People with diabetes may develop a form of nerve damage that causes pain and numbness in the extremities (eg, hands and feet). This condition is called diabetic peripheral neuropathy. The supplement, lipoic acid, is often recommended as a treatment for this condition. However, up until recently, most studies of lipoic acid for diabetic peripheral neuropathy used intravenous lipoic acid. Since treatments that are effective when given intravenously often fail when taken orally, these studies did not prove that oral lipoic acid is helpful in treating diabetic peripheral neuropathy.

However, in October 2006, researchers at Heinrich-Heine-University in Dusseldorf, Germany reported a study that does support oral use of lipoic acid. In this double-blind, placebo-controlled trial, 181 people with diabetes were given either placebo or lipoic acid at a dose of 600 mg, 1200 mg, or 1800 mg daily.

Researchers defined "responders" as those who attained a greater than 50% improvement in a measure of overall symptom severity, the TSS score. By the end of the five-week study period, more than half the participants given lipoic acid achieved this level of improvement compared to only about one quarter of those given placebo. To look at this another way, on average, participants given lipoic acid achieved more improvement than those given placebo, according to most individual measures of symptom severity.

Somewhat surprisingly, the best results were seen in those taking the lowest dose of lipoic acid. Not only were improvements somewhat greater, but there were less side effects. People taking higher doses of lipoic acid were more likely to experience nausea and vomiting.

These are quite promising findings. However, all major studies on lipoic acid for peripheral neuropathy have been performed by a single group of researchers. Research by independent groups is needed before lipoic acid can be considered a proven treatment for diabetic peripheral neuropathy.

REFERENCES: