Anorexia

PROBLEM

Anorexia is an abnormal loss of the appetite for food often associated with medical treatment (radiation therapy or chemotherapy), pain, nausea, depression, smell or taste changes, and the disease process. Cancer cells can alter the release of hormones (e.g., ghrelin) and hormone-like substances and modify the production of the neurotransmitters (e.g., dopamine, serotonin), neuropeptides, and prostaglandins that influence food consumption. Additionally, tumors can directly produce substances that reduce food intake, such as lactate, cytokines, and tryptophan (Ezeoke & Morley, 2015). The incidence of anorexia can be as high as 80% in patients with advanced disease (Thorpe et al., 2017) and is the fourth most common symptom of patients with cancer, after pain, fatigue, and weakness (Blauwhoff-Buskermolen et al., 2016).

Anorexia is closely linked to cachexia, which is a profound muscle-wasting syndrome usually seen in patients with chronic illnesses, including cancer. Patients with cachexia have involuntary loss of total body weight or skeletal muscle mass (Petruzzelli & Wagner, 2016). Typically, it cannot be reversed with standard nutritional therapy. Weight loss during cancer treatment is a significant problem and is associated with decreased survival rates (Millar, Reid, & Porter, 2013).

ASSESSMENT CRITERIA

1. What is the cancer diagnosis, and what treatment is the patient receiving?
2. Is the patient in an advanced stage of the disease or receiving chemotherapy, radiation, or immunotherapy? Has the patient had recent surgical interventions?
3. What medications is the patient taking?
   Obtain medication history (Underhill & Ward, 2015).
4. Ask the patient to describe symptoms in detail (e.g., total amount of weight loss, weight loss over time).
5. Assess the quantity of the patient's weight loss, as well as the patient's current weight as it compares to ideal body weight. Ideal body weight should take into consideration height, weight, and age of the person being measured.
6. Obtain history of the problem.
   a. Precipitating factors (e.g., weight patterns, gain and loss cycles, nutritional intake patterns, whether weighed on a single scale or on several different scales)

b. Onset and duration
c. Relieving factors
d. Any associated symptoms (e.g., nausea and vomiting, weakness, xerostomia, taste changes, fatigue, amenorrhea, polyuria, cold intolerance)
e. Social and cultural beliefs toward food

7. Past medical history (e.g., eating disorders)
8. Changes in activities of daily living and function (Underhill & Ward, 2015)

Signs and Symptoms	Action
• Lack of nutritional intake for several days • Orthostatic hypotension (dizziness when standing) • Signs of dehydration • Collapse	Seek urgent care within two to four hours.
• Weight loss more than 5% of baseline in a month • Minimal nutritional intake for several days • Continued weight loss despite adherence to instructions and ingestion of supplements and prescribed appetite stimulants	Obtain appointment to see healthcare provider within 48–72 hours.
• Weight loss more than 10% of baseline in six months	Yes—Obtain appointment with a healthcare provider within a week. No—Continue with nutritional program, supplements, appetite stimulants, and other homecare instructions.
Cross-references: Dysphagia, Nausea and Vomiting, Xerostomia (Dry Mouth)	

HOMECARE INSTRUCTIONS

- Avoid strong food odors or foods that are not appetizing.
- Try cold foods (e.g., vitamin-enhanced smoothies, sandwiches, yogurt).
- Eat several small meals per day (Underhill & Ward, 2015).
- Fortify milk by adding powdered milk.
- Add protein supplements or powdered milk to casseroles, smoothies, etc.
- Sip on nutritious drinks, such as fruit juices, when thirsty, as opposed to just water (for extra calories).
- Eat the most when you feel the hungriest, regardless of the time of day.
- Eat nutritious high-protein foods (e.g., fish, lean meat, eggs, nuts).
- Add supplements (e.g., Ensure®, ProSure®), two cans per day.
- Consult a dietitian for evaluation. This is recommended in the Oncology Nursing Society Putting Evidence Into Practice (ONS PEP) guidelines for managing anorexia (Thorpe et al., 2017).
- Follow a homecare instruction sheet for recipes and suggestions.

- Take an appetite stimulant (e.g., Marinol®, Megace®) or corticosteroids, if prescribed (Ezeoke & Morley, 2015; Suzuki, Asakawa, Amitani, Nakamura, & Inui, 2013). Use of progestins to manage anorexia is recommended for practice in current ONS PEP guidelines (Thorpe et al., 2017).
- Take antiemetics for nausea, if prescribed.
- Consider alternative therapies such as acupuncture, which has been shown to possibly reduce the risk of developing anorexia with no reported side effects (Yoon, Grundmann, Williams, & Carriere, 2015).
- Remain as active as possible, using mild exercise such as walking or swimming to increase muscle mass, muscle strength, and level of physical functioning (Underhill & Ward, 2015).
- Practice relaxation exercises 30 minutes before meals to decrease stress.
- Establish a system of eating. Often, caregivers focus too much on getting patients to eat or trying to find new ways to make patients eat. A system of eating should be worked out between the patient and the caregiver. Both parties should be educated on the variety of causes of anorexia, some of which are beyond the control of the patient.

Report the Following Problems

- Continued lack of appetite with little or no food ingestion
- Continued weight loss
- Uncontrolled nausea or mouth sores that interfere with the ability to eat

Seek Emergency Care Immediately if Any of the Following Occurs

- Fainting when changing from a sitting to a standing position
- Dizziness

REFERENCES

Blauwhoff-Buskermolen, S., Ruijgrok, C., Ostelo, R.W., de Vet, H.C.W., Verheul, H.M.W., de van der Schueren, M.A.E., & Langius, J.A.E. (2016). The assessment of anorexia in patients with cancer: Cut-off values for the FAACT–A/CS and the VAS for appetite. *Supportive Care in Cancer, 24,* 661–666. https://doi.org/10.1007/s00520-015-2826-2

Ezeoke, C.C., & Morley, J.E. (2015). Pathophysiology of anorexia in the cancer cachexia syndrome. *Journal of Cachexia, Sarcopenia and Muscle, 6,* 287–302. https://doi.org/10.1002/jcsm.12059

Millar, C., Reid, J., & Porter, S. (2013). Healthcare professionals' response to cachexia in advanced cancer: A qualitative study [Online exclusive]. *Oncology Nursing Forum, 40,* E393–E402. https://doi.org/10.1188/13.ONF.E393-E402

Petruzzelli, M., & Wagner, E.F. (2016). Mechanisms of metabolic dysfunction in cancer-associated cachexia. *Genes and Development, 30,* 489–501. https://doi.org/10.1101/gad.276733.115

Suzuki, H., Asakawa, A., Amitani, H., Nakamura, N., & Inui, A. (2013). Cancer cachexia—Pathophysiology and management. *Journal of Gastroenterology, 48,* 574–594. https://doi.org/10.1007/s00535-013-0787-0

Thorpe, D.M., Conley, S.B., Drapek, L., Held-Warmkessel, J., Ramsdell, M.J., Rogers, B., & Wolles, B. (2017). Anorexia. Retrieved from https://www.ons.org/pep/anorexia

Underhill, M.L., & Ward, V.A. (2015). Cancer anorexia-cachexia syndrome. In C.G. Brown (Ed.), *A guide to oncology symptom management* (2nd ed., pp. 119–141). Pittsburgh, PA: Oncology Nursing Society.

Yoon, S.L., Grundmann, O., Williams, J.J., & Carriere, G. (2015). Novel intervention with acupuncture for anorexia and cachexia in patients with gastrointestinal tract cancers: A feasibility study [Online exclusive]. *Oncology Nursing Forum, 42,* E102–E109. https://doi.org/10.1188/15.ONF.E102-E109

Deborah Metzkes, RN, BSN, OCN®, MBA

The author would like to acknowledge Susan Newton, RN, MS, AOCN®, AOCNS®, and Kathy White, RN, OCN®, for their contributions to this protocol that remain unchanged from the previous edition of this book.