

## Positive effects of plantar vibration training for the treatment of diabetic peripheral neuropathy: A pilot study

Katerina Stambolieva, Dorina Petrova and Mariya Irikeva Department of Cognitive Psychophysiology, Institute of Neurobiology, Bulgarian Academy of Sciences, Sofia, Bulgaria; Department of Neurology, National Transport Hospital “Tzar Boris III”, Sofia, Bulgaria

### ABSTRACT

**Purpose:** To evaluate the effectiveness of 8-week low-frequency plantar vibration training on patients with sensorimotor diabetic peripheral neuropathy (DPN). **Participants:** Twelve patients took part in the investigation.

**Results:** An increase of the nerve conductive velocity of sural and peroneal nerves of feet, increased postural stability, and disappearance of the pain and tingling were observed.

**Conclusion:** The obtained results provide evidence for beneficial effects of 8-week plantar vibration training in patients with DPN.

### ARTICLE HISTORY

Received 15 February 2017 Accepted 16 May 2017

### KEYWORDS

Foot sole vibration; prevention diabetic complication; static posturography

