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From Risk Factors to Final Diagnosis

FINAL PROGRAMME AND
BOOK OF ABSTRACTS

Končni program in zbornik izvlečkov

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MOVEMENT CORRECTION SUIT “SPIRAL” FOR CEREBRAL PALSY

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Objective:

Over the past few decades, various new approaches toward the management of movement disorders in cerebral palsy are arising. Different types of therapeutic suits (Adeli Suit, Penguin Suit, Therasuit) aimed at movement correction have been developed. Elastic straps of those suits apply external force to the trunk and body parts. But restricted strap attachment points limit the range of possible correction forces. The objective of our work was to develop a movement correction suit appropriate for different treatment programs.

Material and Methods:

Movement correction suit called “Spiral” Suit has been developed. The suit consists of a system of elastics straps, wrapped in a spiral across the body and extremities. They are imitating the positions of the main muscle groups and providing the necessary corrective force. Straps are fastened to the supportive elements on the trunk and extremities (vest, shorts, knee and elbow pads, foot and wrist pieces) with Velcro attachments that allows various adjustments to be made optimizing the desired corrective force. The absence of the rigid parts in the suit significantly broadens the range of possible physical therapy exercises. System of elastic straps consists of an axial spiral, main extremity spirals and supplemental correction bands. Depending on the primary movement abnormalities different types of the axial spirals and main extremity spirals can be used.

Results and conclusion:

Movement correction suit “Spiral” applies additional exertion to certain joints and corrects the position and movement of the trunk and extremities. In addition, the flow of “correct” proprioceptive information to the central nervous system is enhanced. A special physical therapy program using Suit “Spiral” has been worked out. The effectiveness of this program is to be further evaluated.