

Abstract: The aim of the study was to evaluate the effect of specific rehabilitation concept on the motor deficit in patients after stroke. This concept is used at the Department of inpatient rehabilitation FN Motol, the main component is exercise on the principles of dynamic neuromuscular stabilization (DNS) and is based on the principles of developmental kinesiology. The study included 12 patients after stroke. Proband participants participated in the 3 week therapy, exercise was carried out twice a day. Significant ($p < 0.05$) improvement in motor function of the arm, hand, leg and foot was demonstrated by using Student's paired t-test. There was a statistically significant improvement in postural control and reducing shoulder pain (all assessed using a specific scale: Chedoke McMaster Stroke Assessment). Changes in the degree of spasticity were evaluated by Modified Ashworth scale. A statistically significant improvement in the degree of spasticity was observed in these muscle groups: the elbow flexors, adductors of lower limb, knee extensors and hamstrings. It has been shown that the concept of dynamic neuromuscular stabilization can be advantageously used in selected patients after stroke. It is appropriate to supplement the DNS therapy with training of ADL.