

## **Methylcobalamine and Diabetic Neuropathy**

Clinical usefulness of intrathecal injection of methylcobalamin in patients with diabetic neuropathy Ide H Fujiya S Asanuma Y Tsuji M Sakai H Agishi Y, Clin Ther (1987) 9(2):183-92

Seven men and four women with symptomatic diabetic neuropathy were treated with methylcobalamine (2,500 micrograms in 10 ml of saline) injected intrathecally. Treatment was begun when patients had good metabolic control, as determined by measurements of plasma glucose and hemoglobin, and was repeated several times with a one-month interval between injections. Three patients were re-treated one year after the last intrathecal injection. Symptoms in the legs, such as paresthesia, burning pains, and heaviness, dramatically improved. The effect appeared within a few hours to one week and lasted from several months to four years. The mean peroneal motor-nerve conduction velocity did not change significantly. The mean (+/- SD) concentration of methylcobalamin in spinal fluid was 114 +/- 32 pg/ml before intrathecal injection (n = 5) and 4,752 +/- 2,504 pg/ml one month after intrathecal methylcobalamin treatment (n = 11). Methylcobalamine caused no side effects with respect to subjective symptoms or characteristics of spinal fluid. These findings suggest that a high concentration of methylcobalamin in spinal fluid is highly effective and safe for treating the symptoms of diabetic neuropathy.