

Cutaneous Leishmaniasis in Iran

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ABSTRACT

Methods: This review is based on a data that collected and evaluated in Center for communicable diseases management in Ministry of Health in Iran dependent to surveillance system.

Results: According to different epidemiologic studies, Iran has been considered an endemic area for cutaneous Leishmaniasis (CL) in the

world. In 12 years ago dependent to activities for CL control the number of cases decreased from 23202 in 2008 (Incidence rate 32 per 100000) to 13124 in 2019 (Incidence rate 15.8 per 100000), more cases report from September to December, 46% of cases had one lesion and 21% had 2 lesions, the diameter of lesions were 3 centimeter and bellows in 85% of cases.

Conclusions: This article shows one the main differential diagnosis of chronic skin diseases in Iran is CL, and physician have to attention to diagnosis the cases in early stage. **Keywords:** Cutaneous Leishmaniasis, differential diagnosis, Iran

Introduction

Leishmaniasis are worldwide zoonotic infectious diseases caused by obligate protozoa of Leishmania genus which among them, approximately 20 species are pathogenic for humans (1, 2).

Natural transmission to mammalian hosts is usually by the bite of female Phlebotomus or Lutzomyia sandflies depending on geography (1). There are three main clinical manifestations with different degrees of severity count on the species of parasite involved and elicited host immune response. These features including cutaneous, mucocutaneous and visceral (1, 3, 4). Currently, World Health Organization (WHO) lists leishmaniasis amongst the nine most important tropical and subtropical diseases which has been reported in all continents except Oceania (1, 3). This category of zoonoses occurs in 98 countries or territories around the world with 12 million cases at risk and 20,000–40,000 deaths per year, pursuant to the WHO reports (5, 6).

Materials and Methods

CL is one of the reporting diseases from many years ago, and the surveillance system covered this disease in Iran. There is surveillance system for case finding, recording and reporting the cases and treatment the cases, the strategic plan for CL control, as inter sectoral cooperation, reservoir control, vector control and community education.

CL is endemic from 18 provinces in Iran and many cases diagnosing from non-endemic provinces that had travel to endemic provinces.

Results

Iran has been reported an endemic area for CL in the world. In this Report, we describe some indicators from CL cases in Iran.

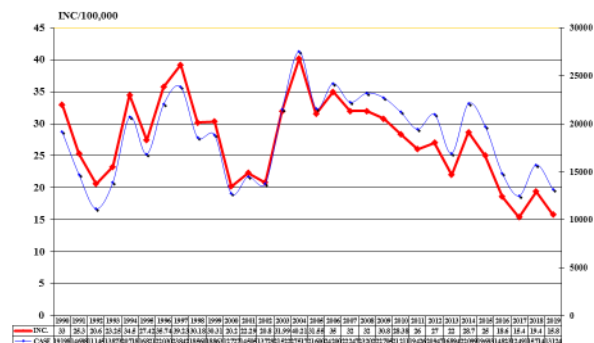
Distribution

In 2019, 13124 CL cases were recorded in Iran (Incidence rate 15.8 cases per 100000 population). In 2008, 23202 cases reported (Incidence rate 32 cases per 100000 population) and in this year established new surveillance system. And dramatically decreased the cases during 12 years. During this years we had two pike in 2014 with 22099 cases and 2018 with 15714 cases. (Figure 1).

In 2019, 9768 (74.5%) of cases reported from 18 endemic provinces and 3356 (25.5%) cases reported from non-endemic provinces that have travel to endemic provinces.

More cases reported in Isfahan provinces in center if Iran with 3127 cases and 51.2 incidence rate per 100000 cases. But highest Incidence rate was in Semnan province with 95.9 per 100000 population and 719 cases.

Figure 1: Trend Of Cutaneous Leishmaniasis I.R.IRAN 1990 – 2019



Clinical aspects

Because more than 85% of cases are Zoonotic in Iran more cases reported from September to December (Figure 2).

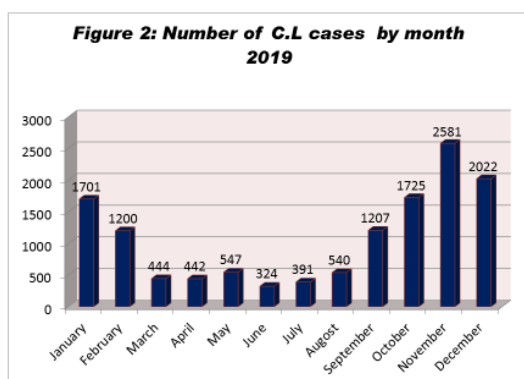
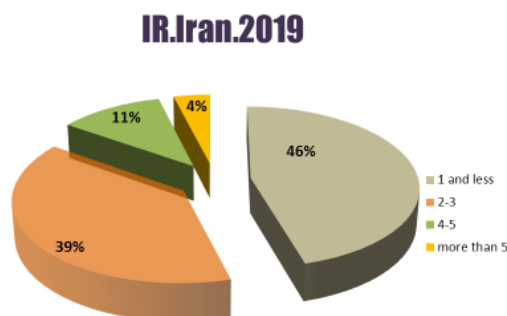


Figure 5: size of C.Leishmaniasis lesion



The cutaneous lesions were mostly on the hand (62%) and foot (26%) and face (21%). In 1177 cases (9%) two or more organ were infected Figure 3. In 46% of cases had one lesions, and 54% of cases had two or more lesions, 18 cases had more than 21 lesions. And maximum number of cases was 30 lesions (Figure 4).

Figure 3: Location of C.Leishmaniasis lesions IR.Iran.2019

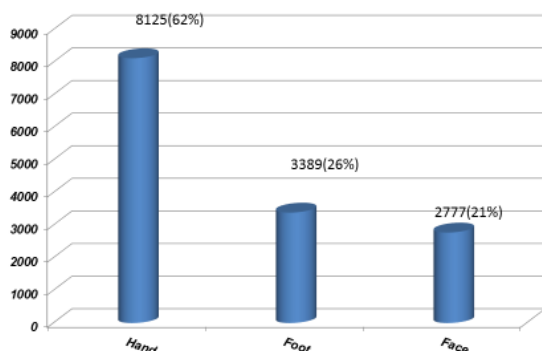
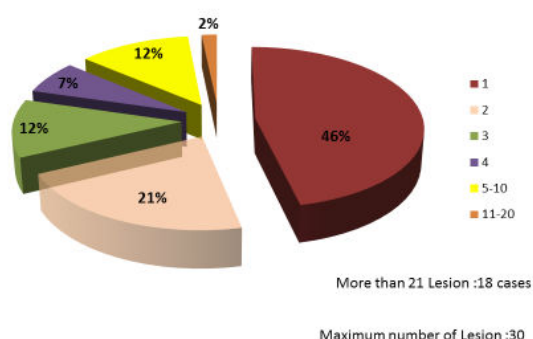


Figure 4: Number of C.Leishmaniasis lesion IR.Iran.2019



Diagnosis the cases in early stage is very important because response to treatment is more effective. And the scar gets smaller. The Figure 5 show the maximum size of the lesions and 85% have the 3 cm or bellows the diameter.

Conclusions

This lecture cover the result of surveillance system in 2019 and comparison the trend of cases in recent years and also explain the main clinical presentation of CL cases how diagnose or referred to health system.

Our study has provided available information on CL in Iran. The review shows that CL is endemic in various parts of 18 provinces. Regarding the available findings, leishmaniasis is found to be a endemic disease in Iran. Therefore, planning to prevent and control is strongly recommended. In the other hand the physician have to more attention to CL in differential diagnosis in cutaneous lesions.

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