Exploring Gua Sha Therapy for Chemotherapy-Induced Peripheral Neuropathy: A Single Case Report and Critical Analysis

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BACKGROUND: Chemotherapy-induced peripheral neuropathy (CIPN) is a significant side effect of some chemotherapeutic agents. Effective treatment is limited.

OBJECTIVES: This single patient case details gua sha as an intervention to reduce CIPN.

METHODS: A 38-year-old female patient received weekly treatment of gua sha in one-hour sessions for 10 weeks. The patient completed the Functional Assessment of Cancer Therapy/Gynecologic Oncology Group–Neurotoxicity (FACT/GOG-NTX) subscale to describe her CIPN throughout and postintervention. A research assistant measured the extent of numbness or tingling along the limb from baseline to 18 months after gua sha. Descriptive data were used to summarize this case.

FINDINGS: After gua sha, the total FACT/GOG-NTX subscale score increased from 13 to 36, indicating a sevenfold greater change than the minimum clinically important difference. The range of limb numbness and tingling decreased, and the symptoms remained stable during follow-up. Gua sha showed a positive clinical effect.

KEYWORDS
gua sha; chemotherapy-induced peripheral neuropathy; integrative therapy; case report

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CHEMOTHERAPY-INDUCED PERIPHERAL NEUROPATHY (CIPN) is one of the most common and significant side effects associated with several widely used chemotherapeutic agents, including platinum-based drugs, taxanes, vinca alkaloids, and bortezomib (Kachrani et al., 2020). It manifests clinically as deficits (of variable intensity) in sensory, motor, and/or autonomic functions that may persist for months or even years after the cessation of chemotherapy (Desforges et al., 2022; Mahon & Carr, 2021). Therefore, cancer survivors may experience debilitating neuropathy, which may influence their daily functioning and quality of life; for instance, patients who develop CIPN are three times more likely to experience falls (Autissier, 2019; Suzuki et al., 2023). In severe cases, CIPN may lead to paresis, complete immobilization, and severe disability; this may affect independence and lead to additional healthcare costs (Tofthagen et al., 2020).

The prevalence of CIPN is agent dependent, and about 60% of individuals receiving neurotoxic chemotherapy will develop CIPN (Kanzawa-Lee, 2020). A meta-analysis, which included 31 studies with data from 4,179 patients, indicated that 68.1% of patients experience symptoms of CIPN within the first month after chemotherapy (Seretny et al., 2014). Although CIPN can resolve over time in some cases, 30% of patients have persistent symptoms at six months after chemotherapy (Seretny et al., 2014). Cisplatin is one of the most neurotoxic anticancer drugs; it can cause paradoxical worsening and/or intensification of symptoms after the cessation of treatment, and it is associated with a phenomenon known as *coasting*, which involves either worsening of mild neuropathy or the onset of new symptoms (Burgess et al., 2021). This poses a challenge for oncologists because no signs or indications warrant a reduction in chemotherapy dosage for the relief of CIPN symptoms (Loprinzi et al., 2020).

CIPN management is currently limited. Duloxetine is the only agent recommended by the American Society of Clinical Oncology (Loprinzi et al., 2020). Findings from clinical trials suggest that duloxetine reduces symptoms of pain and numbness among patients with CIPN but only to a moderate degree; therefore, it offers limited benefits (Chow et al., 2023). As for other options, including tricyclic antidepressants and antiseizure medications, studies have provided conflicting results (Loprinzi et al., 2020). Preliminary evidence suggests a potential benefit from nonpharmacologic