

## VIII ENCONTRO DO INSTITUTO ADOLFO LUTZ

### DYNAMICS OF CIRCULATION AND PERPETUATION OF *Leishmania* spp AND LEISHMANIASIS IN THE STATE OF SÃO PAULO, BRAZIL, AN ANCIENT COLONIZATION REGION\*.

Tolezano JE<sup>1</sup>, Taniguchi HH<sup>1</sup>, Araújo MFL<sup>1</sup>, Barbosa JAR<sup>1</sup>, Barbosa JER<sup>1</sup>, Hiramoto RM<sup>1</sup>, Gomes AHS<sup>1</sup>, Pereira-Chiocola VL<sup>1</sup>, Shaw JJ<sup>2</sup>

<sup>1</sup>Instituto Adolfo Lutz <sup>2</sup>Universidade de São Paulo – e-mail: [tolezano@hotmail.com](mailto:tolezano@hotmail.com)

Until ten years ago, in São Paulo state, Brazil, solely natural focus of cutaneous leishmaniasis (ACL) were recognized, with 400 to 1,000 cases each year. Since then visceral leishmaniasis (ALV) has been introduced and quickly spread as an urban new disease. A total of 1,267 human cases of AVL were notified and thousands of infected dogs culled as the main control measure. This study presents results of three decades of investigations on ecoepidemiology of leishmaniasis. Studies with wild and domestic reservoirs of *Leishmania* spp, were conducted in: Ilhabela (S23°48' W45°20'); Caraguatatuba (S23°43' W45°0'), Itupeva (S23°10' W47°02'), Bauru (S22°20' W49°01') and in Araçatuba (S21°12' W50°25'). More than 3,000 dogs and 1,000 wild animals belonging to 34 different species of mammals caught in forested environment were investigated. Each one was examined by the following methods: smears or imprints of aspirates and biopsies, rk39 antibody, skin test with *L. braziliensis* antigen, inoculation *in vivo* and *in vitro* and DNA extraction for molecular tests. For the wild animals we have assumed techniques of capture-mark-recapture that allow us to determine *Leishmania* spp dynamics of circulation. *L. (V.) braziliensis* were observed in areas of ACL in dogs and in *Proechimys iheringi*, *Nectomys squamipes*, *Bolomys lasiurus* and *Didelphis aurita*. *L. (L.) amazonensis* were observed in areas of ACL in *P. iheringi* and in areas of AVL in dogs. *L.(L.) infantum chagasi*, were observed in areas of ACL (*Akodon spp*, *D. marsupialis*) and in areas of AVL (*D. albiventris* and in dogs). Natural infection in domestic and wild animals shows the potential risk of human infection. In some areas it was found concomitant cycles of two or even three species. Infection of wild animals in areas without human or canine infection says on behalf of presence and perpetuation of circulation cycles of parasite.

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