

Assessing the Need for a Dietitian in Radiation Oncology

Tracy K. Gosselin, RN, MSN, AOCN®, Linda Gilliard, MS, RD, and Rhonda Tinnen

Nutritional care is an integral component of quality cancer treatment. Patients undergoing cancer therapy are at risk for developing a variety of side effects that impact their intake, absorption, and nutritional status. The issue becomes compounded in newly diagnosed patients who have preexisting poor nutritional status, comorbid diseases, mechanical obstruction, and metabolic abnormalities. Standards related to the role of dietitians are well defined in the literature and by the Joint Commission. The quality improvement project illustrated in this article clearly demonstrated the need for a dietitian in the radiation oncology clinic by using the Patient-Generated Subjective Global Assessment.

About 60% of patients with cancer receive radiation therapy at some point in their treatment course. The acute side effects of therapy are related to the site being treated and can include dysphagia, taste changes, pain, xerostomia, mucositis, nausea and vomiting, diarrhea, and the appearance of anorexia or cachexia. Those side effects can impede the ingestion and absorption of food, therefore negatively impacting a patient's nutritional status.

Impaired nutritional status affects quality of life, frequency of emergency room visits and hospitalizations, treatment interruptions, and ultimately, morbidity and mortality of the patient (Bosaeus, Daneryd, Svanberg, & Lundholm, 2001; Dewys et al., 1980; Grosvenor, Bulcavage, & Chlebowski, 1989; Ottery, 1996; Ravasco, Monteiro-Grillo, Vidal, & Camilo, 2003). Dewys et al. reported the effects of weight loss on the prognosis of more than 3,000 patients with 12 different tumor types. Weight loss was found to be an independent predictor of shorter survival in the majority of tumor categories, even in patients with a favorable performance status. Bosaeus et al. studied the effect of dietary intake and resting energy expenditure on weight status in patients with advanced tumors and found that hypermetabolism and continued weight loss were associated with decreased survival. Involuntary weight loss greater than 5% of total weight in one month or more than 1%–2% per week is an indicator of malnutrition (Beaver, Matheny, Roberts, & Myers, 2001).

To date, nursing intervention with education and support has been the only nutritional approach in most outpatient settings to deter further weight loss in patients. Understanding the role that nutrition plays in the management of cancer and ensuring that patients with cancer receive adequate nutrition are essential components of quality care. Nursing intervention alone is often inadequate in addressing weight loss because of lack of time, education, and resources. Timely and persistent intervention

At a Glance

- ♦ Radiation therapy causes a variety of side effects that impact nutritional status.
- ♦ The Patient-Generated Subjective Global Assessment is a screening tool that can be used easily in the clinical setting.
- ♦ A dietitian can provide initial and ongoing assessment, intervention, and symptom management recommendations.

from a trained nutrition professional is essential in the outpatient setting. Patients feel better emotionally and physically and are more in control of their situation after having a nutrition consultation (Schiller et al., 1998).

Literature Review

Because dietary issues can arise, increase, and persist throughout all stages of cancer care, screening is important before, during, and after treatment with referrals to a dietitian if warranted. In a study of 50 patients with head and neck cancer receiving radiation therapy, 44% had eating difficulties

Tracy K. Gosselin, RN, MSN, AOCN®, is a clinical director of oncology services, Linda Gilliard, MS, RD, is a clinical dietitian in the Department of Radiation, and Rhonda Tinnen is an oncology data technician in the Department of Radiation Oncology, all at Duke University Hospital in Durham, NC. No financial relationships to disclose. (Submitted March 2007. Accepted for publication May 24, 2008.)

Digital Object Identifier:10.1188/08.CJON.781-787