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Intensive Neurophysiological Rehabilitation System: New Approach for Treatment of Children with Autism

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Abstract : Introduction: Rehabilitation of children with Autism is the issue of the day in psychiatry and neurology. It is attributed to constantly increasing quantity of autistic children - Autistic Spectrum Disorders (ASD) Existing rehabilitation approaches in treatment of children with Autism improve their medico- social and social- psychological adjustment. Experience of treatment for different kinds of Autistic disorders in International Clinic of Rehabilitation (ICR) reveals the necessity of complex intensive approach for healing this malady and wider implementation of a Kozyavkin method for treatment of children with ASD. Methods: 19 children aged from 3 to 14 years were examined. They were diagnosed 'Autism' (F84.0) with comorbid neurological pathology (from pyramidal insufficiency to para- and tetraplegia). All patients underwent rehabilitation in ICR during two weeks, where INRS approach was used. INRS included methods like biomechanical correction of the spine, massage, physical therapy, joint mobilization, wax-paraffin applications. They were supplemented by art- therapy, ergotherapy, rhythmical group exercises, computer game therapy, team Olympic games and other methods for improvement of motivation and social integration of the child. Estimation of efficacy was conducted using parent's questioning and done twice- on the onset of INRS rehabilitation course and two weeks afterward. For efficacy assessment of rehabilitation of autistic children in ICR standardized tool was used, namely Autism Treatment Evaluation Checklist (ATEC). This scale was selected because any rehabilitation approaches for the child with Autism can be assessed using it. Results: Before the onset of INRS treatment mean score according to ATEC scale was 64,75±9,23, it reveals occurrence in examined children severe communication, speech, socialization and behavioral impairments. After the end of the rehabilitation course, the mean score was 56,5±6,7, what indicates positive dynamics in comparison to the onset of rehabilitation. Generally, improvement of psychoemotional state occurred in 90% of cases. Most significant changes occurred in the scope of speech (16,5 before and 14,5 after the treatment), socialization (15.1 before and 12,5 after) and behavior (20,1 before and 17.4 after). Conclusion: As a result of INRS rehabilitation course reduction of autistic symptoms was noted. Particularly improvements in speech were observed (children began to spell out new syllables, words), there was some decrease in signs of destructiveness, quality of contact with the surrounding people improved, new skills of self-service appeared. The prospect of the study is further, according to evidence-based medicine standards, deeper examination of INRS and assessment of its usefulness in treatment for Autism and ASD.

Keywords : intensive neurophysiological rehabilitation system (INRS), international clinic od rehabilitation, ASD, rehabilitation
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