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COGNITIVE AND EMOTIONAL-VOLITIONAL DISORDERS IN TORCH-ASSOCIATED AUTISM IN CHILDREN

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The prevalence of Autism Spectrum Disorder (ASD) is steadily increasing and ranges from 1 in 36 to 1 in 100 children. TORCH complex pathogens have pronounced neurotropic effects and can cause damage to the fetal central nervous system through mechanisms of neuroinflammation, hypoxia, and metabolic dysfunction. This leads to the formation of organic brain damage, which may determine the characteristics of cognitive deficits and emotional-volitional disorders in children with ASD. However, data on the clinical structure of such disorders in TORCH-associated autism remains limited.

Objective of the study: to investigate the features of cognitive and emotional-volitional disorders in children with TORCH-associated autism.

Materials and Methods: a total of 120 children aged 2–6 years (mean age: 3.8 ± 0.4 years) with a confirmed diagnosis of ASD were examined. The clinical examination included analysis of antenatal and perinatal history, neurological assessment (Denver II, GMDS), and psychometric evaluation using the CARS-2 scale. TORCH infection verification was carried out using PCR to detect DNA/RNA of pathogens in saliva.

Results of the study. In the infectious factor structure, herpesviruses predominated: Epstein-Barr virus - 74.5%, cytomegalovirus infection - 68.6%, herpes simplex virus type 6 - 55.4%, and herpesvirus infection - 12.3%, indicating their leading role in the development of neurodevelopmental disorders. It has been established that TORCH-associated autism is characterized by more severe impairments in both the cognitive and emotional-volitional domains. Disruption of emotional contact was observed in 74.7% of children in the main group compared to 51.1% in the comparison group (χ^2 =

7.06; p = 0.008). Deficit in imitation skills was noted in 65.3% and 42.2%, respectively (χ^2 = 6.14; p = 0.013), reflecting impaired mechanisms of social learning. Affective flattening and hypoemotionality were observed in 69.3% of children with TORCH-associated autism compared to 44.4% (χ^2 = 7.09; p = 0.008). Adaptive behavior disorders were identified in 80.0% and 62.2%, respectively (χ^2 = 4.38; p = 0.036). Cognitive deficit was manifested by a significant predominance of speech impairments (92.3% vs. 16.8%), reduced communication skills, and significant delay in psycholinguistic development. Neurological symptoms in children of the main group were more severe and of an organic nature: peripheral cervical insufficiency syndrome - 32.3% vs. 14.2%, muscular dystonia - 17.6% vs. 8.5%, and pyramidal-extrapyramidal disorders - 13.3% vs. 5.7%. Comorbid disorders were significantly more frequent: sleep disturbances (44.1% vs. 5.7%), enuresis (21.3% vs. 2.9%), tics and seizures (38.6% vs. 6.8%), and hypertension-hydrocephalus syndrome (39.6%), which was absent in the comparison group.

Conclusion. TORCH-associated autism is characterized by more significant cognitive deficits and severe emotional-volitional disorders, which are due to organic damage to the central nervous system. The obtained data emphasize the need for early detection of intrauterine infections and the development of personalized diagnostic and rehabilitation programs for children with ASD.