

## AUTOCHTHONOUS *WUCHERERIA BANCROFTI* MICROFILAREMIA IN THE CITY OF MACEIÓ, ALAGOAS – BRAZIL

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During the period of 1951 to 1956, epidemiological surveys on filariasis were conducted in Brazil, and bancroftian filariasis were detected in Manaus (Amazonas), Belém (Pará), Recife (Pernambuco), Maceió (Alagoas), Salvador and Castro Alves (Bahia), Florianópolis and Ponta Grossa and Barra de Laguna (Santa Catarina), Porto Alegre (Rio Grande do Sul) and São Luis (Maranhão) (R. G. Rachou, 1957, *Rev. Bras. Malariol e Doenças Trop.*, 9: 79-100). Before that, it is important to mention Causey et al., in 1945, carried out studies on the incidence and transmission of filaria, *Wuchereria bancrofti*, in Belém, Brazil (Causey et al., 1945, *Am. J. Hyg.*, 41: 143-149).

Coqueiro, in 1922, found a remarkable percentage of 46.5% of parasitological and clinical filariasis in Maceió (Apud L. M. Deane et al., 1953, *Rev. Bras. Malariol. Doenças Trop.*, 5: 520-522).

L. M. Deane et al., in 1952 (*Anais do X Congresso Brasileiro de Higiene*, Belo Horizonte, 19-25 outubro de 1952, 520-523), performing a parasitological survey in 6% of the population in Maceió, found 18 microfilaremic individuals of 6052 persons examined. The infectivity index in *Culex* was also investigated and no infective larvae were found. In this case no reference was made whether the 18 infected people were autochthonous or not.

At this moment only Recife (G. Dreyer 1987, *Mem. Inst. Oswaldo Cruz*, 82: *Suppl. IV*: 359-360) and Belém (SUCAM, 1989, Relatório 1988 – Belém do Pará) have been considered

as endemic areas for bancroftian filariasis in Brazil.

After examining an autochthonous patient from Maceió with retrograde lymphangitis, one of the clinical forms of lymphatic filariasis, the authors decided to investigate the occurrence of microfilaremic cases in that city. For this purpose, 731 military personnel were examined by thick film, and two positive cases were found in February, 1990. They were 19- and 21- years old and autochthonous to Jacintinho, a district of Maceió. The microfilaria densities, estimated by filtration technique (P. Chularery et al., in 1970, *J. Parasitol.*, 56: 623-624) were 860 and 1,640 microfilariae (mf) per ml of blood. Investigation of the families led to the detection of one mf positive brother (320 mf/ml) out of 11 other members of the two families.

The identification of these three microfilaremic autochthonous cases has triggered a large epidemiological survey in Maceió. This survey has been conducted by the Federal University of Alagoas on the schools, and until now 112 (1.1%) autochthonous microfilaremic cases from Maceió have been identified among 9,699 students (E. Rocha & G. Fontes, personal communication).

According to SUCAM, filariasis has been under control in Maceió. These data indicates, however, that the incidence of the disease may be increasing, and that a complete epidemiological study of the present situation of filariasis in that area is obviously necessary. This is especially important because, with the potential expansion of the microfilaremic stage, morbidity (elephantiasis, chyluria, and other chronic clinical forms) will probably take place after 10 to 20 years, if control measures are not initiated. The success of these measures depends

essentially on the integrated collaboration of the SUCAM, the Federal University, the State Department of Health, and the community, as they collectively decide to combat this disease.

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