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## The Effectiveness of Topical Cannabidiol Oil in Symptomatic Relief of Peripheral Neuropathy of the Lower Extremities

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### Abstract

**Background:** Peripheral neuropathy can significantly impact the quality of life for those who are affected, as therapies from the current treatment algorithm often fail to deliver adequate symptom relief. There has, however, been an increasing body of evidence for the use of cannabinoids in the treatment of chronic, noncancer pain. The efficacy of a topically delivered cannabidiol (CBD) oil in the management of neuropathic pain was examined in this four-week, randomized and placebocontrolled trial.

**Methods:** In total, 29 patients with symptomatic peripheral neuropathy were recruited and enrolled. 15 patients were randomized to the CBD group with the treatment product containing 250 mg CBD/3 fl. oz, and 14 patients were randomized to the placebo group. After four weeks, the placebo group was allowed to crossover into the treatment group. The Neuropathic Pain Scale (NPS) was administered biweekly to assess the mean change from baseline to the end of the treatment period.

**Results:** The study population included 62.1% males and 37.9% females with a mean age of 68 years. There was a statistically significant reduction in intense pain, sharp pain, cold and itchy sensations in the CBD group when compared to the placebo group. No adverse events were reported in this study.

**Conclusion:** Our findings demonstrate that the transdermal application of CBD oil can achieve significant improvement in pain and other disturbing sensations in patients with peripheral neuropathy. The treatment product was well tolerated and may provide a more effective alternative compared to other current therapies in the treatment of peripheral neuropathy.

**Keywords:** CBD; cannabis sativa; diabetic neuropathy; hemp; nerve pain; review..

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