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ENDEMIC FOCI OF LEPROSY IN ANDIJAN REGION

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Summary: In this article, the description of foci of leprosy, the number of household contacts and the number of household contacts, were retrospectively analyzed in the territory of Andijan region.

Key words: leprosy, endemic outbreak, migration, household contacts.

Резюме: В данной статье ретроспективно проанализированы описание очагов лепры, количество бытовых контактов и количество бытовых контактов на территории Андижанской области.

Ключевые слова: лепра, эндемическая вспышка, миграция, бытовые контакты.

Хулоса: Ушбу мақолада Андижон вилояти ҳудудида аниқланган мохов касаллигининг ўчоқлари баёни, маиший мулоқотдорларининг сони, ретроспектив таҳлил қилинган.

Калит сўзлар: мохов, эндемик ўчоқ, миграция, маиший контактлари.

Relevance of the topic. Leprosy (Hansen's disease, leprosy, leprosy) is a chronic infectious disease, distinguished from other diseases by a very long latent period (from 2-4 to 20-30 years). The disease is caused by mycobacteria (M. leprae). It is the most clinically complex disease in the world, with subsequent damage to both the skin and peripheral nervous system, and then to the endocrine and gonads, and even to the visual organs (1,2).

If leprosy is not detected and treated in a timely manner, it often recurs (relapses), leading to severe disability or death at an early age. The longer the disease is detected, the higher the risk of infection. Leprosy can be transmitted through close household contact by airborne droplets. The level of infection is closely related to the strength of a person's immune system. That is why leprosy is considered a low-contagious disease. Studies by a number of scientists have shown that leprosy is about a hundred times less contagious than tuberculosis, despite the fact that its causative agents are representatives of the same family (mycobacteria). However, it should not be forgotten that animals also suffer from tuberculosis. So, in this case, the source of the disease is two to three times greater. That is why the number of cases of tuberculosis in the world is several thousand times higher than that of leprosy. It should be noted here that under normal natural conditions, no animals are infected with leprosy (3,4,10,13).

According to the World Health Organization, more than 200,000 people worldwide are affected by leprosy each year. In 2020 alone, official data on leprosy cases were reported in 127 countries around the world. The majority of these countries, namely 34 in Africa, 19 in

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the Americas, 22 in the Eastern Mediterranean, 28 in Europe, 11 in Southeast Asia, and 13 in the Western Pacific, are located in the regions of Asia, especially in Indochina, Mongolia, Iran, Iraq, Central Asia, and among the population of what is now China. For example, according to data provided by X. Chen and other co-authors, 474,774 cases of leprosy were identified in China alone from 1949 to 1998 (14,15,16,17,18).

In the first half of the last century, there were foci of leprosy in the former Soviet republics of Kazakhstan, the Russian Federation, the Transcaucasian and Baltic republics, Turkmenistan, and Tajikistan. The largest endemic foci are located in the lower Volga region of Russia (Astrakhan), the Syr Darya region of Kazakhstan, which borders the Aral Sea, and the Karakalpakstan region of Uzbekistan. The total number of patients detected in these republics exceeded 13,000-14,000. Of these, 8,000-9,000 are in the Aral Sea region. In the remaining regions and districts of Uzbekistan, over the past 70-80 years, more than 555 patients have been registered, of which 91 are in Tashkent, 135 in Khorezm region, and 83 in Surkhandarya region (5,6,7,8,9,11,12). There is no information in the literature about the causes of the initial appearance of leprosy among the population of the current Andijan region, one of the largest countries and khanates of Central Asia and located on the Great Silk Road, and about the actual situation in recent years. Studying and interpreting it is of great importance in planning and implementing priority preventive work in this regard. Therefore, we set ourselves the goal of studying the course of leprosy infection in the region over the past 80-90 years (1930-2020) and how the epidemiological situation has changed. (Note: Andijan region was formed on March 6, 1941. It borders the Republic of Kyrgyzstan, Fergana and Namangan regions. Its area is 4.2 thousand km2, its population is more than 3,011,687 thousand, and its center is the city of Andijan. First, during the reign of the Kokand Khan, many people from East Turkestan moved here, and later, since the Khanate was annexed to Tsarist Russia, representatives of Russian, Ukrainian, Tatar, Uyghur, Kazakh and Kyrgyz ethnic groups have moved here. The majority of the population is made up of local Uzbeks. The main part of those who moved and were brought settled and assimilated into the local population. Currently, the population of the region occupies one of the leading places in our Republic in terms of density).

Methods of investigation. From the conducted practical and retrospective studies, it became clear that leprosy patients in the region were first registered by medical workers in 1925-30 of the last century. However, the incidence was not very high or did not meet the required level of timely detection. The initial registration of patients was carried out by doctors from Russia at the beginning of the last century. Later, local personnel joined them, and they identified 9 new patients in 1930-40, and 6 in 1941-1950. The highest indicators were recorded in 1951-1960 (31.1%) and 1961-70 (26.8%). In 1971-80, only 5 new patients were found.

Below, we will explain the years of detection of leprosy in the region based on individual evidence. The first two official cases of leprosy were identified in 1930. One of them was a 22-year-old woman from the village of “Oyim” in the Kurgan-Tepa district, and the other was a 58-year-old man from the village of “Shirmonbulak” in the Khojaabad district of the region. Both of them were diagnosed with lepromatous leprosy. By 1931, 3 more patients were diagnosed from the Andijan district of the region (“Turkush” village), in 1933, 1 from the Izboskan district, in 1936, 2 from the city of Andijan, and finally, in 1939, another 27-

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year-old patient with lepromatous leprosy was diagnosed from the Kurgan-Tepa district, who died that year. Thus, 9 patients were diagnosed during the years 1930-1940.

During the war years (1941-1950), for obvious reasons, the detection of patients stopped. However, in 1946, in the area of \u200b\u200bthe "Ittifaq mahalla" near the city of Andijan, 4 new patients (2 women, 2 men) were registered and hospitalized in almost a year. Later, in 1947, two more 41-year-old patients with uncomplicated leprosy were found in the village of "Oyim". In the 1950-1960s, a group of specialized specialists began to actively work in the region. They included a leprologist, epidemiologist, dermatovenereologist and laboratory assistant. With their participation, 15 new patients were identified from Kurgan-Tepa district ("Yangiobod", "Oyim", "Hamza"), Izboskan district ("Lenin", MTS-2), Andijan city ("Kengash", "1-May"), Khojaobod district (Shirmonbulak village), Andijan district (K/Z "Kommuna"). Most of them were severely disabled.

The years 1961-1970 were the most difficult in the region. Patients were registered from Shakhrikhan district (south-west Kyzyl-Yulduz, Khaldivonbek village), Izboskan, Pakhtaobod districts (Lugumbek village, Turtkul village, south-west Kalinin), Zhalakuduk, Kurgantepa, Andijan districts (south-west Pravda, Kunji, Butakora, Karakur village councils), and the village of "Shirmonbulak" of Khojaobod district - a total of 13 patients.

As a result of medical preventive work and research conducted in 1971-1980, the situation stabilized somewhat, but the main patients were again identified from Shakhrikhan district (south-west Kommunizm, Kyzyl-Yulduz, Commune), and a total of 5 patients from the village of Sharq Yulduz of Izboskan district.

During the period 1981-2000, that is, for 20 years, there was a lull in leprosy in the region. However, in 2001, a 47-year-old male patient (born in 1954) from Ulughnor district (formerly Komsomol district) was suddenly diagnosed with lepromatous leprosy (LL). Immediate research revealed that the patient was originally born and raised in Shakhrikhan district, and later moved to Ulughnor, his grandmother had leprosy and was treated in a leprosy hospital, but during the medical examination, all household contacts were not fully examined.

Results of the investigation. Our individual study of the patient's medical history revealed that in December 1961, his grandmother (his paternal grandmother) who was suffering from leprosy was taken away from the leper colony by her sons at night. The sick grandmother lived with her children and grandchildren for only 20-30 days, then died. After some time, her children demolished their house. They themselves moved to different places. In short, the patient's close household contacts were not examined for a long time. After 40 years, the patient's grandson (who was 7 years old at the time of the household contact) was diagnosed with lepromatous leprosy.

Discussion. The results of our research show that the total number of patients found in the region since 1930 has reached 49, of which 27 (55.1%) are men and 22 (44.9%) are women.

When we studied the distribution of leprosy patients by age, the following were found: among children under 14 years old - 2 (4.1%), 15-20 years old - 2 (4.1%), 21-30 years old -

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12 (24.5%), 31-40 years old - 13 (26.5%), 41-50 years old - 8 (16.3%), 51-60 years old - 7 (14.3%) and finally, over 61 years old - 5 (10.2%).

When we analyzed the household contacts of leprosy patients in the region, we found the following; the total number of household contacts was 151, which is 3.1% of the total number of patients. It should be noted that 16 (32.6%) of the identified patients did not have household contacts. This situation can be explained by the fact that they were orphans, orphans, disabled people or came alone due to migration.

The epidemiological significance of the disease being transmitted within the family or outside the family is of great importance. In most cases, patients cannot find out where they contracted the disease. Our epidemiological work in this regard revealed that 9 patients from Andijan had a source of the disease in their family (father, mother, brother or sister had leprosy). Some even had 2 leprosy patients in their homes.

Clinical analysis of patients identified in the region gave us significant new data, including that in 33 of them (67.3%) lepromatous leprosy was diagnosed, in 13 (26.5%) lepromatous leprosy, and finally in 3 (6.1%) tuberculoid leprosy. Thus, the infectious type of leprosy in Andijan region was higher than in the border regions (Fergana, Namangan).

In order to determine the prevalence of infectious diseases among the population, it is important to determine the time elapsed since the disease was contracted. The reason is that the epidemiological process that will occur in the future depends on this period. Based on these thoughts and considerations, we tried to analyze the time since the disease was contracted in patients in the region.

The majority of patients in the region (55.1%) were diagnosed within 6-7 years, and even within 8-10 years (30.6%; 8.2%). So, the patients were registered very late. This cannot but affect the epidemiological process. Leprology specialists with extensive experience work taking into account the time of detection of the disease. The earlier the disease is detected, the more stable the epidemiological process.

Conclusion. Thus, our retrospective study of leprosy in the Andijan region revealed that in some regions of the region, including Izboskan, Zhalakuduk, Shakhrikhan, Andijan, Khojaabad and Kurgantepa districts, and the old urban part of Andijan city, there were endemic foci of leprosy. In particular, relatively stable foci of the disease appeared in the villages of Oyim, Uyghur and Shirmonbulak.

Our research in recent years shows that the migration of the population from neighboring countries had a significant impact on the emergence of leprosy in the Andijan region. Given the endemic foci of the disease in the region (there is one patient with lepromatous leprosy), their household contacts should be continuously monitored.

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