

MRT- COMPARISON OF THE EFFECTS OF THE STANDARD EXERCISES AND COORDINATION AND PROPRIOCEPTIVE EXERCISES ON PAIN AND FUNCTIONAL ABILITY IN PATIENTS WITH CHRONIC NECK PAIN

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Neck pain is a significant public-health problem and the second most common cause of musculoskeletal pain. Although the causes of neck pain are not sufficiently clarified, it is well known its relationship with impaired proprioceptive abilities and deep neck flexors' weakness.

Previous research of the effects of neck coordination and proprioceptive exercises have been mostly done on a small sample with a low frequency of exercise, giving conflicting results.

Due to lack of evidence in this area we plan to conduct an investigation on the effect of coordination and proprioceptive exercises with greater frequency than studied before which will translate into improvement of neck's proprioceptive abilities, function of mechanoreceptors and deep neck flexors' strength.

In our study 120 participants of both sexes with chronic non-specific neck pain will be enrolled. Participants will be randomly assigned in two groups; Group 1 for standard and Group 2 for neck coordination and proprioceptive exercise using the modified innovative device of Røijezon et al. (with permission). Both groups will conduct exercise for four weeks (five times weekly). After that participants from Group 2 will be randomly divided into two equally numbered subgroups. Participants from 2a subgroup will continue four week treatment and those from 2b subgroup will stop with the therapeutic exercises.

Primary outcomes will be intensity of neck pain and functional ability. Secondary outcomes will be ROM, patient and physician global assessment and influence of neck pain on activities of daily living.

Confirmation of hypothesis that neck coordination and proprioceptive exercises conducted with greater frequency than usual, using the modified innovative device, will be more effective on pain and functional ability in relation to standard exercises, would define the optimal parameters for clarifying the efficiency of these specific exercises in the treatment of chronic neck pain and will influence on the rehabilitation planning.