The influence of Balneo Factors of Banja Koviljaca on the functional status of lumbar-sacral Spine in patients with lumbar Discus Hernia

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Introduction. Discus hernia is a condition that can significantly alter a person's life by disturbing their everyday life, changing their role in the family, reducing work ability, and presents a major health and socioeconomic issue.

Purpose. The goal of this research is to test the therapeutic effect of sulphuric water and peloid of Banja Koviljaca on the functional status of lumbar-sacral spine and compare the therapeutic effects of balneo therapy and combined therapy using traditional physical agents in patients with lumbar discus hernia.

Method. The patients were divided into two groups of 30 patients. The experimental group had peloid and sulphuric water, and the control group had traditional physical modalities. The estimation of the functional status of lumbar-sacral spine was performed using Schober test of lumbar spine inclination and by estimating muscle tone of paravertebral musculature. The mentioned measurements were conducted before the treatment, after day five and after the completion of the treatment.

Results. After proper statistical analysis of the obtained values, we have noted that there is a significant increase in Schober test values in both groups at the end of the rehabilitation, with significant improvement of mobility of the lumbar-sacral part of the spinal column in the experimental group, both at the end of the 5th day and at the end of rehabilitation. In both groups PVM spasm had statistically significant reduction after the rehabilitation, but this improvement was more prominent in the experimental group, especially after day 5 of the rehabilitation.

Conclusions. Acquired results in this research are a recommendation for the application of complex spa treatment in patients with lumbar discus hernia, since it contributes significantly to the improvement of spinal column mobility, to the reduction of the PVM spasm, and therefore the decreasing of work inability and improving the quality of life.