INTRODUCTION

The basic studies of CL were founded in Turkmenistan and Uzbekistan at the end of XIX and at the beginning of XX centuries. In 1898 P.F. Borovsky [4] found for the first time causative agent of CL (urban form). In the future due to the works of V.L. Yakimov [26], I. I. Gitelzon [6], P.V. Kojevnikov [10], N.I. Latishev and A.P. Kryukova [12] the existing of two forms of CL was confirmed, they are differ etiologically, clinically and epidemiologically.

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The two forms of CL were named as antroponotic cutaneous leishmaniasis (ACL) and zoonotic cutaneous leishmaniasis (ZCL). L. tropica is causative agent of ACL [11]. L. tropica is characterized by prolonged incubation period from 2-4 months up to 1-2 years, slow ulcer stage development. The duration of the whole process, from initial signs up to scar formation takes about one year. There is tuberculoid form of this type of CL [6]. ACL is spread mainly in the large settlements.

On the territory of CA the source of infection is patient. Parasite vector of disease is antropophilic species of sand fly Phlebotomus sergenti. There are some data about ACL morbidity of dogs [11]. ZCL is characterized by short incubation period (from some days upto 1 month). The duration of the whole process, from initial signs up to scar formation takes about 2 – 6 months. The main host-reservoir of pathogen in CA is great gerbil (Rhombomys opimus). Additional host-reservoir of pathogen in natural foci of CA can be the other species of gerbil (Meriones libycus) [8]. The vector is P. papatasi.

ACL

This form of CL was widely spread in Turkmenistan and Uzbekistan, the main foci were registered in Mary, Ashgabad, Yolotan, Bayram-Ali, Charjou, Kerky (Turkmenistan), Bukhara, Samarkand, Jizakh, Tashkent, Kokand, Ferghana, Andijan, Namangan (Uzbekistan). The greatest rises in the incidence of morbidity were registered in Turkmenistan in 1930-1932 years. The main host-reservoir of pathogen in CA is great gerbil (Rhombomys opimus). Additional host-reservoir of pathogen in natural foci of CA can be the other species of gerbil (Meriones libycus) [8]. The vector is P. papatasi.

ZCL

The studies of this form of CL were carried out in 30-s – 40-s years of the last century. During this time it was confirmed that great gerbil’s and somether rodents holes in desert are dwelling places of Leishmania (T.) tropica, a causative agent of this form of disease.
places of sand flies – ZCL vectors [5,14]. It was confirmed that the main host-reservoir of ZCL causative agent is *R. opimus* [8,12] in CA countries.

This discovery had the significant practical importance, it became theoretical basis for conducting control measures against *R. opimus* in natural ZCL foci. In 50-s – 70-years of the XX century the ZCL epidemic situation became more dangerous in the CA countries, mostly it was connected with intensive agricultural and industrial developing of the new territories and as a consequence the flooding of lands led to higher humidity of the soil and increased the density of ZCL vectors – *P. papatasi*. In order to study and develop ZCL prophylaxis measures the specialists from Ashgabad scientific research institute of epidemiology and hygiene (ASREH), Turkmenistan scientific research institute of cutaneous diseases (TSRCD), Isaev institute of medical parasitology (IIMP) (Samarkand), Gamalei institute of epidemiology and microbiology (GIEM) (Moscow), Martsinovsky institute of medical parasitology and tropical medicine (MIMP&TM) (Moscow) were involved.

ZCL problem in the dangerous areas was successfully solved due to formation of anti-leismanial expeditions in which epidemiologists, parasitologists, dermatologists, zoologists, entomologists, map makers were participated. In Uzbekistan the scientific expeditions of IIMP and MIMP & TM were working. In Turkmenistan the study of ZCL foci was made by the scientists from ASREH, GIEM and MIMP & TM. As a result of comprehensive study of ZCL foci the numbers of patterns of their functioning were identified. In ZCL natural foci on the territory of CA countries in epizootic maintaining among *R. opimus* three species of leishmaniasis are taking part: *L. major*, *L. turanica*, *L. gerbilli*. Only *L. major* is pathogenic for human. Antropogenic species of sand fly *P. papatasi* is the vector of causative agent from rodents to human. *P. papatasi*, *P. caucasicus*, *P. andrejevi*, *P. alexandri*, *P. mongolensis* can serve as the vectors of *L. turanica* among population of gerbils. *P. mongolensis* [16,23,24] transmits *L. gerbilli*. ZCL morbidity is seasonal; the highest number of patients is registered in August – September. It depends of enhance of *L. major* in *R. opimus* [25] population. The foci in the valley sandriver delt as where the irrigation developing of soil is taking place, are the most epidemic dangerous as the high humidity of the soil leads to increasing density of *P. papatasi* and parasite circulation [1,18]. In the area of Central, Zaunguz, South-East Karakums (Turkmenistan) and in the Central Kyzylkums (Uzbekistan) where there is no flooding of lands, ZCL human cases are not registered [3,18]. Zoning and typification of the natural ZCL foci in Turan desert and also epidemiological zoning of the foci in Turkmenistan and Uzbekistan [8,18] were made. The main method of non-specific prophylaxis of ZCL is the elimination of the main host-reservoir in Central Asia countries – *R. opimus* [12]. Revealed that in order to achieve maximum effect of control measures against *R. opimus* it is necessary to conduct thorough mapping of the rodent’s holes in oasis and near oasis territories with the subsequent release of certain natural foci. The elimination of *R. opimus* habitat can be done by means of poisoned grain baits or by ploughing of lands [17].

In the second half of XX century significant progress was achieved in clinical studies, development of treating methods and immunoprophylaxis of CL. The work on differentiation of CL clinical forms began at 20-30-syeas of the XX century. During this period systematic studies of CL were conducted by N.I. Hodulik in Merv, and continued by I.I. Gitelzon. 7000 patients were observed by I.I. Gitelzon during his work in Turkmenistan. The most significant was the author description of two clinical CL forms (dry and wet) and also the description of the tuberculoid CL. For the first time I.I. Gitelzon used the method of immunization by live pathogen in Turkmenistan (1929-1933) [6]. In future in Turkmenistan dermato venerological institute ampouled vaccine [19,20] was created under the supervision of P.V. Kojevnikov. Significant ZCL immune prophylaxis (vacination) was provided by staff members of MIMP&TAM among military contingent in Ashgabad and Mari regions in the 60-s years of the last century [21].The same ZCL immunoprophylaxis among rural population was held in Uzbekistan [22]. It was defined that Monomitsini was the most effect medicine for ZCL treatment [2].

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