

THE ELIMINATION OF SEROPOSITIVE DOGS IS AN INEFFICIENT MEASURE FOR CONTROLLING THE CANINE *LEISHMANIA (L.) CHAGASI* INFECTION

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Dogs naturally infected with *Leishmania (L.) chagasi* have been regarded as the main source of infection for man, and they have become the principal target of control measures. Nevertheless, the elimination of seropositive dogs has failed to demonstrate its importance in diminishing the incidence of human American visceral leishmaniasis (AVL). In this work, we decided, in first step, to evaluate the efficacy of this measure in controlling the canine infection by *L. (L.) chagasi*. This work was carried out in Cafezal Village, municipality of Barcarena, north of Pará State, Brazil, where we followed up a cohorte of 172 dogs for a period of one year. The interventions for evaluating initial prevalence and subsequent incidences were at intervals of six months. For identification of seropositive dogs we used a IFAT with *L. (L.) chagasi* amastigotes (MCAO/BR/1998/M18011- Maranhão State) as antigen, canine anti-IgG (Sigma) and the cut-off dilution 80. The initial prevalence was 36,6% (63 seropositive/172) and following six months the first incidence was 26,6% (33 seropositive/124 seronegative from the first intervention). After these two interventions, all seropositive dogs (96), from both interventions, were eliminated as recommended by the Epidemiology Surveillance Secretary, Ministry of Health, with the aim of a clearance in the area. Following six months more, the final incidence was 24,7% (20 seropositive/81 seronegative from the second intervention), which was not significantly different ($p>0,05$) (ANOVA) from the first incidence (26,6%). These results strongly suggest that the elimination of seropositive dogs, as a measure isolated, does not contribute for controlling the canine infection by *L. (L.) chagasi* and, consequently, also to man.