ABSTRACT

Tittle: The effect of fine motor skills training on cognitive functions in patients after stroke.

Objective: The objective of this work is to determine the effect of fine motor skills training on cognitive functions in patients after stroke and if they differ from patients not undergoing this training.

Methods: The research group consists of 9 stroke patients hospitalised at the Clinic of medial rehabilitation of FNKV in Prague. 5 of the participants were in the experimental group. They underwent initial examination of cognitive functions and fine motor skills, after that they underwent three weeks of intensive fine motor skills training. At the end the same final examination was made again. 4 participants were in the control group, which did the inital and final examination, but didn't participate in the training added by this study. Paired and non-paired t-tests were used to analyse the result data.

Results: The research showed a positive effect and more prominent improvement in MoCA-CZ3 cognitive test in patients who underwent the three weeks of intensive training of fine motor skills than in patients in the control group undergoing the basic care program of the clinic.

Conclusion: The training of patients in fine motor skills caused more prominent improvement of cognitive functions and fine motor skills examined by minor tests than in patients not undergoing this added therapy. The therapy was regarded positively by the participants, and could be used as another form of therapy to improve cognitive functions in patiens after stroke in the future.

Key words: cognitive functions, fine motor skills, Montreal cognitive test, cognitive impairment