

MANAGEMENT OF THE PROCESS OF REHABILITATION IN CHILDREN WITH IDIOPATHIC SCOLIOSIS OF II DEGREE

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At present, treatment of the children with idiopathic scoliosis remains the topical problem. There is controversy over the treatment tactics, as in the American and European medicine the role of muscles is neglected, and the primary methods of rehabilitation are bracing and surgery. The study aimed to determine the effectiveness of the optimal subsequence of rehabilitation methods in the complex treatment of II degree idiopathic scoliosis. The study included 24 patients, female, aged 12–15 years, with a diagnosis of thoracolumbar idiopathic scoliosis, II degree, with an angle of curvature of 23–27°. The objective of rehabilitation was elimination of the asymmetric strain (relaxation) of extensor muscles of the back, traction, detorsion (rotation) and fixation of the spine with a strong muscular corset around it. The participants underwent a complex rehabilitation using amplipulse therapy, manual therapy, kinesiotherapy and hippotherapy using a method suggested by D. Tsverava (1985). The main subjective, objective and radiological parameters were studied in dynamics, before and 3 months after treatment; the functional state of the spinal, back and abdominal muscles was investigated using a static muscle endurance test that was conducted before treatment and at one and three months of rehabilitation. Analysis of the results shows that all of the proposed rehabilitation scheme and subsequence of methods are highly effective for the children with II degree of idiopathic scoliosis. This was demonstrated by improvement of all parameters: discomfort and feeling of fatigue in the back, pain on exertion, pain in trigger points were eliminated; there was a trend of aligning asymmetry between the orientation points; static endurance of trunk and abdominal muscles, angle of curvature decreased (average 5–60).

Conclusion: Complex rehabilitation using physical methods such as amplipulse therapy, manual therapy and kinesiotherapy may be effective for II degree of thoracolumbar idiopathic scoliosis. Hippotherapy enables significant strengthening of the muscles supporting the spine, and besides, creates a favorable environment due to contact of children with a horse.