AUTOIMMUNE (LIMBIC) ENCEPHALITIS OBSERVATION

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Introduction: Pediatric encephalitis is inflammation of the brain tissue associated with clinical manifestations of neurologic dysfunction [1]. A wide spectrum of microorganisms can cause the disease development, such as bacteria, viruses, rickettsiae, spirochaetes, fungi, and protozoa. Among them viruses are the most widespread causes in the world. Earlier it was considered that these were Herpes simplex virus (HSV1 and HSV2), Varicella Zoster virus, cytomegalovirus (CMV), Japanese encephalitis virus, Dengue virus [2].

Objective: To describe the course of encephalitis in children on the basis of clinical and laboratory evaluation of the case.

Materials and Methods: There were analyzed medical literature of reviewed databases and citation systems of PubMed, Web of Science, Scopus, GoogleScholar, elibrary with the usage of key words, as well as the patient's case history.

Results: After the admission of the patient to the hospital there was performed a set of investigations to make a final differential diagnosis. Brain MRI demonstrated some changes in the area of hippocampus, and focal changes in the brain white matter were the most characteristic for autoimmune limbic encephalitis type. There could be observed intensification of diffuse atrophic processes in the brain. IgG antibodies to Epstein-Barr virus were identified in the blood serum. Immunologic analysis demonstrated G immunoglobulin to native DNA (1.53), denaturated DNA (2.03), cell membrane phospholipids (1.28), myelin basic protein (1.69), M immunoglobulin to myelin basic protein (2.75) with its normal level up to 1.1, Circulating Immune Complex (CIC) (21 standard units) with its normal level up to 54 [3].

Conclusion: According to the results of the patient's medical examination there was made the diagnosis of autoimmune (limbic) encephalitis with structural focal epilepsy and mixed disorders of mental development.

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