

Abstract:

The thesis deals with visual-motor coordination in patients after stroke. The main aim of the thesis is to describe the relationship between visuomotor and graphomotor coordination in selected patients after stroke, in subacute and chronic phase of the disease. The main contribution of the thesis should be a better understanding of the relationship between graphomotor and visuomotor skills. The outcome of the thesis is a pilot validation of the relationship between visuomotor and graphomotor skills in a research group of patients.

The theoretical part of the thesis summarizes the knowledge about fine motor skills. It then deals mainly with visuomotor skills, specifically defining the concepts of visual perception, visual-motor integration and visual-motor coordination. Subsequently, the paper describes the level of visuomotor skills in patients after stroke. The theoretical part concludes with the possibilities of assessing visuomotor skills and the impact of this disorder on the activities of daily living.

The practical part of the thesis deals with the evaluation of the level of graphomotor and visuomotor skills in patients after stroke. Two test batteries were used for the assessment: the Handwriting Assessment Battery for Adults (HAB) for the assessment of writing parameters and the Pediatric Neuropsychological Battery NA-C for the assessment of visual-motor coordination. The research group consisted of a total of 15 patients who were included based on meeting the selection criteria.

The results obtained indicate the existence of a relationship between graphomotor skills and visual-motor coordination. The capability of individuals in each subtest is related to each other. The results show that the level of visuomotor coordination affects certain parameters of writing, namely speed, legibility and manipulating writing utensils. The level of visuomotor coordination was shown to be most closely related to the legibility of writing. Furthermore, the results confirm the presence of deficits in the area of visual-motor coordination in patients after stroke.

Key words:

stroke, handwriting, graphomotor skills, visuomotor skills, visuomotor coordination, hand-eye coordination