

RETROVIRAL FACTOR (HIV) IN THE PATHOGENESIS OF KAPOSI'S ANGIOSARCOMA

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Relevance. Viruses are one of the factors that interact with the cell of a living object, turning it into a tumor. This type of virus is called oncogenic. Representatives of this type of pathogens are present in almost every family of viruses. The largest list of oncogenic viruses consists of the following families: hepadnaviruses, herpesviruses, retroviruses, papillomaviruses, and others. Any of the listed types of viral pathogens provoke the development of dangerous oncological pathologies that can cover the cytological and histological structures of a wide variety of organs, blood cells, and tissue groups. Cancer cells are divided into several types: carcinoma, leukemia, sarcoma, lymphoma, glioma. Kaposi's sarcoma is one of the most dangerous and understudied oncological pathologies caused by an oncogenic virus.

Aim. To determine the role of the retroviral factor on the example of HIV in the progression of Kaposi's angiosarcoma in the body of people infected with herpes virus type 8.

Methods: Analytical and statistical information processing methods, system-structured and comparative methods were used.

Results. Kaposi's sarcoma is a malignant tumor that covers the walls of blood vessels. It has a pathophysiological characteristic in the form of painless points on the surface of the integument of red, purple, or brown color. Also, the disease can cover mucous membranes and individual components of internal organs. According to research, Kaposi's sarcoma occurs 300 times more often in HIV/AIDS patients than in surgical interventions and transplant procedures. Patients who had HIV and HHV-8 at the same time developed this pathology for 10 years. The percentage of people who simultaneously had two viruses in their composition, as a result of which this pathology progressed, was 45%. The main pathogenic agent of Kaposi's sarcoma is oncogenic herpes virus type 8 (HHV-8). It is a DNA-containing pathogen from the herpesvirus family. Its negative impact in the form of oncopathology is manifested as a result of a persistent decrease in the functioning of the immune system or possible cases during treatment measures that lead to its gradual decrease (organ transplantation, chemical or radiotherapy measures). One of the main causes in pathogenesis Kaposi's sarcoma is the human immunodeficiency virus (HIV). The role of retroviral infection in the pathogenesis of Kaposi's sarcoma is determined by the neutralization of immune T cells, thereby minimizing their concentration in the patient's leukocyte formula. As a result, the herpes virus is activated and begins to manifest itself. It also has the ability to remain in a latent state in lymphocytes throughout the entire period of post-embryonic ontogenesis of a person. It is also noted that Kaposi's sarcoma was a rare disease before the large-scale HIV pandemic and occurred in 6% of cases per 100,000 infected with HHV-8. With the gradual geographical spread of HIV, the frequency of recording a dynamic outbreak of Kaposi's sarcoma in patients with herpes virus type 8 has increased by 20-25%.

Conclusions. The retroviral factor in the oncogenesis of Kaposi's sarcoma is its main cause. HIV provokes a decrease in the T-cell link of immunity, as a result of which the accompanying virus HHV-8 gets the opportunity to produce a dangerous oncological pathology.