

LABORATORY DIAGNOSIS AND RESEARCH OF RABIES ANTIBODIES IN CHIROPTERA IN THE STATE OF SAO PAULO, DURING THE PERIOD 1992 TO 1995.

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There are 950 species of Chiroptera in the world, and 140 of these are in Brazil, the majority of which are insectivorous and frugivorous. They are populous species, in part because of the absence of efficient predators. Of those bats presenting a positive diagnosis of rabies in Brazil, 50% are insectivorous and 15,4% frugivorous, however the majority of 55 attacks resulting in death in the period 1986 to 1995 were caused by hematophagous bats. The Center for the Control of Zoonosis of the Municipality of São Paulo, from 1992 to 1995 collected 115 specimens of bat serum, 68 from the City of São Paulo (59.1%), 24 from Greater São Paulo (20.9%), 23 from the interior of the State (20%). All of the 115 specimens proved negative when submitted to direct immunofluorescence diagnosis for rabies and inoculation in mice. The serology was effected by the RFFIT technique, resulting in 98 demonstrating titers less than 0,1 IU/ml (85.2%), 13 with titers of 0.1 to 0.49 IU/ml (11,3%) and 4 with titers above 0.5 IU/ml (3.5%). The existence of neutralizing rabies antibodies in bats indicates previous contact with the rabies virus. This fact together with the non-isolation of the antigen in the brains of bats demonstrates that the pathogenesis and the dynamic of the disease in bats has not been totally clarified. Factors such as induced tolerance through precocious exposure to the rabies virus by aerosols within the environment of the caverns, sub infectious doses of the virus and types of serum other than type no. 1, possibly circulating within the bat population, should be researched with a view to determine the pathogenesis in such animals.