

## Alpha-Lipoic Acid Helpful in Diabetic Neuropathy

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Medscape Medical News 2003. © 2003 Medscape

March 7, 2003 — Alpha-lipoic acid (ALA) rapidly and significantly reduces sensory symptoms and pain of diabetic neuropathy, according to the results of a double-blind trial reported in the March issue of *Diabetes Care*.

"[ALA], a potent antioxidant, prevents or improves nerve conduction attributes, endoneurial blood flow, and nerve Na<sup>+</sup> K<sup>+</sup> ATPase activity in experimental diabetes and in humans and may improve positive neuropathic sensory symptoms," write Alexander S. Ametov, MD, from the Russian Medical Academy for Advanced Studies in Moscow, and colleagues from the SYDNEY Trial.

In this parallel-group study, 120 metabolically stable diabetic patients with symptomatic (stage 2) diabetic sensorimotor polyneuropathy were randomized to receive intravenous infusions of 600 mg ALA or placebo for five days per week for 14 treatments.

After 14 treatments, the mean Total Symptom Score improved from baseline by 5.7 points in the ALA group and by 1.8 points in the placebo group ( $P < .001$ ). The ALA group also fared significantly better than the placebo group in terms of improvement on each item of the Total Symptom Score (lancinating and burning pain, asleep numbness and prickling), neuropathy impairment score, one attribute of nerve conduction, and global assessment of efficacy.

"Intravenous racemic ALA, a potent antioxidant, rapidly and to a significant and meaningful degree, improved such positive neuropathic sensory symptoms as pain and several other neuropathic end points. This improvement of symptoms was attributed to improved nerve pathophysiology, not to increased nerve fiber degeneration," the authors write. "Because of its safety profile and its effect on positive neuropathic sensory symptoms and other neuropathic end points, this drug appears to be a useful ancillary treatment for the symptoms of diabetic polyneuropathy."