



The effect of Global Postural Reeducation exercise on movement control and flexibility of hamstring muscle in men with lumbar movement control impairment

Oral Presentation

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Abstract

Introduction: People with movement control disorders usually suffer from impaired control of active movements while performing movements in the spine. Global Postural Reeducation (GPR) is one of the therapeutic methods that has recently attracted attentions. This method suggests that the human body should be analyzed and treated as a whole (Rahmani, Minoonejad, Seidi, & Tabrizi, 2021). Therefore, the purpose of the present study was to evaluate the effect of six weeks of Global Postural Reeducation exercise on lumbar movement control and flexibility of hamstring muscle in men with lumbar movement control impairment.

Methods: 16 subjects with age ranged 30-40 years old with lumbar movement control dysfunction were selected and randomly divided into two groups (GPR group - control group). Mean Age of study was with mean age of 33.9 ± 2.79 years old. GPR intervention group practiced for six weeks, three sessions per week. Before and after the implementation of GPR protocol, the movement control and flexibility of hamstring muscle were measured by using Luomajoki tests (Gutknecht, Mannig, Waldvogel, Wand, & Luomajoki, 2015) and universal goniometer respectively. Results analyzed by independent and paired t test. Significant level was set at 0.05 in SPSS program version 22.

Results: Results from this research showed that there was a significant difference between the mean degree of the hamstrings muscle flexibility in the control group with the GPR group in post-test (P-value =0.001). Also, after 6 weeks, there were significant changes in movement control in the GPR group (P-value =0.001), while no significant changes were observed in the control group.

Conclusion: For rehabilitation in people with lumbar movement control disorders, GPR method seems to be an effective method for the treatment of movement control disorders.

Keywords

Global postural reeducation; Lumbar movement control; exercise; flexibility

Reference:

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