

LEISHMANIASIS

Leishmaniasis is due to the parasite *Leishmania*. In our country exist the following forms of the disease, (to be completed by the Country)
 The Visceral form, globally known as "kala-azar", exists in (to be completed) parts of our country affecting mainly (to be completed) The Cutaneous form exists mainly in (to be completed) of the Country affecting mainly (to be completed). The parasite is transmitted from dog, (or other animals) to man or to other animals by sandflies called : (to be completed) Sandflies are activated in warm weather (usually during the months :to be completed) , depending to the geographical area and bite people and animals little after sundown until little after sunrise.



Visceral Leishmaniasis(kala-azar)



Sandfly – potentially transmitting the parasite *Leishmania*



Very advanced form of Leishmaniasis in a dog (emaciation, skin lesions)

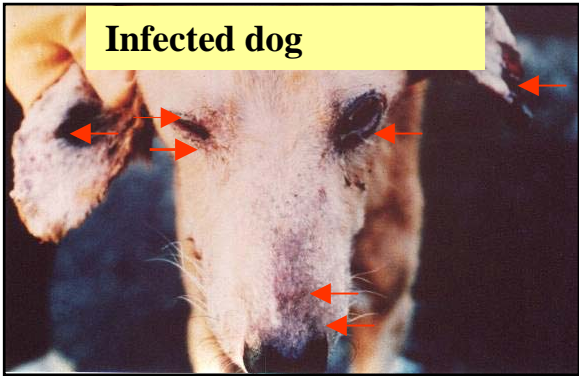


Onychogryposis (unusual increase of nails in a dog with Leishmaniasis)



Cutaneous Leishmaniasis

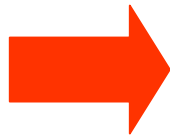
by Dr. N. Charisis (WHO/MZCP)



Sandfly is the intermediate vector of the parasite



Cutaneous lesions in areas of the skin which are mostly preferred by the sandflies when they suck blood from a dog



Sandflies are infected when they suck blood from infected animals and then they transmit the disease in healthy animals or humans. The species of sandflies existing *in our country are biting usually(?) dogs, and occasionally(?) humans or other animals such as.....(to be completed by National Authorities)*

The cases in dogs get over% of the total canine population. Are estimated over*to be completed by National Authorities* new cases every year). In humans the incidence is*to be completed National Authorities* % per year. A great number of adults are infected from the parasite without presenting any signs of the disease. Therefore, it is not possible to determine the spread of the disease in humans(*to be adjusted or deleted*). However, it is a fact that sandflies do not usually enter in the house, especially when they can suck blood from dogs or other domestic animals around human dwellings.

by Dr. N. Charisis (WHO/MZCP)

THE SYMPTOMS OF LEISHMANIASIS IN MAN AND DOG

POSSIBLE SYMPTOMS IN MAN

VISCERAL FORM

Few weeks to one year after infection some of the following symptoms can be observed : irregular fever, loss of weight, spleen **and** liver swelling, lymphadenopathy, exhaustion, discomfort, diarrhea, cough, perspiration nocturnal, edema and gray discoloration of the skin, loss of hair, gingival and nasal hemorrhage.

CUTANEOUS FORM

The symptoms of cutaneous form appear in 15 days up to 2 months after the infection and depend straightly on the location and the number of the lesions (ulcers).

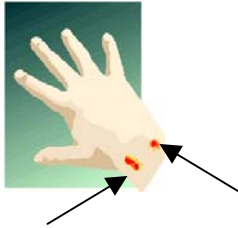
IF YOU NOTICE ONE OR MORE OF THE ABOVE SYMPTOMS YOU SHOULD VISIT IMMEDIATELY THE DOCTOR

POSSIBLE SYMPTOMS IN DOG

One month up to 7 years after the infection, some of the following symptoms can be observed: fever, liver and spleen swelling, lymphadenopathy, myopathy, nephropathy, epistaxis, unusual increase of nails (onychogryposis), ematiation, anemia, cutaneous lesions (such as loss of hair, nodules, ulcers on the ears, eyelids and elbows). Around the eyes may be observed chronic conjunctivitis blepharitis and/or loss of hair.

IF YOU NOTICE ONE OR MORE OF THE ABOVE SYMPTOMS IN YOUR DOG YOU SHOULD VISIT IMMEDIATELY A VETERINARIAN

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PROTECTION FROM LEISHMANIASIS



SPRAYING WITH INSECTICIDES

The control of sandflies in an urban or rural area could be implemented with insecticide spraying of all possible shelters. (*Possible shelters of these insects are garbage, the nests of rodents, the interior walls of wells, the walls of old or abandoned buildings, and generally wherever exist cracks, and shadows protecting the sensitive sandflies from sunbeams during the day*). This measure, that can only be applied in exceptional cases due to its high cost, may be ineffective or even dangerous for the environment, humans and animals, since large inhabited areas should be treated with insecticides.

WIRE MESH – MOSQUITO NETS

- It is suggested to install very thick wire mesh in both, doors and windows (15 openings per cm²) in areas where sandflies exist. People sleeping in outdoors may use mosquito nets with openings lesser in diameter from the usual, treated with proper insecticides (pyrethroids). People working in outdoors after sunset, should wear long trousers, long sleeve shirts, stockings, and cover with an insect-repellant all parts of the body remaining uncovered.



PROTECTION OF DOGS

- Doghouses should be sprayed regularly with insecticides from middle spring until late fall (depending from the geographical area and as far as the weather is warm).
- The animals should be protected from sandflies with the proper insect-repellent (especially when the weather is warm)

ANNUAL VETERINARY EXAMINATION OF DOGS

Dogs should be examined for Leishmaniasis at list once a year, even if they look healthy.

Up to date there is no vaccine against Leishmaniasis. *However many veterinarians administer different treatments to the infected dogs, thus decreasing or even weeping-off the symptoms for small or larger periods of time(to be adjusted or deleted)*. Nevertheless, it is quite possible that some of these dogs are remaining carriers of the parasite. Moreover it is believed, that the use of medicines registered for the treatment of the disease in humans may promote the development(evolution) of parasite strains, which thereafter may be resistant to these drugs. It, therefore, becomes quite difficult to treat people infected by the new strains of the parasite with these drugs .

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