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Research Note

AN AUTOCHTHONOUS CASE OF CUTANEOUS LEISHMANIASIS CAUSED BY *LEISHMANIA (LEISHMANIA) AMAZONENSIS* LAINSON & SHAW, 1972 FROM THE NORTH OF PARANÁ STATE, BRAZIL

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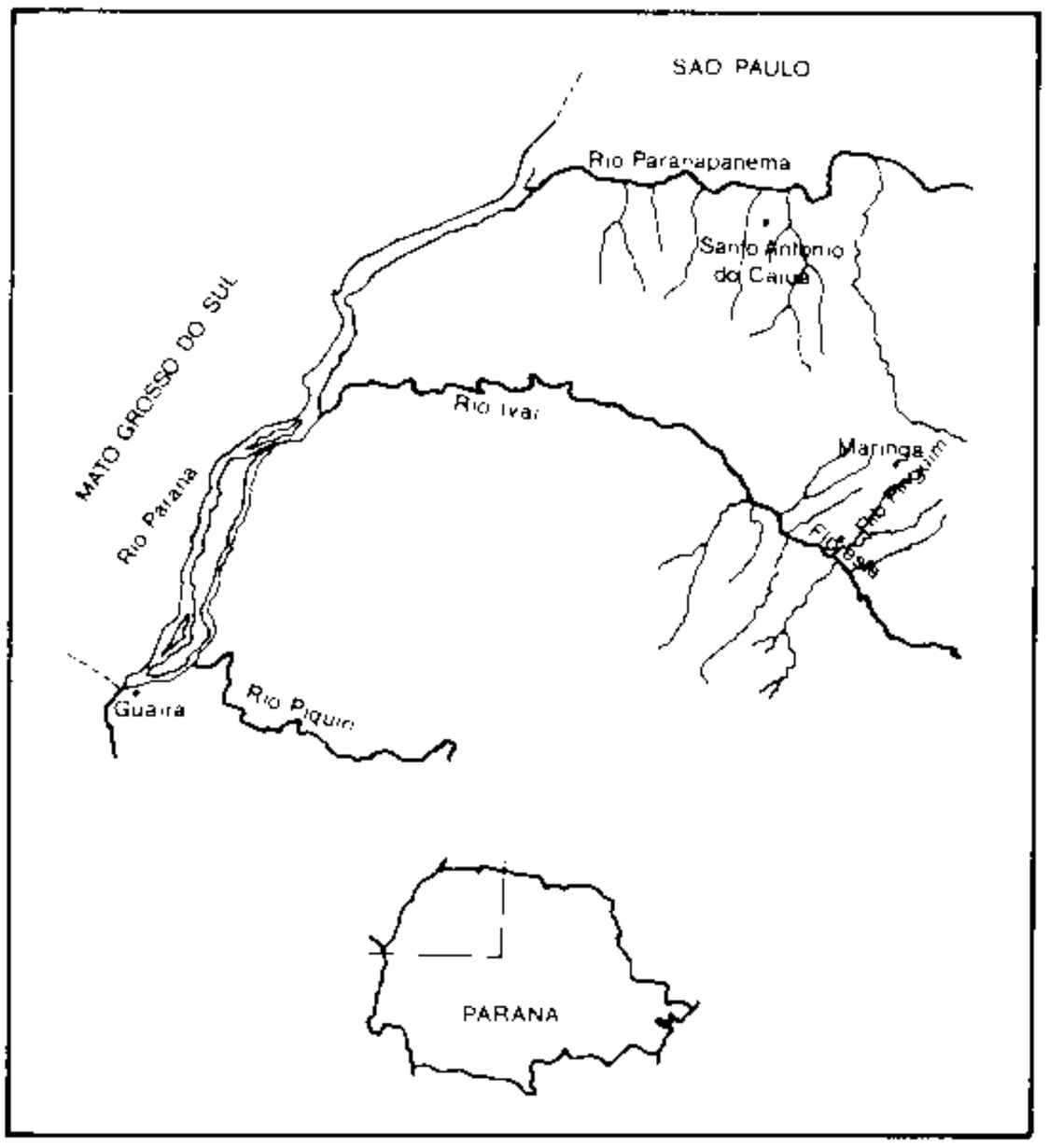
According to E. Rabello (1917, *Ann. Fac. Med.*, Rio de Janeiro, *1:* 308-335) cutaneous leishmaniasis was first recorded from Paraná State by Sousa at the beginning of the century. In 1940 S. B. Pessôa & M. P. Barretto (1944, *Leishmaniose tegumentar,* Imprensa Nacional, Rio de Janeiro, p. 30) diagnosed an unspecified number of cases from the Paranaense counties of Procópio and Perianito, both in the northern region of the State. Since then the disease has received little attention, but continues to occur in this area despite a drastic reduction in the area of forest.

A total of 14 strains of *Leishmania* isolated from patients, who live in the north of Paraná State, Brazil (Figure), were identified with monoclonal antibodies using the method described by J. J. Shaw et al. (1989, *Trans. R. Soc. Trop. Med. Hyg., 83:* 783-784). Thirteen strains were *L. (Viannia) braziliensis* Vianna, 1911, and of these 7 belonged to serodeme I, 1 to serodeme II and 5 to serodeme III (J. J. Shaw et al., 1986, p. 179-183. In *Leishmania taxonomie et phylogenese. Applications éco-épidémiologiques,* Coll. int., CNRS/INSERM/OMS, 1984, IMEEE, Montpellier, France). The other strain (MHOM/BR/88/166MJO) was *L. (L.) amazonensis* and was isolated from a 34 year old male patient (M. J. O.) in May, 1988 at the Clinical Analysis Teaching and Research Laboratory, Maringá State University, Maringá, Paraná, Brazil. On this occasion, the patient had 3 small lesions on his left elbow and 1 larger lesion on his left forearm which he calculated as being about 10 days old. Only the lesion on the forearm had the typical raised borders of a leishmanial lesion. Smears from this lesion were negative as was the serology in an indirect immunofluorescent test, but the Montenegro reaction was positive and measured 32 mm in diameter. Tissue from this lesion was inoculated intradermally into the hind feet of a hamster and 18 months later lesions, containing large numbers of amastigotes, had developed on all 4 feet, the nose and the ears. Cultures from the infected hamster were made in Blood Base Agar (B. C. Walton et al., 1977, *J. Parasit., 63:* 1118-1119), and sent by for identification to the Evandro Chagas Institute, Belém, Pará, Brazil.



Map showing counties of Maringá, Floresta and Santo Antônio do Caiuá, in the north of Paraná State, Brazil.

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The patient, M. J. O., has been a resident in Maringá, Paraná, for the past 7 years, but he frequently goes fishing in the Ribeirão Pinguim river, Floresta county. All the lesions were cured after a course of 180 ampoules of Glucantime. Twelve years earlier M. J. O., contracted cutaneous leishmaniasis as a single lesion on the abdomen, while hunting in the forests bordering the river Paranapanema, Santo Antônio do Caiuá county, Paraná State. This infection was successfully treated with 100 ampoules of Glucantime.

We conclude that the infection was contracted in Floresta county during one of the patients fishing trips. This is as far as we know the most southerly record of *L. (L.) amazonensis*. The Ribeirão Pinguim river is a tributary of the Paraná river whose basin extends into southern Mato Grosso. In the southern region of the Araguaia river valley *L. (L.) amazonensis* has been recorded from several different rodents and marsupials (R. Lainson & J. J. Shaw, 1970, *Trans. R. Soc. Trop. Med. Hyg., 64:* 654-667). It is possible that a degree of ecological continuity between the two river systems is responsible for this southerly location of the *L. (L.) amazonensis*. The enzootic cycle in this region is unknown and it remains to be seen if the reservoirs and vector are the same as in the Amazon region.

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