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Nerve Decompression Potentially Beneficial in Painful Diabetic Neuropathy



Patients who underwent nerve decompression surgery experienced greater reductions in pain.

This article is part of Endocrinology Advisor's coverage of the **American Diabetes Association's 77th Scientific Sessions (ADA 2017)**, taking place in San Diego, CA. Our staff will report on medical research and technological advances in diabetes and diabetes education, conducted by experts in the field. Check back regularly for more news from **ADA 2017**.

Results of research presented at the **77th American Diabetes Association Scientific Sessions** demonstrated that patients with painful diabetic neuropathy who underwent nerve decompression or sham surgery had greater reductions in pain when compared with patients who did not receive surgery. The researchers conducted a randomized, controlled, double-blind, prospective study to examine the long-term effect of neurolysis in painful diabetic neuropathy and to determine whether the approach could alleviate pain, since one-third of individuals with this condition are prone to nerve compression.

A multidisciplinary team comprising neurologists, endocrinologists, and rehabilitation, pain, and surgery specialists assessed baseline pain using a Likert 0 to 10 scale and quality of life using the 36-item Short-Form Health Survey.

From a total of 2987 screened patients, 138 were enrolled, of whom 92 received surgery and 46 did not. Those in the surgical cohort underwent bilateral nerve decompression or sham surgery. Of these patients, 40 in the surgery arm and 27 controls completed the study.

One-year results revealed a mean pain reduction of 5.7 in the surgical leg ($P < .0001$) and 5.25 ($P < .0001$) in the sham leg; the control group experienced no significant pain reduction.

At 54.5 months, follow-up of 36 surgical patients demonstrated a mean pain reduction of 7.47 in the surgical leg ($P < .0001$) and 5.97 in the sham leg ($P < .0001$). The score from the general health component of the survey indicated a significant interaction for group by time ($P = .0010$); although group means at baseline, 3 months, and 6 months were not significantly different, means at 9 months ($P = .01$) and 1 year ($P = .02$) were significant, the researchers wrote.

As a result of the findings, the researchers concluded that there is “a potential role for nerve decompression in carefully selected patients.”

Disclosures: One researcher reports serving on the advisory panel for and receiving research support from several pharmaceutical companies. The other researchers report no relevant financial disclosures.

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Reference

Rozen S, Wolfe G, Raskin P, et al. DNND (Diabetic Neuropathy Nerve Decompression) study — a controlled, randomized, double-blinded, prospective study on the role of surgical decompression of lower extremity nerves for the treatment of patients with symptomatic diabetic neuropathy with chronic nerve compression. Abstract 102-OR. Presented at: the 77th American Diabetes Association Scientific Sessions. June 9-13, 2017; San Diego, California.