

## Leish017- Association between clinical signals severity and occurrence of canine visceral leishmaniasis

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The similarity of visceral leishmaniasis manifestation in humans and dogs renders the study of canine visceral leishmaniasis important. However, more susceptible dogs present more severe clinical manifestations with classical signs of visceral leishmaniasis, as well as cutaneous wounds. The clinical manifestations of canine visceral leishmaniasis consist of signs that vary in number and severity, and can bear similarities to other canine infectious illnesses. These characteristics of the dog disease support the efforts to design more reliable and sensitive methods for clinical diagnosis of canine visceral leishmaniasis. The present study aimed to perform a clinical and serological survey in dogs from an endemic area for visceral leishmaniasis in the municipality of Camaçari, Bahia, Brazil. The association of the presence and severity of the signals with the positive diagnosis of canine visceral leishmaniasis was evaluated. A cross-sectional study was performed including 22 neighborhoods in the municipality of Camaçari. The houses included in this study were chosen randomly. Five hundred dogs were included and evaluated clinically. The diagnosis of visceral leishmaniasis was determined by both ELISA and culture positivity in splenic aspirates. Associations were determined using chi-square test ( $P < 0.05$ ). Leishmania infection was diagnosed in 27% of animals evaluated. Some evaluated signs, and their severity, showed a positive correlation with the positive diagnosis of canine visceral leishmaniasis. In addition, the diagnosis of canine visceral leishmaniasis positively correlate with the severity of the signs including wound on the ears (53%; OR 4,2; IC 2,1-5,1), onycogryphosis (42%; OR 3,0; IC 2,0-4,5), hyperkeratosis on the nose (36%; OR 2,6; IC 1,7-3,9), crust in the body (39%; OR 2,4; IC 1,6-3,6), depigmented nose (37%; OR 2,4; IC 1,6-3,6), lymphadenopathy (34%; OR 2,4; IC 1,6-3,7), conjunctivitis (34%; OR 2,0; IC 1,1-2,4) and alopecia (28%; OR 1,5; IC 1,0-2,3). Together, the results indicate that there is a high association between presence and severity of disease signals with the positive diagnosis of canine visceral leishmaniasis, which is related to the odds of the animal be infected by *Leishmania* sp. These data indicate that the presence and the severity of clinical signs in dogs enhance our capacity to diagnosis canine visceral leishmaniasis. **Support by** FAPESB, INCT-CNPq, PDTIS, PST Veras' grant (CNPq:306672/2008-1). **E-mail:** dmfraga@hotmail.com