

P2367

Effects of whole body vibration on balance and muscle strength in patients with diabetes type-2 associated with peripheral neuropathy

G. Olyaei¹, A. Kordi Yoosefinejad², A. Shadmehr², M.R. Mohajeri-Tehrani³, S. Talebian⁴, H. Bagheri²
¹Physical Therapy, Rehabilitation Faculty, Tehran University of Medical Sciences, ²Physical Therapy, ³Internal Medicine, Endocrinology and Metabolic Research Institute, ⁴Electrophysiology, Tehran University of Medical Sciences, Tehran, Iran

Introduction: Peripheral neuropathy (PN) is a common complication of diabetes with the prevalence of 36% among diabetes sufferers. Muscle strength and balance deficits occur secondary to PN. Whole Body Vibration (WBV) is a new rehabilitation technique that could be beneficial for diabetes sufferers. Acute effects of WBV in patients with diabetes have not been studied yet, so the aim of this study was to investigate the effects of WBV on the above parameters in diabetic type-2 patients.

Methods: 10 patients with diabetes type-2 associated with neuropathy took part in study. Outcome measurements were total strength, strength of tibialis anterior and quadriceps femoris muscles and balance parameters including Unilateral Stance Test (UST) and Timed Up and Go Test (TUGT).

Results: Tibialis anterior muscle strength and TUGT parameters showed significant differences after a session of WBV.

Conclusions: WBV has positive effects on muscle strength and balance in patients with diabetes type-2 associated with peripheral neuropathy.

P2368

Unremovable idiopathic pelvic pain treatment by a novel ultrasound guided technique

R. Bubnov
 The Center of Ultrasound Diagnostics and Interventional Sonography, Clinical Hospital "Feofania" of State Affairs Department, Kyiv, Ukraine

Background: Myofascial pelvic pain is a widespread problem, it occurs more frequently in women, it is detected in 10% to 15% of all gynaecological patients. Recently we proposed a new approach of trigger point therapy, performing precise muscle dry needling under ultrasound (US) guidance.

Materials and methods: This study included 7 patients, females, average age was 68±7 years. All patients suffered from extensive pelvic pain with different location, all with vulvodynia. The own method of treatment was applied, that included ultrasound identification of myofascial trigger points with following dry needling under US guidance using steel acupuncture needles (28 gage) to elicit the LTR effect. In one session one or two needles were inserted. Retention of needles depended of muscle twitch response duration. Visual analogue scale data (0 to 10) were measured before, immediately after and 24 hours after the intervention. A decrease in pain as measured by a VAS of 50% or more than one week after treatment was considered as success.

Results: Main active trigger points were diagnosed in deep pelvic muscles that caused compression of n.pudendus in Alcock's canal. All patients showed decrease in pain as measured by a VAS of 64%, the difference was significant in this group (p<0.01) and pain relief outcome after one month observation.

Conclusion: The proposed method of dry needling trigger points under ultrasound guidance can be considered as an effective practice for treatment the idiopathic pelvic pain, evoked by myofascial disorders.