Active transmission of *Leishmania braziliensis braziliensis* in the Serra de Mar forest, São Paulo, Brazil

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There is strong epidemiological evidence (Forattini et al., 1976) suggesting that in the Ribeira river valley, São Paulo, cutaneous leishmaniasis is transmitted to man in and around dwellings. Gomes et al. (1983) have shown that the suspected vector, *Psychodopygus intermedius*, is taken in greater number off man in and around houses than in the surrounding forest. Further epidemiological studies were undertaken in the Serra de Mar forest, on the borders of the municipalities of Miracatu and Pedro Toledo, to try to determine the transmission season in the local forest and peridomestically. Transmission was monitored by continuously exposing sentinel hamsters during the different seasons between 1982 and 1984. Hamsters were placed in 10x40x50 cm wire cages suspended approximately 50 cm above the ground and covered to protect against rain. Eight hamsters were exposed in the peridomical area and 5 in the neighbouring forest. Between spring 1982 and winter 1984 hamsters were exposed for a total of 699 d in the peridomestic area and for 342 d in the forest.

A single animal that had been a sentinel in the forest during part of the 1982 winter, between 27 July and 21 September, developed a lesion on its front right paw 5 months after being returned to the laboratory. Amastigotes were seen in Giemsa-stained smears and positive cultures were obtained from the lesion and from the liver and spleen. The strain (MMES/BR/82/HM1B) was identified with subspecies-specific leishmanial monoclonal antibodies (McMahon-Pratt et al., 1982) as belonging to serodeme 1 (Shaw et al., 1986) of *Leishmania braziliensis braziliensis*. Two other strains, isolated before the present study from a man (MHOM/BR/81/HVR) and a dog (MCAN/BR/81/ICVR), also belonged to the same serodeme. The site at which the sentinel hamster became infected was a tongue of low forest continuous with the rest of the Serra de Mar forest, and the nearest house was about 1 km away.

The absence of human cases in 1982 indicates that peridomestic transmission did not occur. Peridomestic transmission was monitored by continuously exposing sentinel hamsters during the different seasons between 1982 and 1984. Hamsters were placed in 10x40x50 cm wire cages suspended approximately 50 cm above the ground and covered to protect against rain. Eight hamsters were exposed in the peridomical area and 5 in the neighbouring forest. Between spring 1982 and winter 1984 hamsters were exposed for a total of 699 d in the peridomestic area and for 342 d in the forest.

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