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# Experience of Newly Diagnosed Patients With Sarcoma Receiving Chemotherapy

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**S**arcomas constitute a heterogeneous group of rare solid tumors that originate in the connective tissue or bone. Based on the tissue of origin, sarcoma can affect muscle, fat, blood vessels, bones, or other supporting tissues of the body (National Comprehensive Cancer Network [NCCN], 2011b). Soft tissue sarcomas are the most frequent sarcomas (Cormier & Pollock, 2004). In the United States, the incidence of soft tissue sarcomas in 2010 was estimated to be 10,520 cases, with an overall mortality rate of 3,920 cases for adults as well as children (Jemal, Siegel, Xu, & Ward, 2010). The five-year survival rate of soft tissue sarcomas has been estimated at 50%–60% (Pisters, 2002). Sarcoma of the bone is an extremely rare neoplasm, accounting for less than 0.2% of all cancers (Dorfman & Czerniak, 1995; Gurney, Severson, Davis, & Robinson, 1995; Unni, 1996). In the United States, 2,650 new cases and 1,460 related deaths were estimated in 2010 (Jemal et al., 2010).

Primary bone sarcomas often are curable with adequate treatment (NCCN, 2011a). Collectively, sarcomas account for about 1% of all adult malignancies and 15% of pediatric malignancies (Zahm & Fraumeni, 1997). Soft tissue sarcomas may occur at any age but predominate in young adulthood, with soft tissue sarcomas composing 8% of all cancers in people aged 15–29 years (Bleyer, O'Leary, Barr, & Ries, 2006). Primary neoplasms of the bone are uncommon in adolescents and young adults and account for 3% of all neoplasms in this age group (Unni, 1996). The rarity of cases has resulted in a scarcity of sarcoma research, particularly research examining symptom distress and quality of life (QOL) of adult patients diagnosed with sarcoma.

Sarcoma remains a challenging disease to treat. As a result, research has focused mainly on improving survival rates rather than alleviating symptom distress (Hartmann & Patel, 2005; Jebsen et al., 2010; Womer, 1996). Cancer treatment regimens for younger adults typically are more aggressive than those for older adults and may be perceived as causing greater symptom distress (Smith, Redd, Peyser, & Vogl, 1999); however, very little sarcoma

**Purpose/Objectives:** To examine symptom distress and quality of life (QOL) in newly diagnosed patients with sarcoma receiving chemotherapy.

**Design:** Pilot study; descriptive, quantitative.

**Setting:** Urban community cancer center in the northeastern United States.

**Sample:** 11 newly diagnosed patients with sarcoma.

**Methods:** Participants completed the Edmonton Symptom Assessment Scale and the Functional Assessment of Cancer Therapy–General at baseline and on days 1, 15, and 21 of their chemotherapy treatment.

**Main Research Variables:** Symptom distress and QOL.

**Findings:** Fatigue was the most prevalent and pervasive symptom. Anxiety, well-being, lack of appetite, drowsiness, and depression were the most commonly reported symptoms during chemotherapy. QOL was negatively affected. The lowest mean score reported was for functional well-being. Outcome profiles for symptom distress increased over time, whereas QOL profiles decreased over time. Exploratory analyses of age, race, sex, and diagnosis group suggested differences that warrant further study.

**Conclusions:** Overall, increasing symptom distress and reduced QOL over time were reported by patients with sarcoma during chemotherapy. Exploratory analysis by demographic variables and treatment group suggested the need for further research of predictors for symptom distress and QOL.

**Implications for Nursing:** Clinical and research implications included the need for better understanding about symptom distress and QOL predictors in patients with sarcoma, as well as the evaluation of interventions directed to address this population's specific needs.

research has evaluated symptom distress and QOL in adults. The results of the few available studies conducted with adult sarcoma survivors revealed significant long-term side effects including fatigue, ototoxicity, reduced renal function, and limited physical functioning associated with reduced QOL (Aksnes et al., 2008, 2009; Frances, Morris, Arkader, Nikolic, & Healey, 2007; Servaes, Verhaegen, Schreuder, Veth, & Bleijenberg, 2003). In addition, pain in patients with sarcoma has not been the principal