

The aim of this dissertation was to introduce a set of examinations of clinical functions in patients with multiple sclerosis (MS), which would be optimum for utilisation in physiotherapeutic practice, and also to compare changes to the individual examinations of this set after the patients underwent therapy consisting of aerobic training. We also monitored the persistence of the therapy's effect a month after its termination. The research was conducted on a set of 6 probands in the case of whom MS had been definitively confirmed, motor handicaps predominated, and the EDSS ranking was 3 to 5. Aerobic training took place twice a week for eight weeks. The intensity and length of the load were stipulated individually according to the patient's condition. After the therapy there were significant improvements (a p-value less than 0.05) only in the examination of cognitive functions, though we recorded a relatively significant improvement (a p-value of almost 0.05) in the case of investigations of balance, the functions of the upper limbs, and trembling in the upper limbs. On the other hand there was a relatively significant deterioration in the investigation of dysmetria in the lower limbs. We ascribe the overall minimal improvements in most of the functions investigated partly to the very unfavourable temperatures during the second and third investigation. We regard the set of investigations of clinical functions specified as suitable for utilisation in physiotherapeutic practice.