HUMAN, CANINE AND EQUINE LEISHMANIASIS CAUSED BY LEISHMANIA BRAZILIENSIS BRAZILIENSIS IN AN ENDEMIC AREA IN THE STATE OF RIO DE JANEIRO

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In our study a recent focus of cutaneous leishmaniasis in the locality of Mesquita, municipality of Nova Iguaçu, State of Rio de Janeiro, cases of the disease were diagnosed in humans and dogs by Paes-Oliveira et al. (1985, III Jornada Científica da Fundação Oswaldo Cruz, p. 445) and in equines by Aguilar et al. (1986, Mem. Inst. Oswaldo Cruz, 81: 471-472). With the object of identifying the species of parasite from those hosts, biopsies of the cutaneous lesions from two cases of canine, one case of human and one of equine leishmaniasis were made. Parasites were obtained either by inoculation of the macerated biopsies in hamsters or seeding, in enriched medium, of small fragments of subcutaneous tissue from non-ulcerated nodules which appeared afterwards at the site of inoculation.

The behaviour of the parasites in the digestive tube of phlebotomine sandflies was verified by experimental infection using Lutzomyia longipalpis and was shown to be Peripylarian. Subspecific characterization was made by monoclonal antibodies and isoenzymes as described by Grimaldi et al. (1986. Am. J. Trop. Med. Hyg., in press) and Momen et al. (1985, Am. J. Trop. Med. Hyg., 34: 1076-1084). All four isolates were found to belong to the same serodeme and zymodeme and by comparison with reference strains the isolates were identified as Leishmania braziliensis braziliensis.

This finding, together with previous reports from Venezuela by Aguilar et al. (1982, IX Reunião Anual sobre Pesquisa Básica em Doença de Chagas, p. 106, 1984, Mem. Inst. Oswaldo Cruz, 79: 181-195) and from Brazil by Barreto et al. (1986, Mem. Inst. Oswaldo Cruz, 81 Suppl. 1:63) and Vexenat et al. (1986, Mem. Inst. Oswaldo Cruz, 81:237-238) contribute to the understanding of the epidemiology of cutaneous leishmaniasis in certain areas of those countries where apparently dogs as well as equines might be regarded as sources of infection.

Acknowledgements: To Dr. Leonidas M. Deane for orientation and revision of the text. Also to Alfredo C. R. Azevedo, André F. Barbosa, Eduardo D. Wermelinger and Nataly A. Souza for technical assistance.