

Functional independence in patients with ischemic stroke in the chronic period

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Objective: To investigate the influence of the specialized physical therapy on functional independence and to compare the impact of usual physical therapy in patients with ischemic stroke in the chronic period.

Material and Methods: The study included 10 patients / 6 in the experimental and 4 in the control group, 6 men and 4 women with chronic right-sided and left-sided hemiparesis after ischemic stroke within 3 months. Subjects were evaluated on performance test of functional independence / FIM / at the beginning, of the 10th day, 1st month and 3 months.

We used two exercise methods: specialized physical therapy methodology (SPTM) applied in the experimental group (EG) and usual physical therapy methodology applied in the control group (CG). SPTM was developed by us based on principles of motor control, motor learning and contemporary guidance to neurodevelopmental treatment (NDT). Patients from EG after 10-day daily physical therapy continued with adapted program for home rehabilitation and requirements for it.

Results: The difference in FIM-assessments at the beginning between CG (3.79) and EG (4.31) groups was not significant ($p > 0,05$). On the 10th day, FIM-assessment in the EG (5.81) was significantly greater ($p < 0,01$) compared to CG (4,38). On 1 months, FIM-evaluation in EG (6.46) was significantly greater ($p < 0,001$) in comparison to that of the CG (4.29). At 3 months, the FIM-evaluation in EG (6.81) was significantly greater ($p < 0,001$) in comparison to that of the CG (4.13).

Discussion: The physical therapy applied by us, continued later as an exercise program at home, that significantly improves functional independence in patients with ischemic stroke in the chronic period.

Keywords: Functional independence, physiotherapy, exercise therapy, ischemic stroke.