



CLINICAL AND LABORATORY CHARACTERISTICS OF HERPETIC INFECTIONS

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Abstract: *in recent years, there has been a steady increase in recurrent forms of infection caused by herpes simplex viruses of type 1 and type 2 of various localization. Numerous studies have shown that 65-90% of the adult and child population of the planet are infected with herpes simplex viruses, and from 9 to 25% of them suffer from recurrent forms of diseases, in 30% the infection is detected in a subclinical and latent form. HSV antigen was found in 36% of children with frequent respiratory diseases. It is proved that patients with chronic herpetic infections develop oncological and autoimmune diseases, infertility, fetal pathology much more often. Herpes viruses induce the processes of atherosclerosis, affect the process of mental development of a person, cause pathology of nerve cells. Severe course of herpes infection can be a marker of HIV infection. This article will provide information about many common herpes infections among children in recent years, showing their characteristics in a clinical laboratory. Keywords: herpetic infection, laboratory, children's age.*

Relevance. Herpes infections (HS) are understood as diseases that are characterized by single or grouped vesicular eruptions of 1-4 mm in size on the skin and mucous membranes [1,4]. Rashes occur on an edematous-erythematous base and occur with damage to internal organs. Herpes simplex is a widespread infectious disease of the skin and mucous membranes resulting from infection with herpes simplex viruses HSV-1, HSV-2 - antigenic types. HSV belongs to



the family Herpesviridae, characterized by a variety of clinical manifestations, a chronic course that tends to progress. Sick people and virus carriers are the source of infection [3,7].

According to the WHO, mortality from herpes encephalitis and disseminated forms of the disease is 15.8% and ranks second after influenza (35.8%) among all viral infections. According to seroepidemiological studies, the detection rate of antibodies to HSV-1, HSV-2 is from 70 to 90% or more among the world's population. The degree of infection of the population depends on the socio-economic standard of living, everyday traditions of various ethnic groups. After infection with herpes infection, the following develop: - clinical manifestations of the disease - in 10-15%; - asymptomatic forms - in 10%. Asymptomatic virus secretion is recorded in 5%. Individuals without a history of herpes manifestations account for up to 70%. Genital herpes ranks second among viral STIs after human papillomavirus infection [2,5]. About a third of women of childbearing age are infected with HSV-2. Over the past 30 years, the incidence of neonatal herpes has quadrupled. Primary infection with genital herpes during pregnancy leads to the fact that 50% of children are born with signs of focal or generalized herpes, and with relapses of herpes - only 5%. The frequency of neonatal herpes, according to various sources, ranges from 1: 2500 to 1: 60,000. Neonatal herpes manifests itself in varying degrees of severity of clinical symptoms of the disease [3,6].

Purpose of the study. To give clinical and immunological characteristics of various forms of recurrent herpes infection in children and to determine the informative value of indicators of enzymatic activity of peripheral blood leukocytes as additional diagnostic criteria.

Materials and research methods. The data presented in the work were obtained during the examination and dispensary observation of 110 children who



had clinical and laboratory signs of herpes infection. The examination of children and observation of them was carried out at the AOMPDB in Andijan for the period 2020-2021. The selection of children into groups was carried out on the basis of clinical and laboratory signs of recurrent herpes infection.

Research results. The most common form of recurrence of herpes infection in children is skin herpes. In the group of preschoolers, herpetic stomatitis is more common, in the group of schoolchildren - ophthalmic herpes. Herpetic stomatitis in preschoolers proceeds with the formation of severe and continuously recurrent forms. Ophthalmic herpes in school-age children is characterized by a severe course of the disease and the development of complications in the form of persistent decrease in vision (26.8%), corneal opacity (9.9%), and vascular ingrowth (4.6%).

In the structure of concomitant morbidity in preschoolers, frequent acute respiratory viral infections prevail with the formation of complications (18.7%), infections of the digestive system (27.1%), fungal skin lesions (2.1%). In the group of schoolchildren, infectious and inflammatory diseases of the urinary system (12.9%), astheno-vegetative manifestations (74.2%) are more common. The spectrum of allergic pathology is characterized by the predominance of hay fever (22.6%) and bronchial asthma (12.9%) in the group of schoolchildren.

In children with recurrent herpes infection, signs of combined immune deficiency are recorded in the form of a change in the functional activity of phagocytic cells, a decrease in the T-cell link of immunity with a relative and absolute deficiency of POP + -, CD4 + cells, an increase in the levels of all classes of immunoglobulins during an exacerbation of the disease.

In groups of preschool and school children with ophthalmic herpes, there is a pronounced inhibition of the metabolism of neutrophilic granulocytes, characterized by a decrease in myeloperoxidase and cationic proteins, an



increase in the NBT test during periods of exacerbation and remission of the disease.

In children with herpetic skin lesions, there is an imbalance in the functioning of the polymorphonuclear leukocyte systems, with an increase in myeloperoxidase and NBT test and a decrease in cationic proteins. In the group of preschoolers, disorders persist both during the period of exacerbation and during remission of the disease. In schoolchildren during periods of remission, the indicators of myeloperoxidase and NBT-test normalize, the level of cationic proteins remains significantly lower than in healthy children.

With herpetic stomatitis, a change in the functional activity of peripheral blood neutrophils is observed only in preschoolers. The periods of exacerbation are characterized by an increase in the level of myeloperoxidase and NBT test and inhibition of the synthesis of cationic proteins, periods of remission are characterized by high rates of myeloperoxidase, normalization of cationic proteins and NBT test.

Output. The obtained results of determining the cytoenzymatic status of polymorphonuclear leukocytes show the expediency of an integrated approach to the study of the metabolic activity of peripheral blood neutrophils in children with recurrent herpes infection.

The data characterizing the features of the immune and cytochemical status can be used as criteria for diagnosing a disease, predicting the severity of the course, and reflect the need to use metabolic and immunocorrective therapy.

The violations of immune adaptation established during the observation indicate the advisability of a dynamic study of the immune status with the aim of timely immune correction. Changes in the cytoenzymatic status of peripheral blood neutrophils in recurrent herpes infection, which persist for a long time



during the course of the disease, dictate the need for staged rehabilitation of recurrent herpes infection in infected children.

References

1. Alimbarova L.M. Actual problems of herpesvirus infections / L.M. Alimbarova, M.M. Gareev. M.: GEOTARMedia, 2004. 62 p.
2. Baldin A.B. Features of the course and outcomes of pregnancy in HIV-infected women against the background of associated herpes infection: dis. ... Cand. honey. Sciences: 14.00.01 / A.B. Baldin; SPb, military. honey acad. them. CM. Kirov, St. Petersburg, 2007. 135 p.
3. Odokienko A.Yu. Features of the clinical and immunological status of patients with herpes infection and the choice of rational immunotropic pharmacotherapy: author. / dis. ... Cand. honey. Sciences: 14.00.36 / A.Yu. Odokienko; Omsk. state honey. Academician. Omsk, 2005. 24 p.
4. Ziyodulloyevich A. M. IN CHRONIC VIRAL HEPATITIS AND CIRRHOSIS OF THE LIVER, THE STUDY OF CYTOKINE LEVELS //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2022. – T. 2. – №. 12. – С. 784-787.
5. Ziyodulloyevich A. M. The Study of Cytokine Levels in Chronic Viral Hepatitis and Liver Cirrhosis //EUROPEAN JOURNAL OF INNOVATION IN NONFORMAL EDUCATION. – 2022. – T. 2. – №. 12. – С. 63-66.
6. Абдуллоев М. и т. д. Взгляд врача-инфекциониста на течение кори у детей // НАУЧНЫЙ ЖУРНАЛ ПРИКЛАДНЫХ И МЕДИЦИНСКИХ НАУК. – 2023. – Т. 2. – №. 12. – С. 930-939.
7. Абдуллоев М. 3. Особенности Течения Кори У Детей //Journal of Intellectual Property and Human Rights. – 2024. – Т. 3. – №. 4. – С. 26-33.