

# Cancer Anorexia and Cachexia

## Screening in an ambulatory infusion service and nutrition consultation

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**BACKGROUND:** Cancer anorexia-cachexia syndrome compromises physical function and nutritional and emotional well-being. Systematic screening followed by nutrition referral for appropriate interventions is rare.

**OBJECTIVES:** The purpose of this study was to pilot a screening process followed by nutritional assessment and intervention when warranted for patients with lung malignancies.

**METHODS:** Adult patients with lung malignancies were invited to complete the 12-item Anorexia/Cachexia Scale (A/CS-12) on the day of chemotherapy initiation in ambulatory infusion. Those who scored at a preset threshold were referred to nutrition services for a comprehensive assessment and intervention plan. Those who scored better than the threshold completed the A/CS-12 at each infusion visit for as many as 16 weeks.

**FINDINGS:** 90 participants enrolled, and 46 scored in a moderate-to-severe-risk category; of those, 42 were referred to nutrition services.

### KEYWORDS

anorexia; cachexia; malnutrition; nursing; screening; lung cancer

### DIGITAL OBJECT IDENTIFIER

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**CANCER ANOREXIA-CACHEXIA SYNDROME (CACS)** has signs and symptoms—appetite and weight loss plus muscle wasting—that comprise a common clinical scenario that should be assessed to implement appropriate support sooner rather than later within a course of cancer treatment (Bozzetti et al., 2012). Anorexia and cachexia have been described as emotionally disturbing symptoms (Del Rio et al., 2012), and they compromise physical function and nutritional well-being (LeBlanc, Nipp, et al., 2015). As reviewed by Lis, Gupta, Lammersfeld, Markman, and Vashi (2012), malnutrition in patients with cancer has been strongly associated with poorer quality of life. Weight loss has been associated with worse outcomes in patients with cancer than in those without weight loss (Moumtzi et al., 2016). In 2011, an international consensus panel defined cancer cachexia as “a multifactorial syndrome characterized by an ongoing loss of skeletal muscle mass (with or without loss of fat mass) that cannot be fully reversed by conventional nutritional support and leads to progressive functional impairment” (Fearon et al., 2011, p. 490).

Objective measures, such as weight loss and biochemical serum markers, have been combined with patient-reported measures to predict malnutrition and nutritional risk (Gioulbasanis et al., 2011). Bruggeman et al. (2016) recommended that oncology services implement strategies to screen for cachexia, adding systematic collection of patient-reported symptoms to objective criteria (e.g., weight changes, C-reactive protein). However, such practice is infrequent, even in cancer specialty clinics (Andrew, Waterfield, Hildreth, Kirkpatrick, & Hawkins, 2009). Patients often are not referred for nutrition consultations at a time when support may prevent cachexia, but later in treatment when less can be done to address the issue (Santarpia, Contaldo, & Pasanisi, 2011). Nutritional screening can be used to determine the need for additional information, a more comprehensive assessment, and subsequent intervention (Bozzetti et al., 2012; Mueller, Compher, & Ellen, 2011). A nutrition assessment provides more comprehensive information for registered dietitians to plan an intervention. Consequently, a need exists for further investigation of the feasibility of screening by oncology nurses followed by nutrition consultation and education (Adams et al., 2009; Hopkinson, 2015).