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STATISTICAL ANALYSIS OF SKIN LEISHMANIASIS IN BUKHARA REGION BY AGE, GENDER AND REGION

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ABSTRACT

Cutaneous leishmaniasis is a widespread tropical infection caused by many different species of the mosquito-borne protozoan Leishmania. Its clinical manifestations are extremely varied and depend on many parasite and host factors that are poorly understood. Uzbekistan is also one of the epidemiological regions for cutaneous leishmaniasis. The article presents a collection of age, gender and inter-district statistics for the Bukhara region.

Keywords: Cutaneous leishmaniasis, Bukhara, lymphangitis

RELEVANCE OF THE TOPIC

Leishmaniasis has been a life-threatening parasitic disease for centuries, affecting approximately 350 million people in 98 countries worldwide [1,2,3,4].

The prevalence of leishmaniasis is one of the highest among parasitic diseases. Up to 1 million people are affected worldwide each year [5,6]. The main endemic foci are located in Uzbekistan, Turkmenistan, as well as in some regions of Kazakhstan [7, 8, 9]. The degree of manifestation of the disease in these regions varies, in each of which depends on the interdependence of the population's disease sites, settlements and natural foci, the degree of contact of the population with the foci and the immune layer [10]. The incidence of this disease in Uzbekistan has not decreased for many years [11].

Epidemiological studies have shown that cutaneous leishmaniasis is characterized by a certain seasonality. The first patients appeared in late May, then the disease increased and peaked in September-October, then a gradual decrease in disease was observed, and in December and January 1–2 patients with cutaneous leishmaniasis were registered., and these patients were considered patients who sought medical attention late.

Due to the geographical distribution of the pathogens, Old Age skin leishmaniasis and New Age skin leishmaniasis are distinguished.

Ancient leishmaniasis was prevalent in Asia, Africa, the Middle East, and the Mediterranean. The cause of old-fashioned skin leishmaniasis is L. major or L. tropica, less commonly L. infantum, L. aethiopica. In the Mediterranean and Caspian Seas, skin leishmaniasis is caused by L. infantum and L. chaga.

It should be noted that as the nature and type of habitat of the natural carrier of the pathogen changes, populations where mosquitoes settle will emerge [12].

There are three species of Leishmania in Uzbekistan: L. major, L. turanica, L. gerbilli [13,14]. Environmental factors should also be taken into account when developing measures against leishmaniasis. This suggests that environmental factors may also play a role in the complication of the disease. [15,16].

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In addition, the data suggest that one endemic area of the disease may require different control measures than others.

GOALS AND OBJECTIVES

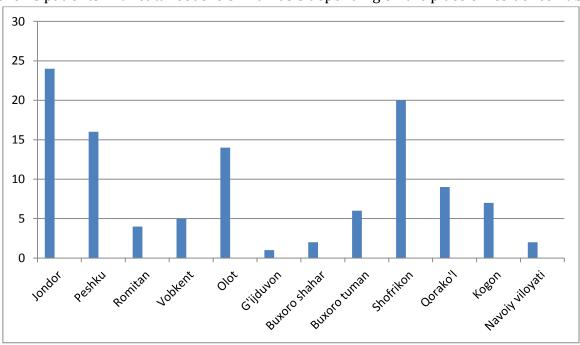
Collection of statistical analysis of skin leishmaniasis in Bukhara region by age, sex and region.

MATERIALS AND METHODS

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

THE RESULTS OBTAINED AND THEIR DISCUSSION

Table 1 shows patients with cutaneous leishmaniasis depending on the place of residence Table 1



Note: 1 - Jondor, 2 - Peshku, 3 - Romitan, 4 - Vobkent, 5 - Alat, 6 - Gijduvan, 7 - Bukhara city, 8 - Bukhara region, 9 - Shofrikon, 10 - Karakul, 11 - Kagan, 12 - Navoi region

The table shows that the majority of patients are residents of Bukhara region, whose territory is semiregion, and due to the professional activities of the population, patients are constantly in the most epidemic centers of cutaneous leishmaniasis.

The data show that all patients with cutaneous leishmaniasis live in different districts of Bukhara region. That is, out of 110 patients, 24 (21.8%) Jondor, 16 (14.5%) Peshku, 4 (3.6%) Romitan, 5 (4.5%) Vobkent, 14 (12.7%) Alat, 1 (0.9%) Gijduvan, 2 (1.8%) Bukhara city, 6 (5.4%) Bukhara region, 20 (18.2%) Shofirkon, 9 (8.2%)) Karakul, 7 (6.3%) Kagan, 2 (1.8%) Navoi region. According to statistics, the most identified patients in these areas are residents of Jondor district.

We classified these patients according to their clinical types and obtained the following result

- 1- Wounded leishmaniasis (uncomplicated) 43 patients
- 2- Leishmanioma complicated by lymphangitis and lymphadenitis 42 patients
- 3- Leishmaniasis is complicated by a lumpy condition 11 patients
- 4- Leishmaniasis is complicated by both lymphangitis and lymphadenitis. 14 patients

From the data presented in Table 2, there were no significant differences in the clinical manifestations of women and men, as the studied forms of the disease occur at approximately the same time. Thus, of the 110 patients, 54 (49 percent) were men and 56 (51 percent) were women. Therefore, the clinical forms of the disease under consideration can be grouped into groups, regardless of gender.

2. Table Distribution of patients with zoonotic skin leishmaniasis by gender

Clinical types	Gender of patients				
	the male		woman		
	number	%	number	%	
Wounded leishmaniasis (uncomplicated)	20	18,2	23	20,9	
Leishmanioma complicated by lymphangitis and	24	21,8	18	16,4	
lymphadenitis					
Leishmaniasis is complicated by a lumpy condition -	4	3,6	7	6,4	
11 patients					
Leishmaniasis is complicated by both lymphangitis	8	7,3	6	5,4	
and lymphadenitis					
total	56	50,9	54	49,1	

As can be seen from the table above, despite the statistically low number of clinical types of leishmaniasis complicated by tuberculosis (11 people) and leishmaniasis complicated by both lymphangitis and lymphadenitis and tuberculosis (14 people), these patients were hospitalized late. was counted and had to be treated with a slightly more complex treatment regimen.

We obtained a statistical assessment of the relationship between patient age and clinical manifestations of zoonotic skin leishmaniasis. We present the results of this analysis. We placed in Table 3.

3. Table Distribution of patients with cutaneous leishmaniasis by age

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Group	Under old	Under 18 years old		18-30		31-40		41-50		Over 50 years old	
	абс	%	абс	%	абс	%	абс	%	абс	%	
1, n=43	9	8,2	12	10,9	9	8,2	1	0,9	12	10,9	
2, n=42	13	11,8	9	8,2	7	6,4	5	4,5	8	7,3	
3, n=11	3	2,7			4	3,6			4	3,6	
4, n=14	2	1,8	2	1,8	6	5,4			4	3,6	
total	27	24,5	23	20,9	26	23,6	6	5,5	28	25,5	

From the data presented in Table 3, it can be seen that the fact that patients with different clinical variants of cutaneous leishmaniasis are of different ages confirms the urgency of this problem.

CONCLUSION

Thus, the data we collected show that the number of patients with cutaneous leishmaniasis in Jondor district of Bukhara region is high due to the high number of cases and the number of visits to the doctor during the ulcerative leishmaniasis (uncomplicated) type. We found that the incidence of the disease was not gender-selective, occurring equally in both sexes. Statistics show that leishmaniasis of the skin is more common in patients under 18 years of age and over 50 years of age, as these people are considered permanent rural residents.

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REFERENCES

- 1. 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).
- 2. 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.
- 3. 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.
- 4. Zhang, W.-W. & Matlashewski, G. Screening Leishmania donovani Complex-Specific Genes Required for Visceral Disease. Methods Mol. Biol. 1201, 339–61 (2015).
- 5. Kaye, P. & Scott, P. Leishmaniasis: complexity at the host-pathogen interface. Nat. Rev. Microbiol. 9, 604–15 (2011).
- 6. 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).
- 7. Makhmudov, F. A., & Gulomova, S. K. (2021). Changes in skin leishmaniasis after local treatment. ACADEMICIA: An International Multidisciplinary Research Journal, 11(1), 1744-1749.
- 8. Maxmudov, F. A., & Latipov, I. I. (2019). The immunopathogenesis of atopic dermatitis and strategy of immunotherapy. Новый день в медицине, (4), 53-57.
- 9. 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).
- 10. Choi, C. M. & Lerner, E. A. Leishmaniasis as an emerging infection. J. Investig. Dermatol. Symp. Proc. 6, 175–82 (2001).
- 11. Джумагулов К. Б., Елисеев Л. Н. и др. /Зоонозный кожный лейшманиоз в Чимкентской области. // Здравоохранение Казахстана. 1989. №1. С. 45-46.
- 12. Дергачева Т. И., Жерихина И. И. О вненоровой активности переносчиков возбудителей зоонозного кожного лейшманиоза // Мед. паразитол.и паразитар. болезни. 1993. №5. С. 37-43.
- 13. Махмудов, Ф. А., & Латипов, И. И. (2019). Атопический дерматит: иммунопатогенез и стратегия иммунотерапии. Новый день в медицине, (4), 195-200.
- 14. 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.
- 15. 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.
- 16. Akhmedovich, M. F. (2022). SIGNIFICANT SIGNS BEFORE STARTING TREATMENT FOR CUTANEOUS LEISHMANIASIS. Web of Scientist: International Scientific Research Journal, 3(4), 326-330.
- 17. Шаропова, Г. С. (2022). Экстракта алоэ при зоонозном лейшманиозе. Один из факторов быстрого наступление стадии рубцевания. Science and Education, 3(5), 181-187.
- 18. Kodirova, N. U. (2022). MODERN METHODS OF TREATMENT OF CHRONIC LUNG DISEASES. Oriental renaissance: Innovative, educational, natural and social sciences, 2(Special Issue 4-2), 983-988.