

Anorexia

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Problem and Incidence

Anorexia is a common symptom in people with cancer and a component of the anorexia-cachexia syndrome. It is the lack or loss of appetite or desire to eat. Anorexia leads to reduced intake; however, anorexia alone does not account for the complex alterations that characterize the anorexia-cachexia syndrome.¹ Anorexia is associated with metabolic derangements, including release of pro-inflammatory cytokines such as interleukin (IL)-1, IL-6, and tumor necrosis factor-alpha produced by the immune system and tumor cells.^{1,2} Anorexia is the most common cause of decreased nutrient intake that triggers malnutrition and muscle wasting.³ The prevalence of anorexia in individuals with cancer is highly variable but has been reported to be 40% at diagnosis and 70% in advanced disease.³

Risk Factors and Assessment

Risk factors for anorexia include

- Advanced disease
- Symptoms such as depression and pain that affect appetite
- Treatment side effects such as nausea and vomiting
- Location of tumor that interferes with ability to eat (e.g., head and neck, gastrointestinal).

Assessment related to anorexia should include

- Measurement of body weight and lean body mass
- Identification of any unplanned weight loss
- Assessment of appetite and changes in appetite.

Assessment tools include

- Functional Assessment of Anorexia/Cachexia Therapy Questionnaire
- Numeric or visual analog scale for patient self-report of appetite.

What interventions are effective in managing anorexia in people with cancer?

Evidence retrieved through December 31, 2013

Recommended for Practice

Corticosteroids have been recommended in professional guidelines⁴ and were associated with some improvement in appetite.^{5,6}

Progestins (megestrol/megestrol acetate) improved appetite in patients at various phases of care in multiple research studies and systematic reviews.^{4,7-12}

Likely to Be Effective

Dietary counseling with and without use of oral nutritional supplements improved energy intake and appetite.¹³⁻¹⁵

Effectiveness Not Established

Several interventions have shown mixed results in studies or were examined in small groups of patients with inconclusive findings. These include

- **Astragali Radix**, an herbal mixture¹⁶
- **Cyproheptadine**, an antihistamine⁴
- **Ghrelin**, a hormone that acts on the hypothalamus¹⁷⁻¹⁹

- **Melatonin**,²⁰ which was not found to be effective in a systematic review⁶
- **Mirtazapine**²¹
- **OHR-118**, a peptide nucleic acid²²
- **Omega-3 fatty acid supplementation** alone or in combination with megestrol^{23,24}—A systematic review showed no difference in appetite with this intervention.⁶
- **Oral branched-chain amino acids**²⁵
- **Pentoxifylline**⁴
- **Rikkunshito**, a traditional Japanese medicine²⁶
- **Thalidomide**, which had mixed results for tolerability and effectiveness.^{12,27-32}

Effectiveness Unlikely

Carnitine/L-carnitine did not improve appetite in patients with cancer in several research studies.^{30,33,34}

Not Recommended for Practice

Cannabis/cannabinoids did not improve anorexia in a large multicenter trial³⁵ or in a systematic review.⁶

Application to Practice

Patients at risk for anorexia should be assessed for appetite level, appetite changes, and weight loss during cancer treatment.

Interventions for which there is strong evidence of effectiveness, including administration of progestins and corticosteroids, should be considered for management.

Nurses can counsel patients regarding nutritional needs and teach patients about the use of nutritional supplements that are likely to be effective.

Patients with severe anorexia, weight loss, or comorbid conditions that necessitate dietary restrictions or specific dietary

interventions should be referred to a registered dietitian for in-depth counseling and education.

Anorexia Resource Contributors

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