

In the epidemiology of the American visceral leishmaniasis (AVL) the etiologic agent is *Leishmania chagasi*; the principal vector is *Lutzomyia longipalpis*; man and dogs are host victims but serve as important domestic reservoirs and foxes and opossums probably represent sylvatic and/or peridomestic reservoirs but their real importance are still unknown. So, they have not been included in the control measures.

The works that have been published about the control of AVL deal with a set of three methods of controlling. They are: *Treatment of human cases* — In northeast of Brazil, in the treatment of human cases a low rate of incidence has been obtained, but this method alone was not sufficient to effect a substantial reduction in the incidence of new cases (1). *Elimination of infected dogs* — that seems to be the principal landmark in the control of AVL. The elimination is necessary because there is no treatment for the disease in dogs. In a pilot endemic area in Jacobina, Bahia, in 1982 among 46 examined dogs we found 11 (23.9%) of positives and all infected dogs were killed; in 1984, 40 dogs were examined and 19 (47.5%) were positives. In those years the incidence of human cases was higher in 1984 than in 1982. It seems that this method did not work well.

Alencar (1963) called attention for an irregular rate of incidence of AVL that have not a definitive reduction in those localities where only the human cases were treated and 78,929 infected dogs were killed in the State of Ceara. In 14 endemic localities which were also sprayed, the incidence of AVL was reduced by 67.7% in contrast to the 14 unsprayed control endemic localities where the rate of incidence decreased by only 25.4%. The necessity of spraying insecticides to control AVL agrees with Deane's thought (2) that emphasized a strict necessity of existence of a high density of *L. longipalpis* for the incidence of human cases. In this way it is possible to provoke a notable decrease in the incidence of human cases of the disease. However, as soon as control measures are interrupted, the disease breaks out again and continues its natural history.

In conclusion one can see that a incomplete picture of the ecology and epidemiological characteristics of AVL remains. More multidisciplinary studies are necessary to answer some questions that still persist. Then, it will be possible to have more knowledgments to adequately control AVL.

1) Alencar JE de 1963 Rev. Bras. Mal. D. Trop. 15:417; 2) Deane LM 1956 Ser. Na. Ed. San.