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## An Interdisciplinary Approach to Manage Cancer Cachexia

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Cancer cachexia occurs in about 33% of newly diagnosed patients with cancer and may lead to delayed, missed, or decreased treatments. An interdisciplinary team approach to manage cancer cachexia may result in fewer missed treatments and improved outcomes. The palliative care program of an urban community cancer center developed an interdisciplinary clinic to treat cancer cachexia with the goal of using an interdisciplinary approach to improve symptom management, nutrition, function, and quality of life (QOL) for patients with cancer at high risk for malnutrition. The Cancer Appetite and Rehabilitation Clinic team completes medical, nutritional, speech, swallowing, and physical therapy evaluations and then develops an individualized program directed to meet patients' needs and improve overall QOL. Patient outcomes are measured by symptom management and nutritional and functional parameters. Early intervention and aggressive symptom management may improve performance status and overall QOL. Results from this project will be used to expand this innovative program. The process of developing and implementing this clinic may help oncology nurses and other healthcare professionals to improve management of cancer cachexia and overall cancer care.

ancer cachexia is defined as a decrease in baseline weight by 5%-10% or more in six months or 5% in one month (Bruera, 1997). Cancer cachexia is common; 50%-75% of patients with cancer experience some degree of cachexia (Slaviero, Read, Clarke, & Rivory, 2003; Takudar & Bruera, 2004). Stewart, Skipworth, and Fearon (2006) stated that cancer cachexia represents a wasting syndrome involving loss of muscle and fat caused directly by tumor factors and/or indirectly by abnormal response to tumor presence. Cachexia most commonly develops in the following tumor types: gastric, 85%; pancreatic, 83%; non-small cell lung, 61%; small cell lung, 57%; prostate, 57%; and colon, 54% (DeWys et al., 1980).

The pathophysiology of cancer cachexia is complex, and its various causes can be grouped into two classes: primary anorexia cachexia and secondary anorexia cachexia (Strasser & Bruera, 2002). Primary anorexia cachexia is a metabolic syndrome directly caused by cancer. The interaction between cancer cells and the host produces a series of immune alterations which lead to anorexia, early satiety, asthenia, muscle wasting, and loss of fat (Strasser & Bruera, 2002). Secondary anorexia cachexia represents a combination of several contributing factors: malnutrition caused by impaired oral intake and impaired gastrointestinal absorption mostly caused by treatment and/or tumor-related symptoms; catabolic conditions nonrelated to cancer, such as chronic diseases or infections; and the loss of muscle mass as a result of prolonged inactivity (Strasser & Bruera, 2002).

Wasting and malnutrition have long been recognized as predictive of poor outcomes in patients with cancer. Significant weight loss at the time of diagnosis was correlated with decreased survival and impaired response to chemotherapy in 1980 by the Eastern Cooperative Oncology Group (DeWys et al., 1980). Patients with cancer cachexia have poor appetites and significant weight loss, leading to weakness and fatigue

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