Nutritional Screening

Development and implementation of a protocol in patients with head and neck cancer

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BACKGROUND: Half of all patients with head and neck cancer are malnourished at the time of diagnosis. Although nutritional status can be predictive of patient-related outcomes, nutritional screening protocols have not been widely accepted as standard of care.

OBJECTIVES: This article aims to develop and pilot a nutritional screening protocol in an outpatient head and neck clinic using the abridged version of the Patient Generated Subjective Global Assessment (abPG-SGA) so that at-risk patients are identified and can maintain or minimize weight loss and body mass index (BMI).

METHODS: At initial and subsequent visits, study participants completed the abPG-SGA, documenting percentage of weight loss and BMI from baseline.

FINDINGS: 317 patients completed the abPG-SGA, with 119 scoring 6 or more, prompting a dietitian referral. The nutritional screening protocol accurately identified at-risk patients and resulted in less weight loss and BMI change.

KEYWORDS
head and neck cancer; nutritional screening; malnutrition; abPG-SGA

DIGITAL OBJECT IDENTIFIER
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ABOUT 50%–80% OF PATIENTS WITH HEAD AND NECK CANCER (HNC) are malnourished at the time of diagnosis (Gorenc et al., 2015; Müller-Richter et al., 2017). Malnutrition has a multifactorial pathogenesis in this population because risky behaviors and unhealthy lifestyle choices contribute to poor dietary consumption. The anatomic site of the tumor and associated treatments can further compound nutritional deficits because of mechanical obstruction, dysphagia, odynophagia, anorexia, and fatigue (Paccagnella et al., 2010). Patients with HNC can expect to have a 20% decrease in total body weight during the treatment and post-treatment phases (Müller-Richter et al., 2017). Weight loss of greater than 5%–10% within a six-month time frame and/or a body mass index (BMI) of less than 20 kg/m^2 can be indicative of malnutrition, placing the patient at a higher risk for poor outcomes (Müller-Richter et al., 2017).

Malnutrition has been established as a prognostic indicator for cancer-related morbidity and mortality, adversely affecting clinical, functional, and economic outcomes (Lim et al., 2012). Prevost et al. (2014) suggest that nutritional status can be predictive of patient outcomes and correlated with a patient's ability to tolerate curative treatment. There are clear correlations between malnutrition and increased length of stay, diminished therapeutic response to treatment, increased complication rates, and elevated healthcare costs (Álvaro Sanz et al., 2019). Severe malnutrition has been associated with a decrease in quality-of-life indicators and overall lower survival rates when compared to well-nourished patients (Álvaro Sanz et al., 2019; Datema et al., 2011; Paccagnella et al., 2010).

A positive correlation exists between nutritional status and improved quality of life, recognizing the importance of frequent nutritional assessment in the management of patients with HNC (Lis et al., 2012). Early and frequent nutritional assessment and intervention are correlated with improved treatment tolerance, decreased interruptions in treatment, and decreased hospitalizations (Paccagnella et al., 2010). To improve patient-centered outcomes, guidelines recommend malnutrition screening and treatment at the time of diagnosis, with assessment continuing until cancer treatment ends (Alshadwi et al., 2013).

Factors and tools to identify malnutrition in patients with HNC include weight loss alone or in combination with the Patient-Generated Subjective