

## **Early Mobilization of Patients with Obesity after Stroke**

### **Abstract**

This study aimed to evaluate the effectiveness of early verticalization in post-stroke obese individuals using the National Institute of Health Stroke Scale (NIHSS), the Functional Independence Measure (FIM), and the seat stability assessment (FIST - Function in Sitting Test). Another aim was to evaluate the relationships between the results of the final tests and the results of the initial tests, the age of the patients, the length of rehabilitation, and the Body Mass Index (BMI) value in the patients and to verify the validity of these tests.

In the theoretical introduction, I described stroke - its definition, epidemiology, classification, risk factors, and diagnostics. Much of the work was devoted to the comprehensive medical rehabilitation of patients after a stroke. Physiotherapy was described in the acute, subacute, and chronic stages, as well as in the subsequent period and palliative care. In addition to describing the principles of neurorehabilitation and explaining the concept of neuroplasticity, I also got to an evaluation methods in rehabilitation. One of the chapters of the thesis is obesity, which is one of the risk factors for stroke - here I also included the definition of obesity, its epidemiology, types, and associated health complications.

The group of examined people consisted of obese patients after a stroke, who underwent rehabilitation chosen according to the specific condition of the patient, and were evaluated not only by the initial and final tests but also during therapies. In terms of the method used in rehabilitation, the most frequently chosen therapy was neurophysiologically based exercise and the emphasis on early verticalization.

In patients with a diagnosis of stroke and obesity, there was a statistically significant improvement in hemiparetic impairment, functional independence, and sitting stability, objectified by the previously mentioned tests. The results of the final tests depend on the values of the initial tests and, conversely, do not depend on the age and BMI of the patients, nor on the length of rehabilitation. The NIHSS, FIM, and FIST tests are therefore valid tests for assessing the condition of obese patients after stroke.

In the discussion, I compared my findings with both Czech and foreign authors and mentioned findings that can enrich this issue.