# INTERPRETATION OF ELISA RESULTS IN THE DIAGNOSIS OF THE HERPES VIRUS

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The paper considers experimental confirmation of the relevance and importance of the ELISA method for determining antibodies of the IgM and IgG class against HSV and for determining the stage and degree of the pathological process.

Keywords: blood serum, herpes simplex virus, specific HSV antigens.

Herpes simplex virus is a latent infection. The development of a herpetic disease in humans is always associated with the presence of a rather crude immunodeficiency state, and the stronger the immune disorders, the greater the severity of the disease. Diagnosis of HSV is important in the early stages of the disease. The most important biological property of herpes viruses in the pathogenesis of diseases is their ability to latent existence. Herpes viruses can persist for life in the human body and cause diseases with diverse clinical manifestations.

Based on the foregoing, the aim of the work was to experimentally confirm the relevance and importance of enzyme-linked immunosorbent assay with the determination of antibodies of the IgM and IgG class to herpes simplex virus based on an analytical review of analyzes from the RSPC "Mother and Child".

For the diagnosis of herpes virus infection, laboratory diagnostic methods are used, such as: PCR, ELISA, RIF, virological method. Of serological methods, enzyme immunoassay is most often used to detect specific antibodies. Accounting for the stage of herpetic infection is possible according to the classes of IgM, IgG. IgM detection is a sign of primary infection or exacerbation of a latent infection, and IgG characterizes the height of the disease and the formation of immunity.

As a result of the work done, data on antibodies of the IgM and IgG classes were obtained and systematized. In order to assign samples to a particular stage of the disease, the data were divided into 3 groups according to the range of IgM and IgG concentrations, which proved the possibility of determining the form of the disease based on a qualitative determination of the concentration of IgM antibodies and quantitative detection of IgG antibodies, as well as the ability to determine the duration of herpes simplex virus infection based on the quantification of antibodies of the IgG class to HSV.

According to the research, it can be concluded that the most promising, more sensitive and specific method for the diagnosis of herpes simplex virus from all serological reactions is currently considered an enzyme-linked immunosorbent assay, which is introduced into the work of many medical centers.

#### **BIBLIOGRAPHY**

- 1. *Andrei*, *G*. Herpes simplex virus drug-resistance: new mutations and insights / G. Andrei, R. Snoeck // Curr. Opin. Infect. Dis. 2013. Vol. 26, № 6. P. 551–560.
- 2. *Nandakumar*, *S.* Natural killer cells as novel helpers in anti-herpes simplex virus immune response / S. Nandakumar, S. N. Woolard, D. Yuan, B. T. Rouse, U. Kumaraguru // J. Virol. − 2008. − № 82 (21). − P. 10820–10831.
- 3. *Paludan*, *S. R.* Recognition of herpesviruses by the innate immune system / S. R. Paludan, , A. G. Bowie, K. A. Horan, K. A. Fitzgerald // Nat Rev Immunol.  $-2011. N_0 11(2). P. 143-154.$

## ANALYSIS OF THE LEVEL OF PHYSICAL AGGRESSION IN TEENAGERS DEPENDING ON THE CHOICE OF A COMPUTER GAME

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Computer games are one of the preferred leisure activities among adolescents. In the modern world, computer games have become not only entertainment, but also a carrier of culture. They allow people to travel to the world of fantasies, to acquire new skills and knowledge. However, unfortunately, computer games are not