

## **[Effect of low frequency magnetic fields used in magnetotherapy and magnetostimulation on the rehabilitation results of patients after ischemic stroke].**

[Article in Polish]

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### **Abstract**

New methods of rehabilitation should be introduced in order to reduce disability resulting from stroke. During the twelve months of follow-up, effect of low frequency magnetic field (lf mf) on the course of patient rehabilitation following ischemic stroke was evaluated on in-patient (acute and subacute period of the stroke) and outpatient (chronic period) basis with the use of Mathew et al's and Barthel's scales. lf mf (20 procedures of 20-min. duration) of magnetotherapy (I group--placebo, II--group 5.6 mT induction, 10 Hz frequency and sinusoidal shape, III group--2.8 mT induction, 10 Hz frequency and sinusoidal shape) and magnetostimulation (IV group--M1P1 program of Viofor JPS system, 16 min a day) was applied as early as in the subacute period of the stroke (1-8 weeks). The data obtained were presented in the form of percentage changes in the pain levels as well as in the form of the arithmetical mean and standard deviation ( $X \pm SD$ ). The ANOVA test was used for a statistical evaluation of the data obtained in the tests. The results obtained indicate beneficial effects of lf mf in the III and IV group of patients in the Barthel's scale and Mathew scale, which were observed during the examination 12 months after the stroke. The recommended doses of lf mf seem to be adequate to obtain therapeutic effects and may be used in the early period of rehabilitation. The neurological and functional improvement persisted for a long-period of the out-patient treatment, which was confirmed during the control examination 12 months after the ischemic stroke. As no adverse effects (which could be attributed to lf mf), were observed, this method of physical therapy can be recognized as a safe one and worth making popular in clinical practice.

PMID: 17892036 [PubMed - indexed for MEDLINE]