Physiotherapy on the neurophysiologic base works with the principles of the motor functions regulations and the sensory—motor learning. We investigated the influence of the physiotherapy with the clinical status and immunological parameters in the patients with MS in this study. There were 12 patients with MS which underwent physiotherapy and 8 patients with MS in the control group. For the assessment of the clinical status we used a testing group of muscle power, spasticity, balance and posture reactions, knee lock, tremor, dysmetria, dysdiadochokinesis, visual and cognitive functions. From the test results we counted the index for the upper and lower

extremities, for the entire function and balance. For the assessment of the immunological

parameters we used common imunological examination.

We found out that physiotherapy on the neurophsiological base significantly possitive influences muscle power and spasticity of the upper and lower extremities, balance, tremor of the lower extremities, sight and the entire functions of the patients with MS. There was only a mild improvement of dysmetria, dysdiadochokinesis, balance, tremor of the upper extremities and cognitive functions. The immunological results showed a significant IgA elevation in the group with the exercise.