COMPARATIVE ASSESSMENT OF THE EFFECTIVENESS OF TRADITIONAL AND RECOMMENDED THERAPY METHOD

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Abstract. *Relevance of the study: the number of people infected with leishmaniasis is about 350 million people. The annual increase in the number of cases is about 400 thousand cases per year.*

Keywords: *the process of treatment, patients, leishmaniasis.*

Relevance of the study: the number of people infected with leishmaniasis is about 350 million people. The annual increase in the number of cases is about 400 thousand cases per year [1,2,3,6]. Typically, the duration of the disease is about a year (acute form of cutaneous leishmaniasis), less often - more than a year (chronic form); the literature describes a case of a protracted course of more than a year in an immunodeficient state [8,9]. In 1940 P.V. Kozhevnikov and N.I. Latyshev identified two forms of cutaneous leishmaniasis: late ulcerating and acute necrotizing [7]. Zoonotic cutaneous leishmaniasis (rural, acute necrotizing) is common in rural oases of desert and semi-desert regions of the Middle East, Central Asia, India, and Africa. The rashes are most often located on open areas of the skin: face, neck, arms, legs. In the area of the mosquito bite, a boil-like infiltrate appears after 2-4 weeks, ulcerating after 1-2 weeks. A deep painful ulcer with purulent discharge is formed. After 2-3 months. it begins to clear itself of necrotic masses. When resolved, a deep scar also forms. The disease is complicated by lymphangitis and lymphadenitis. The zoonotic variant is more common [5,4].

The purpose of the research: study of clinical-immunological (clinical-therapeutic) features of cutaneous leishmaniasis in patients.

Research materials: the process of treatment of patients with leishmaniasis.

Results.

Results of the study: the criteria for the effectiveness of the treatment were the terms of leishmania purification from purulent-necrotic plaque, microbiological-parasitological recovery, epithelization of ulcers and complete resorption of specific complications of PCL.

The study of the results of therapy revealed that the purification of leishmania ulcers from purulent-necrotic plaque in patients with a disease duration of 7-30 days occurred in groups I and II on 3.24 ± 0.12 and 2.42 ± 0.10 days, and with a duration of 31-45 days - by 4.12±0.12 and 3.73±0.11 days, respectively.

In patients who received the treatment we recommended, from the first days of therapy there was an increased rejection of purulent-necrotic plaque, the surface of the ulcers became bright red, slightly swollen, which indicated the effective effect of local treatment on leishmaniaoma.

Clinical analysis showed the dependence of the timing of cleansing of ulcers from purulent-necrotic plaque on the duration of the disease and the presence of specific complications (Table 1). Traditional therapy included etiopathogenetic agents in accordance with the standards for the treatment of leishmaniasis (gentamicin, doxycycline and local treatment) in accordance with the

age of the patients, individual reactivity, drug tolerance, depth and extent of the pathological process.

Table 1

The timing of cleansing ulcers from purulent-necrotic discharge depending on the clinical form of PCL

Clinical form		Time frame for cleansing ulcers (days)
Ulcerated leishmanioma	I g.	3,93 ±0,07***
	II g.	3,19± 0,09***
Complicated form	I g.	5,30 ± 0,10
	II g.	5,20 ±0,20

Note: the reliability of the difference between groups I and II. *** - P<0.01.

Thus, in patients of group II, clearing of lesions occurred faster with a duration of PCL of 7-30 days compared to periods of 31-45 days by 37.8% (P<0.001), and with ulcerated leishmanioma by 63% (P<0.001), than in the complicated form.

Analysis of the timing of the onset of epithelization showed that when the disease was 7-30 days old, this indicator was 5.17 ± 0.16 and 4.13 ± 0.10 days in groups I and II, and 6.21 when the disease was 45-60 days old. ±0.17 and 5.22±0.21 days, respectively.

We also examined this indicator depending on the duration and clinical form of PCL (Table 15). As research results have shown, after treatment with leshmicin, epithelization occurred earlier by 20.9% when the disease was 7-30 days old than when it was 31-45 days old, and in the ulcerated form by 53.3% (P<0.001) compared to the complicated course. diseases.

Thus, our observational data indicate that in the groups of patients who received the treatment we recommended; epithelization processes occurred earlier by 10.3% (P<0.01) compared to the traditional therapy group. In addition, with increasing duration of the disease and in the presence of specific complications of PCL, there was a delay in the onset of regeneration of leishmaniamas.

In most of the examined patients, the healing processes proceeded evenly. After cleansing from purulent-necrotic plaque, the bottom of the leishmania looked smooth, pinkish-red in color, gradually filling with granulation tissue. Initially, islands of epithelialization were noted in the central areas of the lesions with gradual filling of the periphery, thus leading to healing of the ulcers. According to research results, complete epithelization occurred faster in patients treated with Mupiroban ointment and Fatiderm cream.

Thus, with a duration of dermatosis of 7-30 days, the studied indicator was equal to 21.45 ± 0.38 and 17.17 ± 0.24 days, with a period of 31-45 days - 22.33 ± 0.64 and 19.22 ± 0, 72 days, respectively, in groups I and II. In addition, among patients with a complicated form of the disease, the cure time was 28.22±0.86 days in group I and 26.60±0.71 days in group II. Analyzing the results obtained, a relationship was established between the timing of complete recovery with the duration of the disease and the clinical form of PCL. When treated with leshmicin, healing of leishmaniomas occurred with a disease duration of 7-30 days by 22% (P<0.001) faster than with periods of 31-45 days, and with an uncomplicated form by 68.7% (P<0.001) than with PCL. with specific complications.

During our studies, it was noted that the healing of leishmania lesions depended on the location, size and clinical form of the disease. When ulcerated leishmaniomas were located on the extensor surface of the extremities and, especially, in the joint area, there was a slowdown in the time of cleansing from purulent-necrotic plaque, epithelization and, accordingly, scarring in such patients was delayed. In addition, in cases where the lesions were located in the face and neck, the recovery period was shortened, and, conversely, on the distal parts of the extremities, especially on the feet, it was lengthened. This may be due to the characteristics of the blood supply and the different frequency of trauma in these areas.

When studying the research data, it turned out that resorption of the inflammatory infiltrate was observed with a duration of the disease of 7-30 days in groups I and II at 5.66 ± 0.17 and 3.33 ± 0.12 days, with a period of 31-45 days - at 6 .21 ± 0.33 and 4.66 ± 0.34 days, respectively. Specific lymphangitis and lymphadenitis began to regress in groups I and II at 8.30±0.42 and 8.70±0.40 days, respectively.

Thus, the materials of our observations showed that the effect of the developed treatment method on the resorption of inflammatory infiltrates turned out to be more pronounced than traditional therapy drugs (group I - 5.93 ± 0.23 and in group II - 3.99 ± 0.25 days) and with increasing duration of PCL and in clinical forms with specific complications, the effect of drugs became less effective (Table 2).

Resorption of inflammatory infiltrates when PCL was 7-30 days old ended in groups I and II at 21.07±0.24 and 17.60±0.23 days, and at 31-45 days - at 21.63±0.58 and 20.77±0.67 days, respectively (Table 3).

Table 2

The timing of the onset of resorption of the inflammatory infiltrate depending on the clinical form of PCL (in days)

Clinical form		Resorption time
Ulcerated leishmanioma	I гр.	4,37 ± 0,12***
	II гр.	3,67 ± 0,10***
Complicated form	I гр.	8,70 ± 0,40
	II гр.	8,60 ± 0,37

Note: the significance of the difference between groups I and II*** is P<0.001.

Table 3

The timing of the final resorption of the inflammatory infiltrate depending on the duration of the disease (in days)

Duration of the disease	Traditional treatment	Ointment “Leshmicin”
7 - 30	21,07 ± 0,24***	17,60± 0,23***
31 - 45	21,63 ± 0,58	20,77± 0,67
Total	21,66± 0,34**	19,86± 0,51**

Note: significance of the difference between groups I and II** - p < 0.01;
*** - p < 0.001.

The study of these indicators also revealed their dependence on the duration and clinical form of PCL (Table 4). Thus, in group II, with an uncomplicated form, the reverse development

of inflammatory infiltrates occurred faster by 57.9% (P<0.001) than in the presence of specific complications.

In both compared groups, the tubercles of contamination resolved by the end of treatment, and the residual effects of lymphangitis and lymphadenitis persisted for some time after the end of healing of the ulcers.

Table 4

Timing of final resorption of the inflammatory infiltrate depending on the clinical form of PCL

Clinical form		Resorption time
Ulcerated leishmanioma	I гр. (n = 30)	20,81 ± 0,26***
	II гр .(n = 30)	18,30 ± 0,23***
Complicated form	I гр.(n = 10)	26,20 ± 0,66**
	II гр.(n = 10)	28,90 ± 0,43**

Note: the reliability of the difference between groups I and II. ** - p < 0.01;
*** - p < 0.001.

Analysis of materials from parasitological studies demonstrated a stronger antileishmanicidal effect of mupiroban compared to traditional therapy drugs, which was expressed by earlier etiological clearance and a low rate of unsuccessful cases of therapy.

Parasitological studies carried out over time from the regional infiltrate of leishmaniomas revealed that on the 5th day of treatment the causative agent of the disease was not detected in groups I and II in 11.7 and 18.3% of patients, on the 10th day - in 63.3 and 80%, on 20 days - in 85 and 90% of patients, respectively. Etiological recovery on day 20 was not achieved in groups I and II in 15 and 10% of patients, respectively.

It should be noted that in patients who received a course of treatment with leshmicin, the newly formed scar was tender, with a slightly pronounced pink infiltration.

As these studies showed, the shortest duration of PCL was observed in patients treated with leshmicin. Thus, this indicator with a disease duration of 7-30 days in groups I and II was 41.13 ± 1.21 and 32.20 ± 1.17 days, for periods of 31-45 days - 49.53 ± 1.25 and 39.33 ± 1.53 days, respectively. In ulcerated leishmanioma, the duration of PCL was 51.24±1.16 and 45.22±1.28 days, and in the complicated form - 72.20±1.67 and 69.03±2.58 days, respectively, in I and II groups.

In the group of patients receiving leshmicin therapy, adverse reactions were noted in the form of skin redness, subjective burning and pain within 3-7 days from the start of therapy. In 7 patients, due to the development of contact dermatitis, the drug was interrupted for 2-3 days and, after the symptoms subsided, it was continued again.

Thus, based on the research materials obtained, we can conclude that the treatment of patients with PCL using the therapy method we developed is more effective compared to traditional therapy. This is manifested in the fact that in patients of group II, clearing of ulcers from purulent-necrotic plaque, epithelization and resorption of inflammatory infiltrates of leishmaniomas, and a decrease in the duration of the disease are observed at an earlier time.

Analysis of the results obtained in both compared groups showed that the timing of the start of treatment is of significant importance in the treatment of this disease. Thus, our treatment

method turned out to be most effective in the early stages of the disease, when the duration of PCL with the formation of an ulcer did not exceed 45 days. This is explained by the fact that most often at the end of the 2nd month of the existence of leishmanioma in the clinical picture, inflammatory phenomena in the lymphatic vessels and nodes progress, and the ulcerative disintegration of leishmaniomas intensifies. As a result, treatment of this clinical form by prescribing only local therapy in the form of leshmicin is less effective, etiological recovery is delayed and the duration of therapy increases. However, in our study, the use of antibiotics such as gentamicin and doxycycline in these cases was insufficient, which was explained by their weak specific effect on the PCL pathogen itself. In this regard, the above data indicate the need for early diagnosis and initiation of treatment to stop the development of the disease in the initial period, which is important both for the patients themselves and from an economic point of view.

Summarizing the above, it can be argued that Mupiroban ointment has a highly specific effect on the causative agent of the disease, and Fatiderm cream provides good repair of the ulcerative process, which allows for a reduction in treatment time, and also eliminates the toxic properties of systemic antibiotics. Availability of use in wide outpatient practice allows the use of this treatment method directly in endemic foci of PCL.

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