Improvement of cutaneous sensitivity in diabetic peripheral neuropathy with combination L-methylfolate, methylcobalamin, and pyridoxal 5'-phosphate.

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Abstract

Studies of monotherapy with L-methylfolate, methylcobalamin, or pyridoxal 5'-phosphate suggest that these B vitamins may reverse both the symptoms and the pathophysiology of diabetic peripheral neuropathy (DPN). The efficacy of oral-combination L-methylfolate, 3 mg; methylcobalamin, 2 mg; and pyridoxal 5'-phosphate, 35 mg (LMF-MC-PP) in restoring cutaneous sensitivity in patients with type 2 diabetes with DPN was evaluated in 20 type 2 diabetic patients who were given LMF-MC-PP twice daily for 4 weeks and then once daily for an additional 48 weeks. Statistically significant improvement in 1-point (tactile) and 2-point (discriminatory) static testing at the right and left great toe and heel in the patients was observed in all 3 follow-up periods: 1) baseline to 6 months, 2) baseline to 1 year, and 3) 6 months to 1 year. The greatest improvement occurred between baseline and 1 year of treatment. Treatment with oral LMF-MC-PP appears to promote restoration of lost cutaneous sensation in DPN.