Multiple myeloma (MM), a malignancy of the plasma cells, accounts for an estimated 14% of all newly diagnosed hematologic malignancies. Advances in chemotherapy and stem cell transplantation have improved survival rates, but MM remains incurable. Bortezomib (Velcade™, Millennium Pharmaceuticals, Inc., Cambridge, MA), a first-in-class proteasome inhibitor, has been approved for patients with MM who have received at least two prior treatments and have demonstrated disease progression on the most recent one. During clinical trials, most side effects were manageable with standard interventions. The most common toxicities were asthenic conditions (fatigue, malaise, and weakness), gastrointestinal disturbances (nausea, vomiting, diarrhea, and constipation), thrombocytopenia, peripheral neuropathy, pyrexia, and anemia. Supportive therapies and strategies for side-effect management can prevent worsening of these symptoms, thereby avoiding dose reductions and treatment delays. Oncology nurses play a key role in ensuring the proper and safe administration of bortezomib and often are the first to identify the signs of side effects. Patient education about anticipated side effects and close monitoring of patients can lead to symptom management interventions that are essential to patient comfort and safety.

Key Words: multiple myeloma, peripheral neuropathies, proteasome

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