

# SIGNIFICANT SIGNS BEFORE STARTING TREATMENT FOR CUTANEOUS LEISHMANIASIS

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#### Abstract

The prevalence of leishmaniasis is one of the highest among parasitic diseases. Epidemiological studies have shown that cutaneous leishmaniasis is characterized by a certain seasonality. Patients often turn to the doctor late. However, before treating a patient, it is important to determine the clinical type of leishmaniasis, localization of lesions and their number.

**Keywords:** Cutaneous leishmaniasis, clinical form, lymphangitis, lymphadenitis, complicated

## Relevance of the Topic

The prevalence of leishmaniasis is one of the highest among parasitic diseases. Every year, the incidence reaches up to 1 million people worldwide.

The causative agent of cutaneous leishmaniasis was first identified in 1898 in Tashkent by P.F. Barovsky [2,3].

Clinically, leishmaniasis can be localized, chronically relapsing, diffuse, and acute.

In Uzbekistan, there are three types of Leishmania: L. major, L. turanica, L. gerbilli [4,5]. Environmental factors should also be taken into account when developing measures against leishmaniasis. This suggests that environmental factors also play an important role in the complication of the disease [6,7].

The old world of cutaneous leishmaniasis includes zoonotic, early wound-forming leishmaniasis (with an incubation period of 2-4 weeks), the causative agent is considered to be L. major [8,9,10,11].

Cutaneous leishmaniasis is characterized by an incubation period that can last from several days to 3-4 weeks, less often 1-2 months [12, 13]. Later, a strong inflammatory infiltrate with jagged edges and an edematous tubercle is formed. The focus of the wound becomes purulent necrosis. The process is painful and edematous. After 3-6 months, the process ends with scarring [14,15]. In most cases, it causes nodular painless lymphangitis and lymphadenitis [16,17,18]. According to M.K. Sharipova and other authors [19], 1-3 ulcers are detected in 80% of patients with cutaneous leishmaniasis. A study by Kh.M. Mustafaev and other researchers showed that the



localization of ulcers of leishmaniasis in the extremities is more common than the localization of ulcers on the face.

#### **Materials and Methods**

Based on the goals and objectives of the study, 110 patients with zoonotic skin leishmaniasis were identified in the Bukhara regional branch of the Republican Specialized Scientific and Practical Medical Center for Dermatovenereology and Cosmetology of the Republic of Uzbekistan.

#### **RESULTS AND DISCUSSION**

Table 1 We have classified zoonotic cutaneous leishmaniasis by clinical type.

	Clinical types	Number of	%
		patients	
1	Ulcerative leishmaniasis (uncomplicated)	43	39,09
2	Leishmaniasis - a complication of lymphangitis and lymphadenitis	42	38,18
3	Leishmania complicated by tuberkulum seeding.	11	10
4	Leishmaniasis with complications of lymphangitis, lymphadenitis, and tubercular seeding.	14	12,73
Total		110	100

Given the localization of wounds in zoonotic cutaneous leishmaniasis, their formation is of a different nature, the data are given in Table. 2.

Table 2 We divided zoonotic leishmaniasis of the skin according to localization in the body.

Clinical types				
	hand	legs	Body	head
Ulcerative leishmaniasis	23	19	2	11
(uncomplicated)				
Leishmaniasis - a complication of	17	24	3	13
lymphangitis and lymphadenitis				
Leishmania complicated by	7	7	1	2
tuberkulum seeding.				
Leishmaniasis with complications	10	9		2
of lymphangitis, lymphadenitis,				
and tubercular seeding.				

Evidence suggests that cutaneous leishmaniasis occurs on the arms and legs in most patients, with the head being the next indication and the body part being the least common area. This is due to the fact that arms and legs are open this season. When

the wound is located on the skin of the feet, taking into account the characteristics of the vascular and lymphatic systems, complications develop in the form of lymphangitis and lymphadenitis, which determine the specific clinical manifestations of complicated forms of leishmaniasis.

Wound localization in leishmaniasis indicates the clinical course of cutaneous leishmaniasis. Localization of wounds in the face is accompanied by the formation of rapidly developing, uneven edges, deeper wounds. The size of the wounds on the skin of the body was characterized by a large and small amount of purulent leakage. The location of the wounds on the legs is accompanied by numerous purulent discharges, clear signs of lymphangitis and lymphadenitis.

Table 3 We divided zoonotic skin leishmaniasis by the number of leishmaniasis lesions on the body.

Clinical types														
		1		2-4 wounds		5-7 wounds		8-10 wounds		10 wounds				
		wound		1										
		%			%			%			%			%
Ulcerative leishmaniasis		13,6		21	19,1		3	2,7		3	2,7		1	0,9
(uncomplicated)														
Leishmaniasis - a complication		14,5		15	13,6		2	1,8		7	6,3		2	1,8
of lymphangitis and														
lymphadenitis														
Leishmania complicated by	4	3,6		4	3,6		2	1,8		1	0,9			
tuberkulum seeding.														
Leishmaniasis with	2	1,8		6	5,4					1	0,9		5	4,5
complications of lymphangitis,					٠, ١									
lymphadenitis, and tubercular														
seeding														
	37	33,6	•	46	41,8		7	6,3		12	10,9	)	8	7,3

In our study, out of 110 patients with zoonotic cutaneous leishmaniasis, the maximum number of leishmanial ulcers per patient was 13. Multiple wounds from 1 to 4 were present in a very high percentage.

### **Used Literature**

1. Вьюков В. Н. 1969. Многолетняя динамика численности москитов в очаге зоонозного кожного лейшманиоза Юго-Восточной Туркмении. В кн.: III совещ. по лейшм. и др. троп, трансмис. природно-очаговым болезням людей Ср. Азии и Закавказья. Ашхабад, 28—30 мая 1969 г., М.: 56—58.



- 2. Ханафиева, И.В. Применение иммуностимуляторов в терапии зоонозного кожного лейшманиоза : диссертация на соискание ученой степени кандидата медицинских наук / Ханафиева Ирина Владимировна- Ашхабат, 1996.
- 3. Maxmudov, F. A., Raxmatov, O. B., Latipov, I. I., Rustamov, M. K., & Sharapova, G. S. (2021). Intravenous laser blood irradiation in the complex treatment of patients with cutaneous leishmaniasis. 湖南大学学报(自然科学版), 48(9).
- 4. Махмудов, Ф. А., & Латипов, И. И. (2019). Атопический дерматит: иммунопатогенез и стратегия иммунотерапии. *Новый день в медицине*, (4), 195-200.
- 5. Елисеев Л. Н., Стрелкова М. В., Жерихина И. И. Особенности эпидемической активизации природного очага ЗКЛ в местах симпатричного распространения L.major, L.tiranica, L.gerbilli // Мед. паразитол. и паразитар. болезни. 1991. №3. С. 24-29.
- 6. Maxmudov, F. A., & Latipov, I. I. (2019). The immunopathogenesis of atopic dermatitis and strategy of immunotherapy. *Новый день в медицине*, (4), 53-57.
- 7. Zhang, W.-W. & Matlashewski, G. Screening Leishmania donovani Complex-Specific Genes Required for Visceral Disease. Methods Mol. Biol. 1201, 339–61 (2015).
- 8. Advances in leishmaniasis / H. W. Murray [et al.] // Lancet. 2005 Oct-Nov. Vol. 366, N 9496. P. 15611577.
- 9. Makhmudov, F. A., & Gulomova, S. K. (2021). Changes in skin leishmaniasis after local treatment. *ACADEMICIA: An International Multidisciplinary Research Journal*, 11(1), 1744-1749.
- 10. Axmedovich, M. F., Samadovna, S. G., & Obidovich, S. S. (2021, May). Observation of immunological changes during clinical cycles of skin leishmaniosis. In *Euro-Asia Conferences* (Vol. 5, No. 1, pp. 207-211).
- 11. Rakhmatov, O. B. (2021). IMPROVING THE PRINCIPLES OF TREATMENT IN PATIENTS WITH ZOONOTIC LEISHMANIASIS WITH THE IMMUNOMODULATOR GEPON AND METHYLENE BLUE USING THE ALT-VOSTOK DEVICE. 湖南大学学报(自然科学版), 48(9).
- 12. Иванов О. Л. Кожные и венерические болезни. Москва: Медицина, 1997. С. 140-143.
- 13. Родякин Н. Ф. Кожный лейшманиоз. Ашхабад:, 1982. 190 с.



- 14. Axmedovich, M. F., Ikromovich, L. I., & Hamza o'g'li, O. J. (2021). Statistics of the incidence of cutaneous leishmaniasis in the Bukhara region, depending on age, gender and region. *Middle European Scientific Bulletin*, 17, 373-377.
- 15. Дерматология Фитцпатрика в клинической практике // Клаус Вольф, Лоуэлл А. Голдсмит, Стивен И. и др. Под общ. ред. акад. Кубановой А. А. Т. 1. М.: Бином, 2012. 896 с
- 16. Беляева Т.В. Под ред. Шуваловой Е.П. Инфекционные болезни Серия «Учебник для медицинских вузов 2004
- 17. Axmedovich, F. M., & Amonovich, D. Y. (2021). Clinical Criteria for the Manifestation of Atopic Dermatitis in Schoolchildren, Depending on Age. *CENTRAL ASIAN JOURNAL OF MEDICAL AND NATURAL SCIENCES*, *2*(5), 335-339.
- 18. Махмудов, Ф. А., Латипов, И. И., Озодов, Ж. Х., & Юсупов, Д. А. (2020). VITILIGO EXTENT TENSITY INDEX (VETI) SCORE: A NEW DEFINITION, ASSESSMENT AND TREATMENT EVALUATION CRITERIA IN VITILIGO. Новый день в медицине, (1), 276-279.
- 19. Шарипов М. К., Раззаков Ш. А., Краснонос Л. Н. и др. /Зоонозный кожный лейшманиоз в Узбекистане и его профилактика // Мед. паразитол. ипаразитар. болезни. 1987. №1. С. 39-45.
- 20. Шаропова, Г. С. (2022). Изучить Эффективность Экстракта Алоэ При Местном Применения Зоонозного Лейшманиоза. *CENTRAL ASIAN JOURNAL OF MEDICAL AND NATURAL SCIENCES*, 2(7), 216-220.
- 21. Мухаммедов С. М. Клинические наблюдения за больными кожным лейшманиозом сельского типа, леченных мономицином // Мед. журнал Узбекистана. 1967. №9. С. 33-34.