

Efficacy of Neuromuscular Training on Pain, Balance and Function in Patients with Grade I and II Knee Osteoarthritis

Ganjave Pranita D and Dabholkar Twinkle

Abstract

Aim: To assess and compare the effect of conventional exercise program alone (conventional group) with conventional exercise program in conjunction with neuromuscular training (experimental group) in patients with knee osteoarthritis. **Method:** Forty patients with unilateral knee osteoarthritis were randomly assigned to two treatment groups for 12 sessions: Group A-Conventional exercises group and Group B-Experimental group. Patients in both the groups were assessed on outcome measures of knee pain, knee range, muscle strength, balance parameters, knee instability and function pre-treatment, 2 weeks and 4 weeks post treatment. **Results:** On between group comparisons, there were no differences in pain, knee range of motion, isometric knee and hip muscle strength and end point excursion in balance. However, there was statistically greater improvement in function and some components of balance in the experimental group when compared to conventional group. **Conclusion:** Hence it is beneficial to add neuromuscular training to conventional exercise program in patients with knee osteoarthritis.

Ganjave Pranita D

MPT

School of Physiotherapy

D.Y.Patil University, Navi Mumbai, India

E-mail: pranitaganjave@gmail.com

Dabholkar Twinkle

Professor

School of Physiotherapy

D.Y.Patil University, Navi Mumbai, India

E-mail: twinkledabholkar@rediffmail.com

**Key Words: Knee Osteoarthritis,
Balance, Neuromuscular Training**

DOI: 10.18376/jesp/2017/v13/i2/111281