within the oncology population
  - · Cancer cachexia
  - · Refeeding syndrome
- Recognize and be able to address common nutrition questions asked by

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#### Malnutrition

- Estimated to occur in ~80% of cancer patients<sup>1</sup>
  - At diagnosis, 40-80% of GI, pancreatic, HNC and CRC have signs of nutritional impairment<sup>2</sup>
- Cancer related malnutrition results in accelerated weight loss triggered by1
  - Systemic inflammation and catabolic factors
- Negative energy balance and skeletal muscle loss is also driven by
  - . ,  $\,$   $\,$  Poor oral intake related to tumor or treatment (nutrition impact symptoms or NIS)
  - Metabolic alterations (elevated REE, insulin resistance, lipolysis and
- Involuntary weight loss of just 5% decreases survival<sup>3</sup>

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## Malnutrition

- Academy of Nutrition and Dietetics Evidence Analysis Library<sup>1,4</sup>
  - Grade 1 (strong) evidence demonstrating the association between poor nutritional status (adult) and:

    Decreased tolerance to radiation treatment

    Decreased tolerance to chemotherapy

    Increased hospital length of stay

    Lower quality of life

    - Mortality
- · Higher rates of malnutrition are found within:
- Head and neck cancer Esophageal

- Hepatobiliary Pancreatic
- Lung

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#### Malnutrition

- $^{\bullet}$  Despite high rates of malnutrition, <60% of patients classified as malnourished receive no nutritional intervention of any type  $^1$
- Why?
- ~ 90% of oncology treatment is provided in ambulatory centers
- Screening tools are ambiguous and inconsistently applied within ambulatory settings (vs inpatient screening)
- Medical nutrition therapy (MNT) is not consistently included in multidisciplinary care
- A lack of oncology dietitians (1 Oncology RD:2308-2674 patients)<sup>1,2</sup>
- Insurance Coverage
- Reimbursement

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#### **Malnutrition Screening Tools**

- Screening<sup>5</sup>
- Should be simple, quick and easy to use
- Done by any member of the team
- Identifies those patients experiencing or at risk for malnutrition
- Ensures proactive nutrition care
- Should be conducted on initial oncology service visit
- Applied routinely throughout treatment for RD to assess status
- Helps prioritize care

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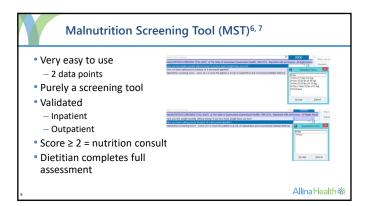


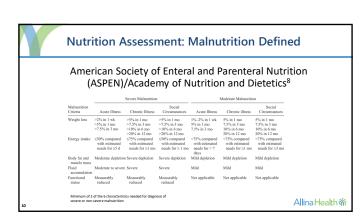
#### Validated Screening Tools in the Oncology Setting<sup>4,5</sup>

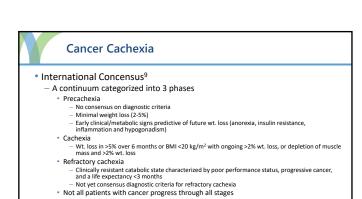
- Malnutrition Screening Tool (MST)\*
- Patient-Generated Subjective Global Assessment (PG-SGA)\*
  - Screening and assessment
- Short form
- Malnutrition Universal Screening Tool (MUST)
- Malnutrition Screening Tool for Cancer Patients (MSTC)

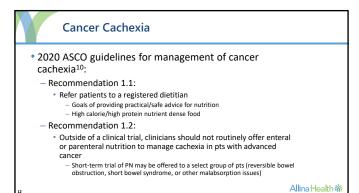
\*MST and PG-SGA validated in the outpatient ambulatory setting (MST used within United/Abbott VPCI ambulatory oncology clinics)

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#### Cancer cachexia

- Recommendation 2.1:10
  - Evidence remains insufficient to strongly endorse any pharmacologic agent to improve cancer cachexia outcomes. Currently no FDA-approved medications for the indication of cancer cachexia
- Recommendation 2.2:
  - Clinicians may offer a short-term trial of a progesterone analog or corticosteroid to patients experiencing loss of appetite and/or body weight. Choice of agent and duration of treatment depends on treatment goals/assessment of risk/benefit

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#### Cancer cachexia

- Symptoms contributing to insufficient intake<sup>10</sup>:
  - Depression, dysgeusia, pain, drowsiness, nausea, constipation
  - Associated with weight loss and decreased survival
  - Retrospective studies show a clinical benefit when NIS are treated
  - Pharmacological therapies for pain, chronic nausea, depression and constipation were well tolerated
  - Medications included metoclopramide, antidepressants, opioids and laxatives
  - Non-pharmacological therapies included nutrition counseling and physical therapy (in combination with medications when indicated)

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#### Cancer cachexia

- Patient, caregiver and clinician communication (key points)<sup>10</sup>
  - · Loss of appetite is common in pts with advanced cancer
  - Trying to force a pt. to eat is counterproductive, may lead to increased N/V
  - In most pts with advanced cancer/cachexia providing additional calories by feeding tube or IV does not improve outcomes
  - Trying to make a pt. eat, if marked loss of appetite, can lead to decreased social interaction and increased patient distress
  - For caregivers, it is best to listen and support patient in a variety of other ways

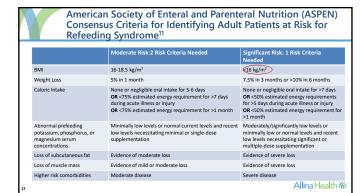
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#### Refeeding Syndrome<sup>11</sup>

- First described during WWII
  - Prisoners of war, concentration camp survivors and victims of famine
- 1944, Keys et al evaluated the physiologic effects of prolonged starvation (Minnesota Starvation Experiment)
- Definition
  - A measureable reduction in levels of 1 or any combination of phosphorus, potassium and/or magnesium, or the manifestation of thiamin deficiency, developing shortly (hours to days) after initiation of calorie provision to an individual who has been exposed to a substantial period of undernourishment

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#### **Refeeding Syndrome**

- Diseases and Clinical Conditions<sup>11</sup>
   Associated with Increased Risk
  - Dysphagia and esophageal dysmotility
  - Malabsorptive states
  - Cance
  - Chronic alcohol or drug use disorder

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#### **Bottom Line on Nutrition**

- · Screen for risk of malnutrition
  - Allows for timely intervention
- Referral to RD if ≥ 2 on MST for full nutrition assessment
  - Nutrition intervention, address NIS
  - Monitoring and evaluation
- Collaboration with team (patient centered)
- Consistent approach
- Consistent messaging to patients
- Realistic expectations

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#### Common Questions and Misconceptions<sup>12-14</sup>

- Sugar and cancer
- Organic foods
- Use of supplements
- · Soy and breast cancer
- Fasting

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#### **Excellent Resources**

- Excellent resources:
- Oncology Nutrition Dietetic Practice Group (ON DPG)
- www.oncologynutrition.org
- $AKN \rightarrow Patient Care \rightarrow Library Services \rightarrow Find an e-book \rightarrow Oncology$ Nutrition
  - Oncology Nutrition for Clinical Practice
  - · Nutrition Care Manual
  - The Complete Resource Kit for Oncology Nutrition
- Under development, FAQ for patients

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#### **Conclusions**

- Providers give consistent messages to common questions
- Provide reputable resources to patients<sup>12-15</sup>
- Oncology Nutrition Dietetic Practice Group (<u>www.oncologynutrition.org</u>)
- American Institute for Cancer Research (www.aicr.org)
- American Cancer Society (www.cancer.org)
- National Cancer Institute (www.cancer.gov)

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# Thank You

Thank you for your time and attention!



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