

HERPES SIMPLEX VIRUS

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Herpes infection is the most common infection among the adult population. The causative agent of the disease is Herpes simplex virus, which affects the skin, nerve cells, and human mucous membranes. Once in the human body, pathogens accumulate and manifest themselves with a weakened immune system.

According to scientists, almost 90% of the world's population are latent carriers of the Herpes Virus. Herpes, or herpes infection, is a disease caused by viruses of the Herpesviridae family. Eight species are known to science, among which the most common Herpes simplex simple type, namely Herpes Simplex Virus type 1 (HSV-1) and Herpes Simplex Virus type 2 (HSV-2) [1].

Variations of the Herpes Virus can infect almost the entire body and cause a number of very serious diseases, such as herpes of the lips, chicken pox, Herpes zoster (VZV), cytomegalovirus infection, as well as various forms of cancer and encephalitis [2]. A feature of the Herpesviridae family of viruses is that they all cause lifelong diseases, and pathogens can be inactive for a long time, proceeding without clinical manifestations.

The virus can enter the body in early childhood: at 3-4 years old, when the antibodies against the Herpes Virus transmitted to the baby by the mother are depleted. The Herpes Simplex Virus is spread by airborne, sexual, contact, transfusion routes, as well as during organ transplantation. Once in the human body, the Herpes Virus spreads through the bloodstream. It enters the nerve cells of the peripheral nervous system and integrates into the genome of neurons. Viruses HSV-1 or HSV-2 are able to interact very effectively with the human immune system, which explains the long latent period of the disease, allowing the virus to spread as much as possible in the body [3].

The virus can be activated as a result of increased physical or emotional stress, general exhaustion of the organism. Other diseases, such as fevers, injuries, hormonal changes, and skin lesions, can also become a risk factor.

That is why early and high-quality diagnosis of the disease becomes a very important event for every person. Modern medicine uses a number of different research methods to diagnose HSV in a patient [4]. These methods are virological methods for the detection and identification of herpes simplex viruses, detection of HSV antigens and enzyme immunoassay, cytomorphological methods, the polymerase chain reaction (PCR) method, the method for registering the immune response to HSV and the method for assessing the immune status.

After diagnosing the virus, it is very important to start treatment in a timely manner and not engage in self-diagnosis and self-medication. Medicines used for herpes infection are effective when prescribed by a doctor in the individual dosage that is

necessary in a particular case. The main class of medicines used in the treatment of herpetic infection is antiviral agents. Both tablets and injections, as well as ointments, creams for local action are used. To prevent relapses, immunostimulating drugs are prescribed to restore and maintain the immune system.

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3. Mardanly S.G., Arseneva V.A., Mardanly S.S., Rotanov S.V. The prevalence rate of human herpes viruses among different age populations // Zh. Mikrobiol. (Moscow), No. 2, P. 50—55 (2019)
4. Prostoy herpes u vzroslykh. Klinicheskie rekomendatsii MZ RF. (2014) (in Russian)