

Exercise Improves Symptoms of Peripheral Neuropathy

Source: *Diabetes*

Peripheral neuropathy is the term for damage to nerves of the peripheral nervous system, which may be caused either by diseases of or trauma to the nerve or the side-effects of systemic illness. Neuropathy may be associated with varying combinations of weakness, autonomic changes, and sensory changes. Common symptoms associated with damage to the motor nerve are muscle weakness, cramps, and spasms. Loss of balance and coordination may also occur. Damage to the sensory nerve can produce tingling, numbness, and pain.

Causes of peripheral neuropathy:

- Trauma or pressure on the nerve
- Diabetes
- Vitamin Deficiencies
- Alcoholism
- Infections
- Autoimmune Diseases
- Inherited Disorders
- Tumors
- Exposure to poisons

A study published in the journal, *Diabetes*, assessed the effects of an exercise program on balance and trunk proprioception. The researchers recruited 38 patients with diabetes having peripheral neuropathies. They were randomized and subdivided in two groups with the experimental group practicing a balance exercise program for 60 minutes, twice a week for 8 weeks. The control group did not participate in the exercise program but both groups received health education on diabetes for 50 minutes per week for 8 weeks. The results were the experimental group experienced significant decrease in postural sway, an increase in one-leg stance test, and dynamic balance from the Berg Balance Scale, Functional Reach Test, Timed Up and Go test, and 10-m walking time improved significantly after balance exercise. A decrease in errors of trunk repositioning was also observed with training. The authors concluded "These results suggest that a balance exercise is suitable for individuals with diabetic neuropathy."¹

1 Song CH, Petrofsky JS, Lee SW, et al. Effects of an Exercise Program on Balance and Trunk Proprioception in Older Adults with Diabetic Neuropathies. *Diabetes Technol Ther.* May2011.