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CLINICAL COURSE OF HIV INFECTION WITH INTESTINAL PARASITOSIS AND ALLERGODERMATOSIS

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Abstract: Evaluation of the course of HIV infection with intestinal parasitosis and allergodermatosis. The results of studies of 65 patients with HIV infection served as the material. The study was conducted in patients with HIV infection with allergic dermatoses and parasitosis. Extensive damage to the skin surface in patients with HIV infection compared with allergic dermatoses without intestinal parasitosis ($8,13 \pm 2,5\%$) was more often observed in patients with combined intestinal parasitosis: with giardiasis ($14,2 \pm 6,9\%$, $p < 0,05$) and with blastocystosis ($17,9 \pm 4,4\%$, $p < 0,05$). A pronounced course of allergic dermatoses is detected in patients with HIV infection with intestinal parasitosis.

Key words: HIV infection, intestinal parasitosis, allergodermatosis.

Introduction. It is important that allergic dermatoses have different etiological factors of occurrence, the complexity of the mechanism of pathogenetic development, and the features of the multifaceted nature of skin lesions. Factors aggravating the course of HIV infection are additional diseases [1, 5, 6]. Enterobiosis disease, intestinal amoebiasis, intestinal giardiasis, blastocyst invasion and a number of other invasions are considered pathologies that aggravate the clinical course of HIV infection, according to existing scientific sources [2, 3, 8, 9].

A high level of immunoglobulin E (IgE) is also one of the main prognostic indicators in patients with HIV infection. Several sources of scientific research show that parasitic diseases adversely affect the clinical and laboratory course of HIV infection and various clinical and laboratory changes are observed. Today, many regions of the world are endemic for some intestinal parasitosis, especially for giardiasis and blastocystosis [4, 7].

Taking into account the above, we considered it appropriate to study the features of their mixed course in HIV-infected patients diagnosed with giardiasis, blastocystosis and allergic dermatoses, which are common intestinal parasites.

The aim of the study was to evaluation of clinical manifestations of HIV infection in intestinal parasitosis and allergic dermatosis.

Materials and methods of research. This scientific study was conducted on 65 patients with HIV infection who were treated at the Samarkand Regional Clinical Infectious Diseases Hospital and the Research Institute of Virology: giardiasis was detected in 19 (29.2%) HIV-infected, blastocystosis was detected in 15 (23.1%) patients. 31 (47.7%) HIV-infected people were tested for intestinal parasites with a negative result. The age of the patients ranged from 18 to 59 years (mean age 22.8 ± 3.5 years). The share of men and women was 50.8% and 49.2%, respectively.

All patients underwent general clinical, parasitological, immunological and molecular genetic methods. The 1st group included 19 HIV-infected with a diagnosis of giardiasis, the 2nd group included 15 HIV-infected with a diagnosis of blastocystosis, the control group included 31 patients with a negative result for intestinal parasitosis.

The diagnosis of allergic dermatoses was confirmed in all patients in the study groups. Intestinal parasitosis was confirmed by coproovoscopy, native drop and formalin ether precipitation, enzyme immunoassay, and polymerase chain reaction.

Statistica 7.0 computer program was used for statistical processing of research results (clinical and laboratory parameters). R - statistical significance was determined by calculating the average ($M \pm m$).

Results and discussion. In the group of HIV-infected patients with giardiasis and blastocystosis, more often than in HIV-infected patients without intestinal parasitosis ($9.68 \pm 2.5\%$), allergic dermatoses were observed - the degree of damage to the skin surface over a large area. (respectively $15.8 \pm 3.9\%$ and $20.0 \pm 4.1\%$, $r < 0.05$ in both cases).

Skin rash in the form of urticaria and erythema in the form of erythematous-papular, erythematous-vesicular and bullous elements, combined allergic dermatoses is observed in HIV infection with giardiasis $31.6 \pm 4.5\%$ and blastocystosis $60.0 \pm 7.9\%$ in patients without intestinal parasitosis 19, It was $3 \pm 3.7\%$ ($p < 0.05$).

Dry skin was observed in $22.5 \pm 2.9\%$ of HIV-infected people without intestinal parasites, but with allergic dermatoses.

This change was more marked in patients with intestinal parasitosis compared to this group: this figure was $42.1 \pm 3.2\%$ ($r < 0.05$) in HIV-infected patients with

confirmed giardiasis invasion and $60.0\pm 3.3\%$ in patients with blastocystosis ($r < 0.05$) (Table 1).

Table 1

The frequency of occurrence of allergic dermatoses and other pathologies in intestinal parasitosis in HIV-infected people (%)

Skin changes	Groups with intestinal parasites		Group without intestinal parasites (n=31)
	Giardiasis (n=19)	Blastocystosis (n=15)	
Skin rashes (vesicles, papules)	$10,5\pm 1,7\%$	$26,6\pm 2,3\% *$	$12,3\pm 1,1\% ^\Delta$
Combined allergic dermatoses (erythematous-papular, erythematous-vesicular and bullous)	$31,6\pm 4,5\%$	$60,0\pm 7,9\% *$	$19,3\pm 3,7\% **^\Delta$
The defeat of the skin on a vast area in various forms	$15,8\pm 3,9\%$	$20,0\pm 4,1\%$	$9,68\pm 2,5\% *^\Delta$
Erythema	$10,5\pm 1,3\%$	$13,3\pm 1,7\%$	$12,9\pm 2,0\%$
Dry skin detection	$42,1\pm 3,2\%$	$60,0\pm 3,3\%$	$22,5\pm 2,9\% *^\Delta$
Observation of itching on the skin (mainly in the afternoon)	$21,0\pm 2,8\%$	$40,0\pm 2,8\% *$	$9,68\pm 1,7\% *^\Delta$
Peeling (peeling) of the affected surface of the skin	$5,26\pm 0,58\%$	$6,67\pm 0,89\%$	$6,45\pm 1,02\%$
The formation of wounds on the surface of the skin of various shapes	0	$6,67\pm 0,89\%$	0

Note: * – groups with giardiasis and blastocystosis ($r < 0.05$)

** - groups with giardiasis and without intestinal parasites ($p < 0.05$)

Δ - groups with blastocystosis and without intestinal parasitosis ($p < 0.05$)

As can be seen from the table, there was no statistically significant difference between the lesion index in patients in the study groups diagnosed with giardiasis and blastocystosis with reddening of a certain area of the skin surface and in patients in the group without intestinal parasitosis. . Intestinal parasitosis in patients with giardiasis and allergic dermatosis was not detected, but compared with patients with allergic dermatosis, diarrhea was 2 times higher (21.0% and 9.68%, respectively,

$r < 0.05$), abdominal pain was 2 times higher (21.0% and 9.68%), $r < 0.05$), and hepatomegaly was observed 1.5 times more often (26.3% and 16.1%, $r < 0.05$).

Although intestinal parasitosis was not diagnosed in patients with blastocystosis and allergic dermatoses, the frequency of detection of some clinical symptoms compared with HIV-infected patients with allergic dermatosis was as follows: diarrheal syndrome 4 times (40.0% and 9.68%, respectively, $r < 0.01$), nausea by 3 times (20.0% and 6.45%, respectively, $r < 0.01$), abdominal pain by 2.5 times (26.7% and 9.68%, $r < 0.05$) were observed relatively high (Fig. 1).

IgE as a diagnostic marker of allergic diseases and parasitic invasion is a specific pattern of observation: in HIV-infected patients with giardiasis and blastocystoma, the average level of IgE was higher, in the group of patients without intestinal parasites (324.1 ± 10.8 IU / ml, 287.7 ± 9.34 IU/mL and 165.2 ± 7.16). In all cases, $r < 0.05$.

Conclusion. In HIV-infected patients with confirmed hyambliosis and blastocystosis, compared with patients without intestinal parasitosis, a relatively high incidence of allergic dermatoses was observed. Many manifestations of allergic dermatosis and HIV-infected with intestinal parasites and skin lesions indicate the presence of an allergic process in patients. The presence of intestinal parasites and the presence of allergies are confirmed by high levels of IgE.

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