## **Abstract**

**Title:** Comparison of the effectiveness of manual therapy and therapy using exercises in muscle postural strings for painful neck syndromes.

Objective: The main aim of this work is to compare the effect of active and passive approaches, combinations thereof, used in normal physiotherapy practice for painful neck syndromes. Active physiotherapy techniques represent the concept of Dr. Raševa, exercises in open and closed kinematic strings and elements of developmental kinesiology. Passive physiotherapy techniques are soft tissue techniques, mobilization and manipulation. The combination of these techniques is the application of active and passive techniques, i.e. the concept of Dr. Rašev, exercises in open and closed kinematic strings, elements of developmental kinesiology and soft tissue techniques, mobilization and manipulation.

**Methods:** The study involved a total of 30 probands with chronic neck pain, randomly divided into three groups of 10. The first group (LTV - health exercise) included active treatment approaches, i.e. the concept of Dr. Raševa, exercises in open and closed kinematic strings and elements of developmental kinesiology. In the second group (TMT - soft tissue techniques) the contents were passive therapeutic approaches, i.e. soft tissue techniques, mobilization and manipulation. The third group (Combined) was a combination of active and passive approaches. There were used the techniques from the two previous groups in the third group, i.e. the concept of Dr. Rašev, exercises in open and closed kinematic strings, elements of developmental kinesiology and soft tissue techniques, mobilization and manipulation. Probands were individually treated in five visits, 30 minutes for one visit. The evaluation methods were NRS, NDI and goniometry. The data was evaluated in Microsoft Office Excel.

**Results:** The results showed that after 5 therapies there was a statistically significant reduction in pain on the NRS scale in all three groups (LTV, TMT and Combined) in patients suffering from chronic neck pain. Within the NDI questionnaire there was a very small reduction in the ADL limitation, for all three groups, only for the TMT (soft tissue

techniques) group, no statistical significance was demonstrated. There were no changes in goniometry in any of the groups and changes were not statistically significant.

**Keywords:** chronic neck pain, cervical spine, exercise, mobilization, NDI, ROM (range of motion, goniometry)