

DURING AND AFTER TREATMENT

Peripheral Neuropathy: Common Side Effect

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For peripheral neuropathy, standards of care are based on established evidence-based practice.

Definition

- Peripheral neuropathy is disease or dysfunction of one or more peripheral nerves (i.e., motor, sensory, or autonomic), resulting in numbness or weakness.
- Peripheral neuropathy occurs outside of the brain and spinal cord and is caused by cancer, treatment, or both.

Incidence

- Chemotherapeutic agents that can cause peripheral neuropathy include epothilones, platinum analogs, taxanes, and vinca alkaloids, as well as immunomodulating drugs and proteasome inhibitors.
- From 10% to 100% of patients with cancer will develop neuropathy following treatment.

Assessment Tools and Recommended Intervals

- Functional Assessment of Cancer Therapy/Gynecologic Oncology Group–Neurotoxicity
- Total Neuropathy Score

Prevention Measures

- Reduce the chemotherapy dose.

Evidence-Based Interventions and Management

- Carefully manage chemotoxic agents as treatment.
- Consider duloxetine as a serotonin and norepinephrine reuptake inhibitor antidepressant, which has shown efficacy in treating peripheral neuropathy.
- Consider gabapentin in combination with other medications, such as opioids or imipramine. It should be used with extreme caution in those with pulmonary disease.
- Monitor stability, balance, and gait to prevent injury.

Agents and Interventions to Avoid

- Avoid aggressive dosing of chemoneurotoxic agents.

Evidence-Based Resources for Providers

- American Society of Clinical Oncology: Prevention and management of chemotherapy-induced peripheral neuropathy in survivors of adult cancers (www.asco.org/practice-patients/guidelines/patient-and-survivor-care#/9541)
- NCCN Clinical Practice Guidelines in Oncology: Survivorship (v.3.2021) (www.nccn.org/professionals/physician_gls/pdf/survivorship.pdf)

Evidence-Based Resources for Patients and Family

- American Cancer Society: Managing peripheral neuropathy (<https://bit.ly/3jBeaaA>)

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