

# Assessing the Nutritional Status of Patients With Sarcoma by Using the Scored Patient-Generated Subjective Global Assessment

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An intervention with the Scored Patient-Generated Subjective Global Assessment was implemented at a community cancer center to identify patients with sarcoma at risk for malnutrition. This population usually is not considered to be at nutritional risk because of young age and the site of diagnosis; however, 60% of patients assessed were at risk for malnutrition or were severely malnourished. Nurses and dietitians should be aware of potential nutritional risk in this population and learn about possible interventions.

Almost 80% of patients with cancer will develop some level of malnutrition (Kubrak & Jensen, 2007). Some consequences of malnutrition in the general cancer population include decreased quality of life and response to treatment, as well as reduced survival (Bauer, Capra, & Ferguson, 2002). In addition, patients with cancer can develop a wasting syndrome known as cancer cachexia. Cancer cachexia is classified as a metabolic syndrome that causes patients to exhibit anorexic behaviors such as early satiety, weakness, anemia, sarcopenia (age-related loss of muscle mass and strength), and weight loss (Capra, Ferguson, & Reid, 2001) and occurs in up to 80% of patients with cancer (Andrew, Kirkpatrick, Holden, & Hawkins, 2008; Granda-Cameron et al., 2010). Secondary cancer cachexia is a possible treatment side effect (Gosselin, Gilliard, & Tinnen, 2008) that can be caused by a variety of factors, including impaired oral intake, chronic diseases not related to cancer, or loss of muscle mass (Strasser & Bruera, 2002). However, little research has focused on the nutritional effects of cancer and chemotherapy in adult patients with sarcoma (i.e., malignant tumors of the connective tissues, such as cartilage or bone).

Ideal nutritional assessment tools should evaluate the physiologic requirements, nutritional intake, body composition, and

functional status of patients (Barbosa-Silva, & Barros, 2006). The Scored Patient-Generated Subjective Global Assessment (PG-SGA) can be used to determine the nutritional status of patients with cancer (Ottery, 1994). The tool quantifies a nutrition risk score based on the combination of known prognostic indicators of weight loss, performance status, and symptoms that limit fluid and food intake. The PG-SGA places patients in category A (well nourished), B (at risk), or C (severely malnourished), which can be used to assess the amount of nutritional intervention necessary (Bauer et al., 2002).

Bauer et al. (2002) reported 98% sensitivity in detecting malnourished patients with cancer by using the PG-SGA. Isenring, Bauer, and Capra (2003) found similar results, indicating that the PG-SGA is accurate in distinguishing well-nourished patients from malnourished patients. Isenring et al. (2003) also concluded that the serial scores associated with the PG-SGA can be used to predict increases or decreases in patients' quality of life. In a critical evaluation of multiple nutritional screening tools, Kubrak and Jensen (2007) found that the PG-SGA held more diagnostic value

in detecting malnourished patients over the Mini Nutritional Assessment and the Malnutrition Screening Tool.

An evidence-based intervention was undertaken to identify patients with sarcoma at risk for malnutrition at a community cancer center. As an implementation of evidence-based practice, institutional review board approval was not required. No studies have evaluated this population for nutritional changes over the extended course of treatment; therefore, the registered dietitian assessed all patients with newly diagnosed or recurrent sarcoma ( $N = 28$ ) over a six-month period. The goal was to implement a system that would identify when side effects begin to cause a deterioration of nutritional status and proceed with early intervention to help minimize side effects and treatment delays.

## Methods

The Joan Karnell Cancer Center (JKCC), a community cancer center in Philadelphia, PA, treats a wide variety of patients with cancer and is a member of SARC (Sarcoma Alliance for Research Through Collaboration). The PG-SGA was determined

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