

The prevalence of cutaneous leishmaniosis in the city of Zahedan in 2013

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Abstract: Leishmaniosis, including zoonotic diseases, which are the visceral form (kala-azar), cutaneous Leishmaniosis and mucocutaneous occur. CL Mastigotrypan groups of protozoa, family and genus Leishmania, which is transmitted by sand fly bites a carrier (Phlebotomus families, subfamilies Phlebotominae) from animal reservoirs (mostly rodents and domestic and wild carnivores) and is transmitted human to human and the symptoms it is up to a year just wounds can remain on the body. It is reported in two epidemiological forms of leishmaniosis, caused by Leishmania tropical Anthroponomias urban type and its main vectors and reservoirs of human and dog is phlebotomus sergent and other forms of rural or Zoonotic caused by Leishmania major, major carriers it papayas and its reservoir is wild rodents.

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1. Introduction

Reservoir of cutaneous leishmaniosis in Iran

CL into two species. Urban or dried (Anthroponomias) in this type of reservoir of human disease, but the dog is accidentally infected. Haryana Merinos licks in the city of Naans in Isfahan province in Sistan-Baluchestan and Khuzestan is Tatraayndyka.

Ways of infection and parasite life cycle

The parasite lives in two stages, one stage is a stage Leishmanian Lptvmvnyy the Leishmania parasite is an organism that lacks flagella Amastigotes say the body is round or oval and sometimes fusiform within the phagocytic cells (macrophages) and Leishman bodies called mammals.

The Lptvmvnyy also say that Promastigotes deformation caused by Leishmania mode, the form of the parasite anterior flagella in its Rqsmt that this form of the parasite in the mosquito digestive tracts of dirt and also to be seen within the medium. Masytgv form in the vertebrate host of the parasite in people and animals, and often within macrophages (phagocytic cells) lives. Bloodthirsty female sandfly. And by sucking blood, devours amastigote and promastigote converts in the gastrointestinal tract. This form of asexual binary division organism grows and their numbers increased after 5 to 20 days.

In general, the types of sand flies infected with cutaneous leishmaniasis occur in the following three ways:

- 1 human to human
- 2 animal to animal
- 3 animal to human and vice versa.

And kala-azar parasite seating in phagocytic cells Rtykvlvandtlyal system, spleen, liver, bone marrow,

lymph nodes and other tissues and may be seen in blood monocytes. In time flies eat the blood of vertebrate hosts In humans lost their flagella in Slvlh spread of phagocytic body may transfer. rahhay other sexual contact, blood transfusion, congenital infection through the placenta or eye mucous membranes or open wounds contaminated with materials such as wound drainage or nasal mucosa human or animal is infected with visceral leishmaniasis. Carnivorous animals may become infected by eating infected animal carcasses.

Latency

Drsalk depending on the type of patient. Cutaneous Leishmaniasis wet type (rural) shorter incubation period (4-1 weeks) but dry in cutaneous leishmaniasis (city) and normally this longer period (2 to 8 months) sometimes 2-1 years.

In visceral leishmaniasis (kala-azar) in the course of several weeks to several months and sometimes up to one year.

Symptoms of cutaneous leishmaniasis

Cutaneous lesions may be seen in one of the following forms:

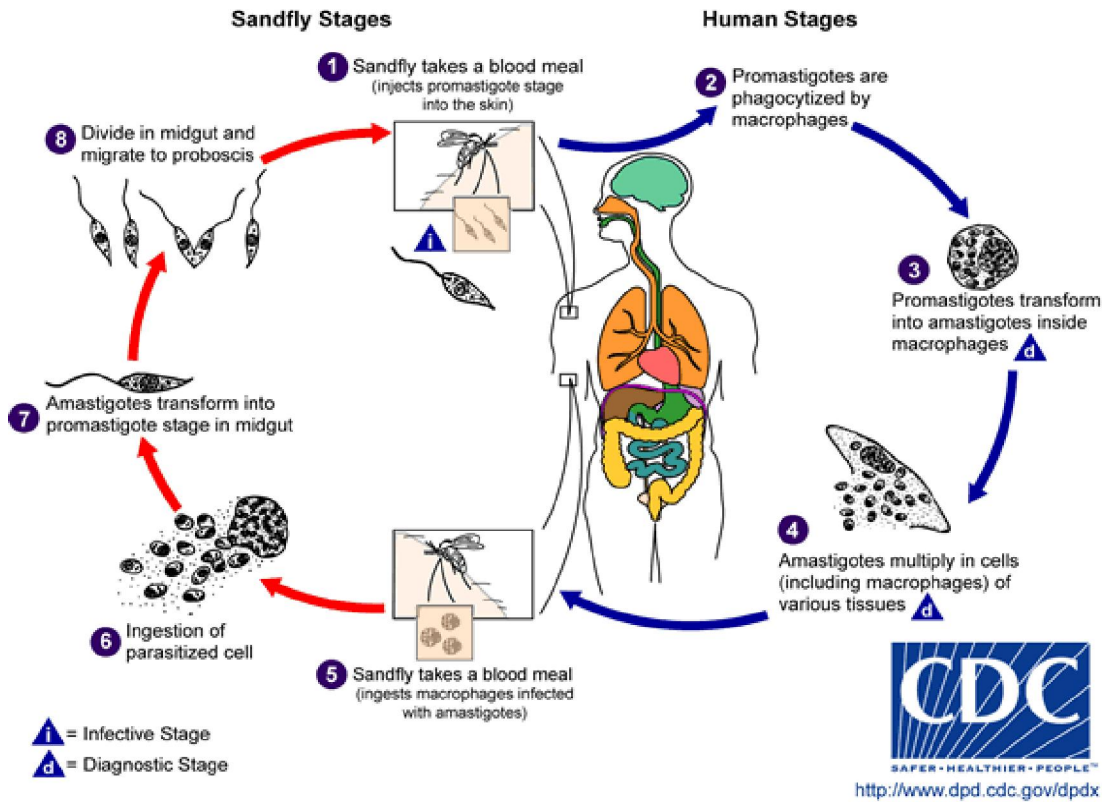
1. dry form
 2. Wet
 3. The unusual shapes
 4. The chronic form
- Figure 5. Lvpvyyd or recurrent
6-lesions caused by vaccination

1. Dry form

This form of the disease has four stages painless papules, sores and scabs stage, begin recovery, full recovery and instead of staying scar (scar or scar) is. After the incubation period in the mosquito bites red

papules appear to be soft and painless papules and does not fade under pressure. There is sometimes a little itchy. After a few weeks or months papules enabled, larger lesions and red halo around it learns. And little by little, piece by accumulation of cells in the lesion Tighten. After 2 to 3 months papules and outstanding as red beans with smooth surfaces and soft consistency comes in. At this time in the bottom of the recess to a depth of one millimeter shell to be seen.

Gradually the surface of the grain becomes soft and serous fluid secretion and finally comes SCI open wounds. Circumscribed and marginal ulcers, irregular and is featured on the cover of sweet, dirty brown. The lesion is painless and sometimes with mild itching. The greater the number of lesions size smaller scars and faster recovery. Wound healing gradually from the center of the wound and scabs begin to dry.



2. Wet

It also has the same four stages seeker is dry, but its clinical protests differences are as follows: After incubation period of several weeks to several months with acute inflammation appears SCI welding After two weeks injured big and round it quickly becomes

congested. The following is empty and the edge of the wound edge and the wound has pus is Tfarys. At the same time, and usually wound around happens within 6-4 months after the start of the general good and rarely in normal mode more than 8 months.



Clinical symptoms of kala-azar

Of the disease usually occurs in secret and without clear signs of slow progress. Irregular fever raging protests with up to 40 ° C with agitation, pain in the spleen, cough and body weight loss, enlargement of the spleen and liver enlargement resulting in the patient's abdomen, anemia and low number of blood cells (red blood cells, white and platelets), swelling of the face, hands and legs can be seen. Phagocytic cells throughout the body and reduces the defense forces and the readiness to accept other infections do not lead to death if diagnosis and treatment of patients.

In general, the diagnosis of cutaneous leishmaniasis and visceral on the last act of the National Committee of suspected, probable and confirmed as follows: CL

Suspect Detection (Suspected):

Detect probable (Probable):

There papules that gradually increase the size of the wound or ulcer surface and then come up and sometimes deep wounds and abscesses on the edge of the red color.

A definitive diagnosis (Definite):

Viewing Angle made in the development of skin lesions (smear).

Visceral leishmaniasis (kala-azar)

Suspect Detection (Suspected):

Clinical symptoms of acute disease with symptoms such as fever, hepatomegaly, splenomegaly, weight loss, anemia, skin discoloration.

Detect probable (Probable):

Clinical signs associated with IPA DAT test positive.

A definite diagnosis: (Definite)

Viewing Angle made in the development of tissues (spleen, bone marrow and lymph nodes) or get it in culture.

Diagnosis

Diagnosis of cutaneous leishmaniasis:

Laboratory diagnostic criteria:

1. parasitological tests positive (smear or culture of the wound).

2 positive serologic test (IFA, ELIZA) only for mucosal leishmaniasis.

(M.C.L).

Kala-azar diagnosis:

Since kala-azar in Iran often seen in children and the symptoms of irregular fever, enlargement of the spleen and liver enlargement resulting in stomach.

Laboratory diagnostic criteria:

1-positive parasitological tests (smear and bone marrow, spleen, liver, lymph nodes, blood and culture Azbyypsy or material aspirated from members.

2-positive serologic test (DAT, ELIZA, IFA) blood sample for serologic tests readily possible.

Centrifuged to separate plasma or by calling the laboratory filter paper blood on the patient's finger into some of the blood A diametral stain absorption of about one centimeter After drying paper and tested by DAT to do with a small, remote laboratories.

According to the World Health Organization, leishmaniasis endemic in 98 countries and more than 350 million people are at risk, the incidence of Leishmania about 12 million people are estimated 2 million new cases of leishmaniasis occur each year, about 5/0 million of them Kala-azar patients and 5/1 patients with cutaneous Leishmaniasis is estimated million. Leishmania tropica transmission of India through Central Asia and has spread west to Shmalafryqa. Leishmania major transport from central Asia to North Africa took place. The Leishmania major expansion in America through Argentina in South America is woven. In addition, more than 90% of cases of cutaneous leishmaniasis in Afghanistan, Algeria, Saudi Arabia, Iran, Bolivia, Brazil, Colombia, Nicaragua and Peru there. As well as cutaneous leishmaniasis in some countries such as Afghanistan, Venezuela, Pakistan, and Turkey are on the rise.

Leishmaniasis in 14 countries of the 22 countries in the Middle East there. Rural final Kano cutaneous leishmaniasis (ZCL) caused by Leishmania major in Afghanistan, Egypt, Iran, Iraq, Jordan, Libya, Morocco, Palestine, Pakistan, Saudi Arabia, Syria and Yemen. Urban cutaneous leishmaniasis (ACL) caused by Leishmania is in Afghanistan, Iran, Iraq, Morocco, Pakistan, Saudi Arabia, Syria, and Yemen to be seen. (World Health Organization). CL has long been known in Iran and in the Iranian ancient books, including The wounded Avicenna mentioned the name of Khyrvnyh the last treatises and dealt with the problem And is resistant to various medications and with signs that the wound is thought that the lesion is mentioned Extensive studies of cutaneous leishmaniasis in the early twentieth century took place in and around Tehran, including the 1913 Nlygan Tehran to study stray dogs around there and found skin ulcers and lesions in these dogs was visceral. In 1915, carcasses of 21 dogs tested in Tehran And 15 dogs diagnosed with cutaneous leishmaniasis. Since 1320 after Iranian researchers in epidemiology, parasitology laboratory characteristics, an infected sand fly species Several studies conducted and the treatment of cutaneous leishmaniasis. According to studies by the researchers and researchers in health research institute of Tehran University School of Public Health CL has been done in different parts of Iran. In 1387, over 26 thousand cases of cutaneous leishmaniasis with an incidence of 37 per 100 thousand people in Iran have been recorded and reported that this number 1390 to 20585 with the incidence of 27 per 100 thousand people. More than

90% of cases occurred in the country's 88 city and 17 provinces for the Ygyrd transmission. Urban and rural cutaneous leishmaniasis in Iran that in many provinces, especially in rural areas, rural cutaneous leishmaniasis) more than 70% of the patients (and in large and medium cities, urban cutaneous leishmaniasis is common. In large and medium cities, urban cutaneous leishmaniasis is common. In 1390 the city of Shiraz, Mashhad, Isfahan and Golestan, Kerman, Khuzestan, Ilam, Yazd, Sistan and Baluchestan, Tehran, Qom, Northern Khorasan and Iran In large and medium cities, urban cutaneous leishmaniasis is common. Most cases of infection have. 80% of CL Type. salk rural urban type in Mashhad, Shiraz, Tehran, Kerman, Neyshabur, Yazd, Bam and there... Which may occur in any other urban area. salk of rural areas of Isfahan, Fars, Khuzestan, Kerman, Golestan, Khorasan, North Khorasan, Bushehr, Hormozgan Semnan, Sistan and Baluchestan, Yazd, Ilam and so on. Sandfly vectors of the disease in domestic urban cutaneous leishmaniasis parasite called *P. sergenti* that is transmitted from human to human The principal vector of cutaneous leishmaniasis in rural, semi-wild sand flies called papatasi the parasites that cause the disease is transmitted to humans, some rats *Rhombomys Rhombomys* that the four species, *libycus Hvryanh*, *Tatra Indica* and *libycus libycus* respectively in central and northern East, South-East, Central, West and South and rural centers have been identified Iran as the main reservoirs of cutaneous leishmaniasis in rural cutaneous leishmaniasis have been identified Iran as the main reservoirs. (The World Health Organization).

Leishmaniasis and fight it

Due to the improvement of spontaneous form of localized skin (over 2 months to 3 years) for the treatment of this waste should be such as age, sex, location and cause of the disease and the status of the immune system of the patient in mind Dasht. darvy combination of antimony 5 capacity is based on cc2-1 to the low number of lesions within each lesion (the dermis) is injected every week. Where no improvement with topical therapy, the wrong place (joint, nose, around the vital organs of local injection) and mucocutaneous, published Azampvl meglumine (Glucantime) intramuscularly at a dose mg / kg / day 100-50 for 14-10 days becomes. (After a two-week break will be repeated again 2 weeks).

Before and after starting these drugs once a week these tests are: CBC-diff, liver and kidney function tests, ECG

In case of following side effects, the drug will be suspended:

1. ST segment depression and increase the interval $QT > 5/0$ in ECG.

(2) an increase in liver enzymes more than 5 times the normal.

3. Anemia, leukopenia, thrombocytopenia in CBC.

Taking these drugs in pregnancy, lactation, renal failure is prohibited.

Prevention of disease.

A removal of predisposing factors:

1. Improvement of Livestock and Poultry maintenance and restoration cranny in residential areas.

2. The open channel improvements, improved sewage system construction Vnkhalh.

3. The correct disposal of waste collection Vnkhalh construction.

4. The loss of stray dogs struggle with rodents.

5. Demolition of dilapidated buildings and deserted Vtstyh.

(B) protection against mosquito bites:

1. Install a fine on windows and entrance doors.

2. The use of insecticide-treated mosquito nets, preferably normal that its effect remains for a long time.

3. Use ointments materials away when you rest and sleep in insect infested areas.

4. Lesion sites covering in order to prevent spreading the disease to others from being infected sandflies new.

(C) Spraying:

Consultants mosquito spraying migration to neighboring areas Vpyda becomes a carrier of resistant varieties is the best way to eliminate the growth and proliferation of sandflies improve the environment. (Doctors without Borders site).

2. Materials and methods

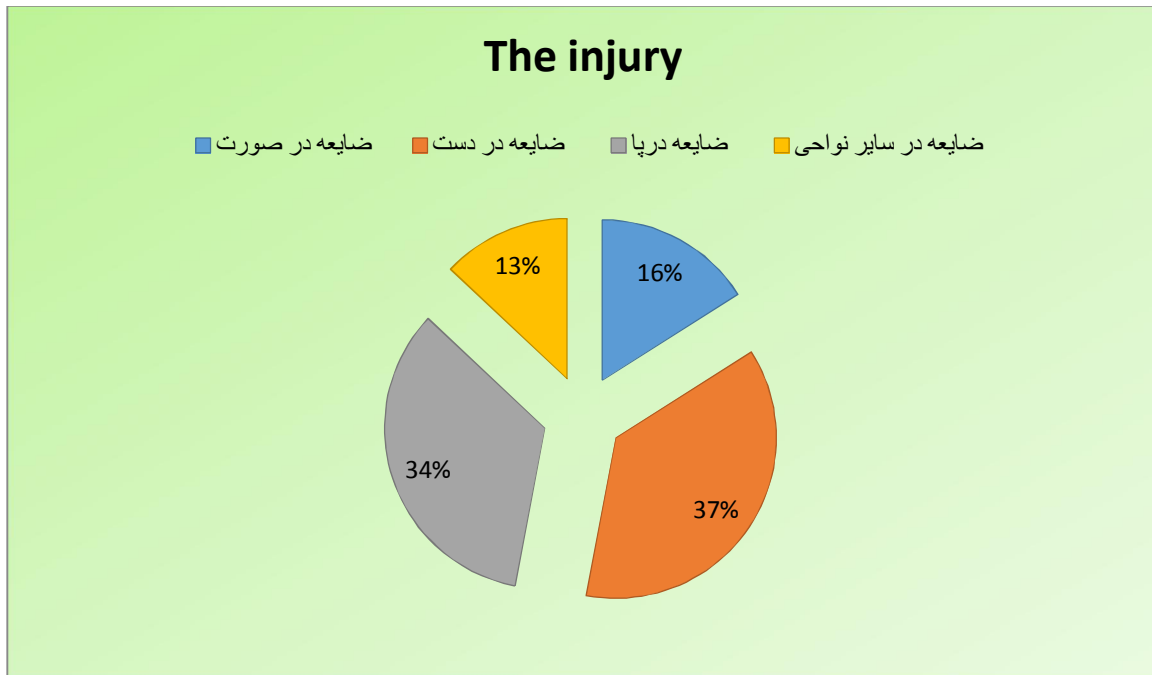
This study is descriptive. The study population were cases of leishmaniasis after visiting Zahedan Mrkzsalk filing and to continue the pursuit and detection Incubation Zahedan Were referred, the wounds were direct smear microscopy after Giemsa staining was observed. Epidemiological information from referral forms of leishmaniasis unit was prepared. Variables such as age, gender, location, and number of wounds in different parts of the body were analyzed with software Spss.

3. Results

24 positive cases were 19 males (79%) and five others were women (21%), the mean age of patients was 22 years. And most cases of cutaneous leishmaniasis in the ages 15-24 (54%) and the lowest incidence in Between the ages 0-4 (8%), with 68% of patients in urban areas and 34% in rural areas are 16% of patients with cutaneous leishmaniasis lesions on the pink, 37% in the region, 34% of on foot and 13% in

other areas of the body lesion. 25% of patients impulse to travel to the cities of Mashhad, Isfahan, ferns and

Zabul, respectively.



4. Discussion and conclusion

Urban and rural type of disease diagnosis to disease control is very important, because every patient is different epidemiological factors influence. Research conducted the world and other parts of the country showed a significant decrease in the effective combating of disease in patients at the heart of reservoirs are contaminated. (Yazdankhah, 1999, Dehghani et al., 2003) Vector population reduction in the incidence of the disease has an effective role, so that the residual spraying, use of bed nets impregnated with poison Vtvry, use of repellents, proper disposal of waste transporters in human dwellings decreased Vbhsazy abundant environment that the contact carrier consequently reducing the human loss We saw cases. This shows that residual spraying with rodent control can be considered a useful method to reduce the incidence of the disease. (Yazdankhah et al., 1999) n case of serious cutaneous leishmaniasis control, especially education, screening accurate and timely Vdrmtn Avmydvar patients the illness can be controlled.

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