Op051.
Microcurrent reflexology in combination with cortexin in speech pathlogy therapy while treating cerebral palsy
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A complex study of 78 patients with cerebral palsy had speech pathology. The aim of our research was to study therapeutic action of the microcurrent reflexology and neuroprotector "Cortexin" combination therapy compared with monotherapy while treating cerebral palsy. 78 children at the age of 2 to 7 were treated. All the children had speech pathology. They were provided microcurrent reflexology courses including 15 sessions using apparatus "MAKS". The patients were divided into 2 randomized groups. The patients of the first group were given 3 microcurrent reflexology courses and 2 "Cortexin" courses. And the second group patients were given only 3 microcurrent reflexology courses. "Cortexin" was made intramuscularly measured 10 mg. The bottle content was diluted in 2 ml of 0,5% "Novocaine". The course of treatment included 10 injections. The logopedic examination according to Gorscheneva S. showed the beneficial effect of the microcurrent reflexology and "Cortexin" combination therapy. An analysis of results of the complex treatment demonstrated its high efficacy in the recovery of speech functions in children with cerebral palsy compared to patients of the comparison group.

Op052.
Evaluation of muscle spasticity in children with cerebral palsy after shock wave therapy
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Background. Extracorporeal shock wave therapy is a method of treatment, which is used in medical practice mainly in the management of muscular-skeletal disorders. The aim of this study is to evaluate the effect of shock wave therapy on muscle spasticity of plantar flexors in children with cerebral palsy.

Methods. Two groups of children with cerebral palsy were included in the study: first group - 25 children, mean age 4.84, SD 3.11; second group - 12 children, mean age 5.5, SD 3.23. The children from the first group received a single radial shockwave therapy (RSWT) session to each gastrocnemius and soleus muscles. The children from the second group received 2 sessions of RSWT, same number of shots. A placebo session 6 weeks before the active treatment was applied. Clinical and instrumental methods were used: passive range of motion (pROM), Modified Ashworth Scale and pedobarometric measurement.

Results. Immediately after the treatment a statistically significant increase in pROM (from 33, 25° to 47°, p<0.01) and decrease in the Ashworth Scale (from 2.75 to 2.00, p<0.01) for the first group and for the second group (pROM - from 45, 35° to 51, 69°, p<0.01; Ashworth Scale - from 2.61 to 2.28, p<0.01) were found. The effect persisted for four weeks for both groups. On the pedobarometric measurement a significant increase in plantar surface was observed. No significant difference was found after placebo stimulation.

Conclusion. RSWT could be used for reducing muscle spasticity in children with cerebral palsy. A single session has long-lasting effect, but further investigation is needed to clarify the most appropriate treatment protocol.

Op053.
Cartography of neurovisual disorders in 66 cerebral palsied (CP) children and adolescents
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Background. Neurovisual disorders in CP are responsible for disabilities in daily life as learning. Despite their frequent, specific studies are still limited. The purpose of this work is to analyze neurovisual disorders among CP population and search for significant links. 66 children and teenagers aged 6 to 18 year with CP: Quadriplegia (31.8 %), Hemiplegia (24.2 %), cerebellar Syndrome (19.6 %), diplegia (10.6 %), and other (9 %). All followed in rehabilitation institute with interdisciplinary rehabilitation and schooling program.

Methods. A data of improved assessment of neurovisual sensory and motor function, ocu-cervical and ocu-manual coordination, motor and hands function; neuropsychological functions and school knowledge was established and analyzed with the software «Statistica».

Results. Beyond the results in line with literature this work provides precisions on specifics correlations. For the whole population, setting in motion and motility reaction time, pursuit and saccadic movement are most frequently overdrawn (65%). Analysis of Pursuit disorder identifies a high positive correlation with both binocular vision troubles and vision field amputation (95%). The frequency of Motor visual disorders is significantly higher in cerebellar syndrome (76%) and in severe prematurity. Results confirm the presence of Hand-eye coordination disorders without hands' disabilities. Authors emphasize the importance to correlate results with executive functions, Fluid Reasoning, Working Memory, and Processing Speed.

Conclusions. This work quantifies the various types of neurovisual...