

Short Term Effects of Mobilization Techniques on Neck Pain and Deep Neck Flexor Muscle Endurance in Patients with Mechanical Chronic Neck Pain

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Objectives: The aim of the study was to investigate short term effects of cervical and scapular mobilization techniques on neck pain and deep cervical muscles endurance in chronic mechanical neck pain patients.

Methods: 22 chronic mechanical neck pain patients four male 18 female (mean age: mean±sd 35.59± 15.85) were included. Before treatment, neck pain level (visual analog scale) and deep neck flexor muscles endurance (in supine position with digital chronometer) of all patients were evaluated. Cyriax cervical mobilization for 10 minutes and scapular mobilization for 10 repetition 10 sets were performed to patients as treatment protocol. After treatment, 24 hours after and a week after evaluations of neck pain and deep cervical muscles endurance were repeated.

Results: Before treatment Neck pain Visual Analog Scale scores was 5.78±1.43 point, 2.80±1.99 point after treatment, 24 hours later 3.36±2.12 point, one week later 3.91±2.24 point. This alteration was found significant statistically ($p<0.01$). Before treatment deep cervical flexor muscle endurance score was 27.25±17.74 sec, after treatment 39.46±25.20 sec, 24 hours later 38.67±28.43 and one week later 40.11±27.82 sec. This alteration was also found significant statistically ($p=0.01$).

Conclusion: Initially neck pain scores in our subjects decreased quickly, after 24 hours these scores increased but last scores were below first neck pain level in a week follow-up. Deep neck cervical flexor muscles test scores also increased quickly, after 24 hours later this scores were stable along a week. Mobilization techniques are effective methods on neck pain and endurance in chronic mechanical neck pain patients.

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