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STUDY OF EPIDEMIOLOGICAL FEATURES OF VISCERAL LEISHMANIASIS IN ENDEMIC AREAS OF THE REPUBLIC OF UZBEKISTAN

Gaybullaev Fazliddin Khayriddinogli*

*Bukhara State Medical Institute named after Abu Ali Ibn Sino,
 UZBEKISTAN

ABSTRACT

In the study of the clinical and epidemiological course of visceral leishmaniasis in the regions studied by the author, all 70 patients were children. The average age of the patients was 5.8 ± 0.8 . 58.6% (41 people) were girls and 41.4% (29) were boys. In terms of regions studied, the highest rate is in Navoi region - from 3.3 to 4.1 per 100,000 population, the incidence rate increased by 1.2 times, followed by Samarkand region - by 2.2 times. In Namangan region, there was a 2-fold decrease.

KEYWORDS: *Visceral leishmaniasis, sternal puncture.*

INTRODUCTION

Leishmaniasis is a widespread disease worldwide, affecting 350 million people each year. The person is at risk of injury. Leishmaniasis is registered in 98 countries. [2] Leishmaniasis affects 700,000-1 million people a year. It is estimated that 50,000 to 90,000 cases are visceral leishmaniasis. [2]

The causative agent of visceral leishmaniasis (VL) is *L. infantum* (synonyms: Mediterranean leishmaniasis, pediatric leishmaniasis), mainly distributed in the Mediterranean, the Near and Far East, the Caucasus and Central Asia. VL is a more dangerous disease than other leishmaniasis; if the disease is not diagnosed and treated in time, it can lead to the death of the patient. The risk group includes children, especially young children. [1]

Currently, the main hearth of VL is located in Pop district of Namangan region. The first cases of the disease in Pop County have been registered since 1987. From 1987 to 2009, 95 cases of VL were observed in 9 settlements. The resurgence of BJI in the Republic of Uzbekistan requires a

modern study of the spread of the disease among humans, the reservoir of infection, the clinic, the carriers. [2]

MATERIALS AND METHODS

The study was conducted in 2016-2017 at the Samarkand Institute of Parasitology named after Isaeva, Navoi and Namangan Regional Infectious Diseases Hospitals, and during this period observed 70 patients diagnosed with visceral leishmaniasis.

All 70 patients in the follow-up group were children. The mean age of the patients was 5.8 ± 0.8 . 58.6% (41 people) were girls and 41.4% (29) were boys. There was no statistically significant difference in the sex of patients in the follow-up group.

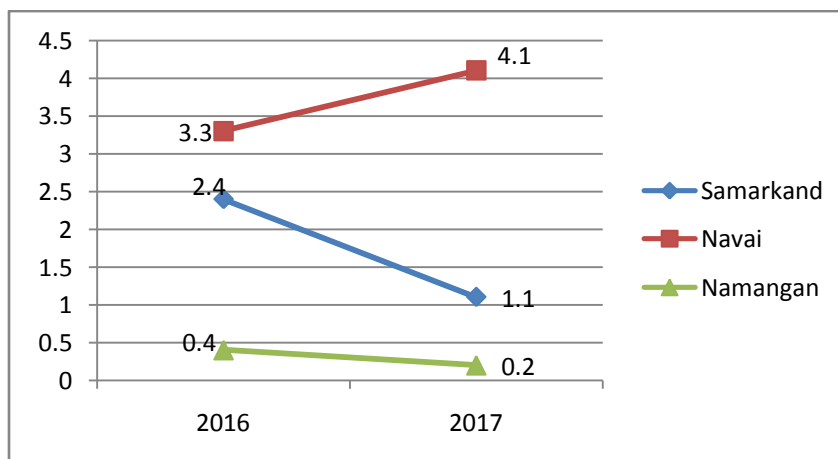
Patients were diagnosed by clinical signs and the detection of leishmaniasis on microscopic examination of the bone marrow puncture, and groups of patients were randomly selected according to their arrival at the hospital.

TABLE (1). THE VOLUME OF RESEARCH METHODS CONDUCTED

No	Research methods	Number of patients
1.	Clinical follow-up of patients	70
	Clinical analysis of blood, urine, feces when coming to the hospital and before discharge	70
	Blood biochemical analysis	70
	Sternal puncture	45
	Rk-39 test	20
2.	Statistical analysis	70

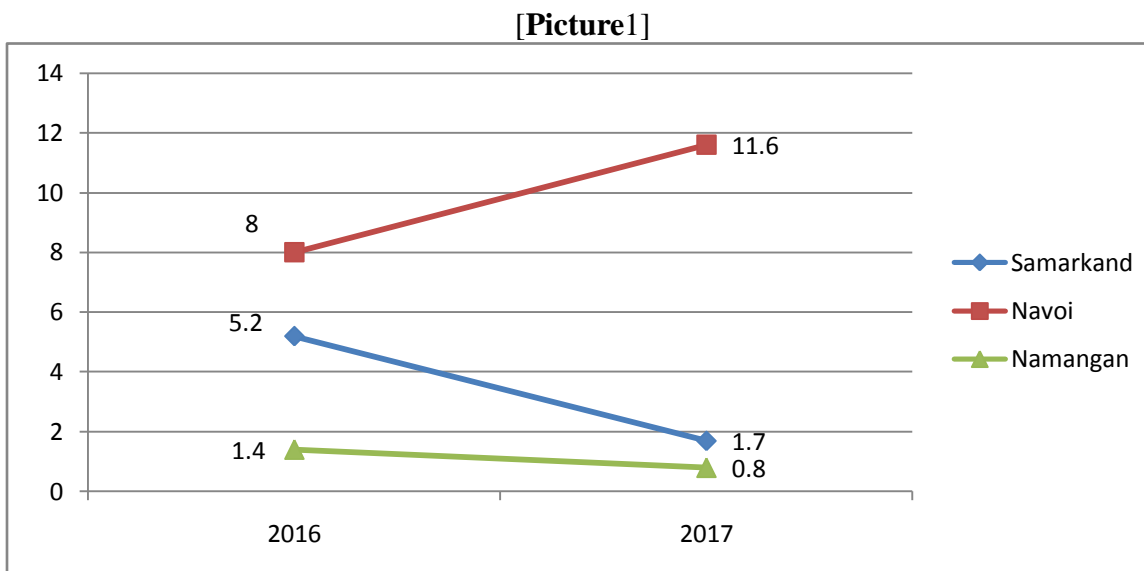
The incidence of visceral leishmaniasis in Samarkand, Navoi and Namangan regions

The first task of the study was to analyze the data of the State Center for Sanitary Epidemiological Surveillance of the Republic of Uzbekistan for 2016-2017 in order to study the dynamics of the incidence of visceral leishmaniasis in Samarkand, Navoi and Namangan regions.



Picture 1. The incidence of visceral leishmaniasis in the study areas (intensive)

According to the results of the analysis, in 2017, 506 cases of visceral leishmaniasis were registered in the country. In 2016, the figure was 391. In terms of regions studied, the highest rate is in Navoi region - from 3.3 to 4.1 per 100,000 population, ie the incidence rate increased by 1.2 times, followed by Samarkand region - by 2.2 times. In Namangan region, the number of cases decreased by 2 times.



Picture 2. Incidence of visceral leishmaniasis among children under 14 years of age in the study areas (intensive rate)

In 2017, 44.5% (225) of patients with visceral leishmaniasis registered were children under 14 years of age. This figure is 1.2 times higher than in 2016, i.e. in 2016, the number of children under 14 years of age with visceral leishmaniasis was 188. In 2016, children accounted for 48.1% of all cases.

An analysis of children with visceral leishmaniasis in the studied regions showed that the incidence rate among children was highest in Navoi region, and in 2017 the incidence rate increased 1.5 times compared to 2016. In Samarkand and Namangan regions, the incidence among children decreased by 3.5 and 1.8 times, respectively, as in adults. [Figure 2]

CONCLUSION

1. If you look at the cross-section of the studied regions, the highest rate is in Navoi region.
2. There was no statistically significant difference in the sex of patients in the follow-up group.
3. Samarkand region - over the years, the incidence rate decreased by 2.2 times, and in Namangan region - by 2 times.

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