

Abstract

The previous studies showed the important role of immunoglobulins in the course of inflammatory processes of infectious etiology. They contribute to the effectiveness of the immune system and are an important component of the specific response. The detection of antibodies in serum and other materials such as cerebrospinal fluid etc. is used to diagnose diseases.

The aim of the study was to detect intrathecal synthesis of antibodies against TBE virus in the cerebrospinal fluid of patients diagnosed with tick-borne encephalitis. The correlation between the intrathecal synthesis of antibodies and the course of TBE and the observed complications after TBE was studied.

The study was conducted on 102 people with TBE diagnosed, hospitalized at the Department of Infectious Diseases and Neuroinfections of the Medical University of Białystok.

The analysis of the tests was performed in the acute phase of infection and about 1 month later, during the follow-up hospitalization. The study population was divided into groups according to the performed serological tests, and then into subgroups due to the severity of the disease: meningitis, encephalitis.

The results of the study showed the presence of intrathecal synthesis of IgM and IgG antibodies against TBE virus in patients diagnosed with TBE. The correlation CSQrel IgG and IgG2/IgG1 index with the frequency of observing postencephalitic syndrome after TBE was observed. The negative correlations between CSQrel IgG with pleocytosis and albumin concentration were also observed.

CSQrel. IgG during the first hospitalization was significantly higher in patients with a monophasic course of the disease. The negative correlations between pleocytosis and protein concentration with CSQrel IgM were found.

The studies suggest the usefulness of intrathecal synthesis of antibodies against TBE virus in order to predict the severity of TBE infection and the possibility of complications after TBE infection. Another application of the above-mentioned test is the diagnosis of TBE and differentiation from other neuroinfections.