

# Peripheral Neuropathy in Patients With Colorectal Cancer Receiving Oxaliplatin

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Neuropathic side effects are commonly reported in patients receiving oxaliplatin, but little is known about the characteristics of peripheral neuropathy in this patient population. The purpose of this descriptive study was to explore the prevalence of neuropathic symptoms in patients with colorectal cancer receiving oxaliplatin as well as to explore symptom severity, distress, frequency, and neuropathic interference with activities. Thirty-three patients receiving oxaliplatin at two outpatient facilities completed the Chemotherapy-Induced Peripheral Neuropathy Assessment Tool. Data were analyzed using descriptive statistics. Cold sensitivity, tingling in the hands, and numbness in the hands were the most prevalent neuropathic symptoms, and cold sensitivity, nerve pain, and trouble with balance were the most severe symptoms. Trouble with balance, muscle or joint aches, and neuropathic pain were the most distressing symptoms, and numbness in the fingers and hands and in the toes and feet were the most frequent symptoms. Patients reported that neuropathic symptoms interfered with numerous activities. Oncology nurses can use this information to help educate patients and families about potential side effects of oxaliplatin and to coordinate the care of patients with peripheral neuropathy using a symptom-focused, multidisciplinary approach.

**M**ore than one million survivors of colorectal cancer (CRC) are living in the United States, representing 9% of all cancer survivors (National Cancer Institute [NCI], 2010). CRC-related deaths have decreased steadily since the late 1990s largely because of early detection but also because of the development of new treatment options like oxaliplatin, which has been shown to extend overall survival in patients with CRC (American Cancer Society, 2008; Liu et al., 2010). Oxaliplatin-induced neurotoxicities negatively affect the quality of life (QOL) of patients with CRC undergoing chemotherapy, survivors, and patients with advanced disease no longer receiving chemotherapy.

Some patients with CRC receive chemotherapy in hopes of achieving the best possible outcome with improved QOL, prolonged survival, or cure. However, some are unable to complete their planned treatment course because of the development of chemotherapy-induced peripheral neuropathy (CIPN), thus negatively affecting their QOL and potentially their prognostic outcomes. Oxaliplatin, a third-generation platinum-based

## At a Glance

- ◆ Patients with colorectal cancer receiving oxaliplatin report sensory and motor neuropathies that are moderately severe and distressing and interfere with usual activities and enjoyment of life.
- ◆ Numbness in the extremities, sensitivity to cold, loss of balance, muscle and joint aches, and neuropathic pain are some of the more common, severe, and distressing symptoms.
- ◆ Nursing care should include educating patients regarding neuropathic symptoms and include a multidisciplinary approach in helping patients prepare for the loss of independence that may result.

chemotherapeutic agent, is considered standard of care in the treatment of CRC in the adjuvant and metastatic setting (Saif & Reardon, 2005). Peripheral nerve dysfunction leading

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