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Organic brain damage is one of etiological factors in epilepsy and neuroinfection is one of them.

Most patients with lesions of the Central nervous system raise the levels of antibodies in the ?entral spinal fluid and plasma, but , as a rule, on the 10th day after the onset of the disease. Therefore, serological research methods are more important for retrospective analysis and monitoring of treatment effectiveness. But they are indispensable in the diagnosis of recurrent and chronic neuroinfections.

The aim of the investigation was to study neuroimmun status of patients with epilepsy by mean of immunofluorescence (ELISA) and polymerase chain reaction (PCR). Blood samples of 50 healthy donors and 43 drug-resistant epileptic patients were studied. The serum of healthy donors and epileptic patients was investigated by ELISA and PCR for the quantitative detection of IgM and IgG antibodies to herpes viruses (HV) types 1, 2 and 6, Epstein-Barr (VEB), cytomegalovirus (CMV), toxoplasmosis, tick-born encephalitis.

Among healthy donors there were not determined pathological neuroimmune features. While among patients with drug-resistant epilepsy DNA VEB was detected in 1 patient and HV-6 in 3 patients. In 3 another patients revealed IgM, indicating the activation of the CMV and VEB. Elevated titers of IgG in HV were determined in 66.67 %, VEB – in 60.87%, CMV – in 62.5% patients. Elevated titers of IgG indicate chronic type of neuroinfections.

For detection of chronic infectious disease of CNS in patients with drug-resistant epilepsy we serve laboratory diagnostics (PCR and ELISA) to choose the correct therapy.