

**Abstract:**

The Action Research Arm Test (ARAT) is a standardized tool, which is used for fine and gross motor skills evaluation of hemiparetic patients after stroke. It is widely used abroad thanks to its excellent psychometric properties and easy administration. It is also used in many foreign studies to evaluate the function of upper extremity, especially for neurological patients. Unfortunately, so far it has been used only sporadically in the Czech Republic. In the theoretical part of this thesis the ARAT and the Modified Frenchay Scale (referred as "MFS") is described. In the practical part, the MFS is compared with the ARAT. The main aim of this diploma thesis is a pilot comparison of sensitivity of upper limb motor skills evaluation done by ARAT and MFS. Thirty patients after stroke were tested in the Rehabilitation Center Kladruby in three weeks. They were further divided into three intervention groups according to the severity of the paresis (light, medium, heavy). The analysis of the results shows that the sensitivity of both diagnostic tools is statistically comparable. According to the Spearman correlation coefficient, the ARAT and the MFS correlate very strongly in range of 0.96-0.98. The greatest differences were measured in the group of patients with moderate hemiparesis. In this group, the ARAT detected the motor change during rehabilitation better than MFS. The advantages and disadvantages of both used diagnostic tools are described in the discussion.