

FEATURES OF THE CLINICAL COURSE OF HERPETIC INFECTION IN HIV-INFECTED PATIENTS

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Summary. Herpes infection in HIV-infected people is prone to recurrence; the more pronounced the immunodeficiency, the more persistent the infection, the higher the risk of developing generalized lesions.

Purpose of the study: to study the clinical features of the course of herpetic infection in HIV-infected patients.

Study materials: we conducted a prospective study analysis of 50 patients with HIV infection. The study group included HIV-infected patients at different stages of the disease aged from 18 to 40 years. Stage I - 12, stage II - 19, stage III - 16, stage IV - 3 patients.

Results of the study: in all cases of the study, various forms of chronic herpetic infection were diagnosed, reactivation of which occurred in 38%, and a recurrent course in 62% of cases.

Conclusions: the course of HI depends on the stage of HIV infection. The clinical picture of herpes infection in patients in stages III and IV of HIV infection is polymorphic and is manifested by lesions of internal organs.

Key words: HIV infection, herpes infection, genital herpes, immunodeficiency.

Introduction: the most common diseases are caused by herpes simplex viruses (HSV-1 and HSV-2). The infection rate of the population over 40 years of age is more than 90%. As a rule, one strain of HSV is isolated from one patient, but in patients with immunodeficiency several strains of the same subtype of the virus can be isolated. The likelihood of developing the disease, its form, severity, frequency of relapses and their duration depend on a person's immune status [1].

Herpes infections are of particular relevance for people with HIV infection, since the causative agents of these diseases are able to interact at the cellular and molecular levels. In HIV-infected patients with severe immunodeficiency, herpetic infections can lead to the development of severe life-threatening conditions and death [3, 4]. They not only contribute to the progression of HIV infection, but also affect the functioning of many organs and systems [3].

Herpes infection in HIV-infected people is prone to relapse; the more pronounced the immunodeficiency, the more persistent the infection, the higher the risk of developing generalized lesions [2, 5, 6].

Purpose of the study: to study the clinical features of the course of herpes infection in HIV-infected patients.

Study materials: we conducted a prospective study and analyzed 50 patients with HIV infection. The study group included HIV-infected patients at different stages of the disease aged 18 to 40 years. Stage I - 12, stage II - 19, stage III - 16, stage IV - 3 patients. The diagnosis of HIV infection was established on the basis of epidemiological, clinical and laboratory examination data, confirmed by double detection of antibodies (AT) to HIV using enzyme-linked immunosorbent assay (ELISA). The diagnosis of herpetic infection was established on

the basis of identified changes in organs and systems, taking into account the polytropism of the pathogen and the generalized nature of the lesions in the terminal stage of the disease. Based on the results of the polymerase chain reaction (PCR), the etiological decoding of the herpetic infection was determined.

Results of the study. In all cases of the study, various forms of chronic herpetic infection were diagnosed, reactivation of which occurred in 38%, and recurrent course in 62% of cases. Thus, HSV 1 caused relapses of nasal and labial herpes (15 patients), its first clinical manifestations (5 patients), as well as gingivostomatitis (5 patients) and pharyngotonsillitis (2 patients) only in stages I (21) and II (26) of HIV -infections. The number of patients diagnosed with herpetic infection in the indicated stages was 87,4% and 70,2%, respectively.

HIV-associated herpes infection with damage to the skin and mucous membranes was characterized by more abundant and widespread elements of the vesicular rash, as well as its slow regression, lasting more than 1 month (from 6 to 8 weeks). In 30,7% of patients in stage II of HIV infection, an erosive-ulcerative form of HI was observed - deep erosions with transformation into ulcers that healed slowly. It should be noted that herpetic skin lesions in the form of grouped blisters with serous contents were noted not only in places of their typical localization on the lips and wings of the nose. In patients with stage II HIV infection, they spread to the forehead, cheeks, and ears. Damage to the oropharyngeal mucosa was always accompanied by constant and severe pain, hyperemia, hypersalivation, and ulcerative gingivitis.

Relapses of herpes labialis in HIV-infected patients were characterized by a greater frequency and severity of clinical manifestations in comparison with patients not infected with HIV. In HIV-infected patients, monthly relapses of labial herpes were recorded in 13 patients; every 3 months they developed in 10 patients and were manifested by group (6 patients) and multiple (4 patients) vesicles that spread to the cheeks and parotid area. In those not infected with HIV, there were no monthly relapses; they developed every 3 months in 2 patients, and every 6 months in 4. Moreover, the elements of the rash were single and did not spread beyond the lips.

Relapses of gingivitis stomatitis were accompanied by low-grade fever, moderate intoxication, multiple deep erosions with swelling and hyperemia of the oral mucosa, while in patients without HIV infection they occurred in a milder form, without disturbing the general condition of the patient, with less pronounced changes in the mucous membrane.

Relapses of genital herpes in HIV-infected patients are characterized by a greater frequency and severity of clinical manifestations than in patients not infected with HIV. Among those infected with HIV, monthly relapses of genital herpes were observed in 4 patients, every 3 months they developed in 2 patients, manifested by group (1 patient) and multiple (2 patients) vesicles. Every 6 months, relapses of genital herpes with multiple rash elements occurred in 1 patient.

We analyzed serological markers of HIV-associated herpes infection depending on the number of CD4+ T-lymphocytes in patients without immunodeficiency (>500), with moderate (500-350), severe (350-200) and profound (<200) immunodeficiency. It was found that IgG titers to HSV 1/2 in patients with HIV-associated HI were different. Their level in most cases was moderate (50-100 IU/ml) - 51,0±5,0%, much less often low (<50 IU/ml) - 27,0±4,4% and high (>100 IU /ml) - 22,0±4,1%. The dependence of diagnostic levels of IgG to HSV 1/2 on the presence of immunodeficiency caused by HIV and its severity was observed. A high specific humoral response to GI was given only by patients without immunodeficiency



(22,0±4,1%), moderate by patients with moderate immunodeficiency (40,0±4,9%), and a small percentage with severe immunodeficiency (3,0±1,7 out of 13,0±3,4%) and without immunodeficiency (8,0±2,7 out of 0,0±4,6%). A low humoral response to GI is typical for patients with profound immunodeficiency (17,0±3,7%) and the majority with severe immunodeficiency (10,0±3,0 out of 13,0±3,4%).

Thus, the diagnosis of HIV-concomitant herpetic infection is accompanied by significant difficulties. The most informative results are PCR results, which allow timely detection of active forms of infection, which is of fundamental importance for the treatment tactics of patients. Simultaneously with serological examinations, HSV 1/2 DNA was detected by PCR. Herpes of the skin and mucous membranes was confirmed by PCR in 10% of patients with lesions of the mucous membrane of the oropharynx and oral cavity in 15% of patients with atypical skin lesions. In 75% of cases, with a typical skin rash in the form of vesicles, the diagnosis was not in doubt. Patients with genital herpes more often received positive PCR results when examining material from the vagina and cervical canal (56,3 and 43,7%, respectively), much less often - from the rectum and urethra (12,5 and 9,38%, respectively).

Positive PCR results in a blood test, confirming viremia and indicating HSV replication at the systemic level, were obtained in 62.5% of patients with generalized herpetic infection.

Conclusions. The course of HI depends on the stage of HIV infection. In patients in stages I and II of the disease, only localized forms of HI were diagnosed with damage to the skin, mucous membrane of the oropharynx, and genitals, which were distinguished by a recurrent course and the tendency of the rash elements to spread. The clinical picture of herpetic infection in patients in stages III and IV of HIV infection is polymorphic and is manifested by lesions of internal organs, which are not observed in patients with herpetic infection without HIV infection. In conditions of immunodeficiency, the etiology of HIV herpes infection becomes systemic.

Literature

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