

Leish072- Effectiveness of diagnosis for Canine Visceral Leishmaniasis carried out at the Center of Zoonosis Control of Camaçari, Brazil

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According to World Health Organization, visceral leishmaniasis (VL) is a serious public health problem. The disease is caused by protozoa of the genus *Leishmania* and transmitted by *Lutzomia longipalpis*. The dog is considered the main reservoirs at urban areas, probably by facilitating the transmission for men and other animals. The control strategies recommended by the Health Department in Brazil are based mainly on identification and euthanasia of seropositive dogs. Until December 2011, ELISA was used to screen and IFA to confirm the diagnosis of visceral leishmaniasis, as recommended by Brazilian Health Department. A cross-sectional study was conducted from May to August 2011 in order to compare the efficacy of three diagnosis tests: IFA conducted by the Center of Zoonosis Control (CZC) of the municipality of Camaçari (Bahia) and culture of splenic aspirates and ELISA performed at the Laboratory of Pathology and Biointervention (LPBI), FIOCRUZ. Blood samples were collected to perform ELISA and IFA, as well as splenic aspirates to precede culture. The positivity rate for IFA was 40.31%, for splenic aspirate cultures was 11.22%, and for ELISA was 25.51%. Using culture as the gold standard, several parameters were calculated: i) for IFA sensitivity 73% (16/22), specificity 64% (111/174), positive predictive value (PPV) 20% and negative predictive value (NPV) 95%. When positivity at ELISA or culture was considered, the results were combined to compare with IFA, thus the other parameters calculated revealed: ii) for IFA sensitivity 78% (39/50), specificity 73% (106/146), PPV 49% and NPV 91%. These results show that using the diagnostic tests performed in Camaçari by the CZC, dogs were incorrectly diagnosed, leading to the maintenance of false negative and euthanasia of false positive in this endemic area. To prevent this situation, is necessary to develop more accurate diagnostic tests with higher specificity and sensitivity. **Support by** FAPESB, INCT-CNPq, PDTIS, PST Veras' grant (CNPq:306672/2008-1) **E-mail:** dmfraga@hotmail.com