

## LETTER TO THE EDITOR

### HANTAVIRUS PULMONARY SYNDROME IN THE RURAL AREA OF JUQUITIBA, SÃO PAULO METROPOLITAN AREA, BRAZIL\*

Sir,

Although cases of Hantavirus infections in rodents and humans have been identified in the State of São Paulo<sup>2,3,4,5</sup>, there has not been any documented diagnosis of human disease associated with these agents.

In December 1993, acute hantavirus infection was identified in three brothers inhabiting the rural area of Juitiba, in the São Paulo metropolitan area (Figure 1). Their living conditions were poor, with the house also used for storage of domestic animal food. Wild rodents also inhabited their domicile. The illness was characterized by fever, headache, myalgia, prostration, cough, dizziness, nausea and/or vomiting. Two of the patients died in a period of 3-5 days with an acute respiratory insufficiency and in one of them shock. The serologic conversion, in samples collected from the surviving patient, by the enzyme immunoassay (ELISA IgM and IgG) against the antigens of Hantaan (HTN) and Sin

Nombre (SN) viruses, and by immunofluorescence assay (IFA) against the HTN antigen, demonstrate acute infection by Hantavirus. There was no laboratory evidence of leptospirosis in two patients or bacterial and fungal infection in the surviving one. The serologic survey in 49 persons living in the neighbourhood of the patients detected (by ELISA) 4 persons with anti-HTN antibodies (IgM or IgG) and IgG antibodies against the antigen and recombinant nucleoprotein of the Sin Nombre (SN) virus in three persons, two of whom had antibodies against HTN.

The patients had similar clinical manifestations to those described in cases of Sin Nombre (SN) infection, by a novel Hantavirus identified in the United States in May 1993<sup>1,6</sup>. The serologic evidences suggest that an antigenically similar virus to SN virus is responsible for the cases in Juitiba.

The Hantavirus pulmonary syndrome disease transmitted by rodents has not been previously diagnosed in Brazil.

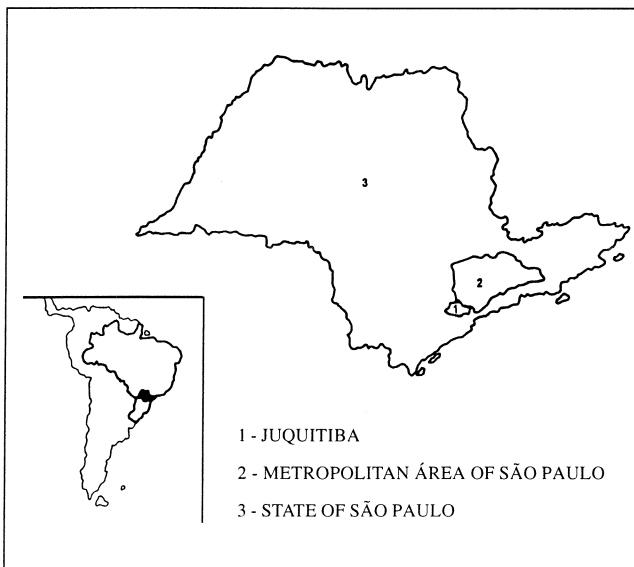


Fig. 1 - Localization of Juitiba in metropolitan area of São Paulo, state of São Paulo, Brazil

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