

CANINE VISCERAL LEISHMANIASIS (CVL) SURVEILLANCE IN CITY OF FLORIANÓPOLIS BASED ON SEROLOGICAL MONITORING OF THE CANINE RESERVOIR BETWEEN 2010 AND 2014

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Abstract

The leishmaniasis is a combination of six tropical parasitic diseases caused by protozoan parasites from the genre *Leishmania* transmitted to humans by phlebotomine. It produces several clinical features depending on which specie is involved. The visceral form caused by *Leishmania infantum chagasi* is systemic and can lead the patient to death. It is considered as a rural and peri-urban anthrozoosis with urban inclination. The domestic dog is the main host of canine visceral leishmaniasis (CVL) in spreading urban cycle. Enzootic canine is prone to forego human cases. Santa Catarina State was unbroken until the first semester of 2010, when in the City of Florianópolis were confirmed 5 first cases. This paper aims to determine the seroprevalence of the CLV, in Florianópolis, between September, 2010 and June, 2014. 5983 canine serum samples were analyzed, from both genres, of different ages, various races and from the entire city. Between 2010 and 2011 two methods were used for classification and confirmation, which are respectively enzyme immunoassay (ELISA) and indirect immunofluorescence. In 2012 the immunochromatographic assay was introduced for classification and ELISA was still used for confirmation. The cross-sectional population-based study data was analyzed through descriptive statistics. 98,04% of the samples had non-reagent results for CLV and 1,48% were confirmed. Among the positive samples, 4,5% occurred in 2010, 3,37% in 2011, 11,23% in 2012, 50,56% in 2013 and 30,33% in the first trimester of 2014. This data is an alert considering a region, which was unbroken because, states the maintenance of the disease among the canine reservoirs. Nevertheless, also shows the growing access to the diagnosis due to the diagnostic protocol changes. The TR DPP®-LVC made the diagnostic quicker making possible a faster extraction of ill dogs. 46,06% of the ill dogs were sacrificed. The infection maintenance among dogs in Florianópolis may be related to the endurance of seropositive animals in the urban area, which keeps the transmission cycle activated. Some owners refused to sacrifice their dogs and it may be a contributing factor to the CVL expansion in the city, and poses a risk to public health. The main direct impact of the surveillance and control practices of the CLV was the absence of human cases. Despite the negative results of *L. longipalpis* for human cases in Florianópolis up to the present moment, the fact of finding reagent serology indicates the necessity of keeping the canine serological surveillance in order to prematurely detect any epidemiological local changes.

Keywords: Canine Visceral Leishmaniasis (CVL), Florianópolis, zoonose, public health

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