

Comparison of Disability, Proprioception, Cervical Mobility, and Physical Activity Between Individuals With and Without Chronic Neck Pain

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Abstract

Introduction: Neck pain is widespread among office workers and computer users. Range of motion, proprioception, and daily physical activity are critical in evaluating Chronic Neck Pain (CNP) subjects. This study aimed to compare the level of physical activity, proprioception, cervical range of motion, disability, and quality of life in office workers with and without CNP.

Methods: This study was cross-sectional and analytical. The sample was 29 healthy office workers and 29 office workers with CNP. Range of motion, proprioception, quality of life, and neck disability with a goniometer, joint position sense error, SF-36 questionnaire, and Neck Disability Index were evaluated in two groups, respectively.

Results: The findings of the study showed that there was a statistically significant difference between the two groups in right and left lateral flexion and right rotation range of motion ($p < 0.05$), also in disability and pain severity, ($p < 0.05$). There were moderate negative correlations between VAS with left lateral flexion ($r = -0.461$, $P < 0.001$) and right lateral flexion ($r = -0.464$, $P < 0.001$). Also, VAS and NDI had a strong positive correlation ($r = 0.865$, $P < 0.001$). In addition, it was shown that moderate correlations between extension JPE with right rotation JPS ($r = 0.504$, $P < 0.001$), and left rotation JPE ($r = 0.541$, $P < 0.001$).

Conclusion: It can be concluded that when people's activity increases, the range of motion decreases. It is suggested that office workers perform isometric neck exercises and stretching movements of the neck muscles, such as the upper trapezius muscle, in the intervals between working and using the computer.

Index Terms

Physical Activity, Proprioception, Quality of Life, Disability, Neck Pain