

MOLECULAR DIAGNOSTIC OF VISCERAL CANINE LEISHMANIASIS AS A EPIDEMIOLOGICAL TOOL

(DIAGNÓSTICO MOLECULAR DE LEISHMANIOSE VISCERAL CANINA COMO FERRAMENTA
EPIDEMIOLÓGICA)

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Leishmaniasis is a zoonosis caused by protozoa of the genus *Leishmania*. The amastigotes form is found in vertebrate hosts and promastigote inhabits the digestive tract of the disease vector. In Brazil, the main vector is *Lutzomyia longipalpis* while the domestic dog is the most important carrier of the disease and humans, the accidental host (DEANE & DEANE, 1955). Three clinical forms are known, the cutaneous, mucocutaneous and visceral leishmaniasis (LAINSON & SHAW, 1987). Leishmaniasis is present in four continents, except Australia, affecting approximately two million people per year, with 500,000 cases of visceral leishmaniasis (WHO, 2004). Considering the importance of the dog in the disease cycle and the relevance of leishmaniasis for public health, this study evaluates the occurrence of this disease in the region of Bauru, São Paulo, considered so far, endemic for canine visceral leishmaniasis. Samples of whole blood from 149 dogs from 21 different cities received by the Molecular Biology Laboratory of Zoonosis of FMVZ, Unesp, Botucatu, during the years 2010, 2011 and 2012 for routine tests were used. All samples underwent Polymerase Chain Reaction, being performed genus-specific analysis (*Leishmania* spp.), using as primers LINR4 (5'-GGG GGTGTT GTA AAA TAG GG-3') and LIN19 (5'-AAC CAG GCC CCT ACC CG-3') (ARANSAY et al., 2000). The results according to the year were as follows: 2010, 70% (24 animals) were positive; 2011, of 48 samples evaluated, 50% were positive; and, in 2012, of 77 tests, 64.9% were positive. The results show that a larger number of samples should be analyzed over the years and confirm the importance of studies in the region, as well as the need for epidemiological surveillance and prophylactic measures for controlling leishmaniasis.

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