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Comparison of Dynamic Neuromusuclar Stabilisation and Maitland's Mobilisation on Nerve Conductivity in Subjects with Cervical Radiculopathy

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Abstract

Background/Introduction: Cervical radiculopathy is a relatively common neurological disorder resulting from nerve root dysfunction, which is often due to mechanical compression of disc. In the absence of myelopathy or significant muscle weakness all patients can be treated with conservative management.

Objective: To compare the effect of Dynamic Neuromuscular Stabilisation and Maitland Mobilisation in improving nerve conductivity and muscle activity in patients with cervical radiculopathy

Methodology: 34 subjects with unilateral cervical radiculopathy were selected based on selection criteria. Subjects were divided into 2 groups. Group A received Dynamic neuromuscular stabilisation exercise. Group B received Maitland mobilization. Pre-test was done

using NCV for median nerve conductivity and EMG for pronator teres muscle activity. Post-test was done using the same outcome after the cessation of the intervention. Data collected was used for statistics.

Result: The statistics revealed that subjects treated with dynamic neuromuscular stabilization exercise showed a highly significant improvement in reducing pain and improving function in subjects with cervical radiculopathy. Where, the p value is less than 0.05.

Conclusion: The study focused on improvement in the nerve conductivity and muscle activity in upper limb concludes that intervening dynamic neuromuscular stabilization exercise showed a showed a better difference than the Maitland mobilization.

Keywords: Cervical Radiculopathy; Maitland Mobilization; Dynamic Neuromuscular Stabilization; Nerve Conduction Velocity (NCV); Electromyography (EMG)