

UNUSUAL PREVALENCE OF *LEISHMANIA* *BRAZILIENSIS BRAZILIENSIS* IN FOUR FAMILIES

In the area of Três Braços, Bahia, Brazil, one of the few remaining areas of bahian littoral forest, tegumentary leishmaniasis is endemic¹. *Leishmania braziliensis braziliensis* is responsible for the great majority of infections² and as a result mucosal metastasis is frequently seen^{1,3}. A five year longitudinal study (1979-1984) of the prevalence and incidence of tegumentary leishmaniasis among 2,494 people living in 15 farms has recently been analysed (Jones TC: personal communication). The data show that leishmaniasis is a sporadic endemic disease occurring irregularly in different farms throughout the period of study. Usually only one case occurred in family during this period (75%). Two cases occurred in 16% of families while only 9% of families recorded 3 or more cases.

However have seen an unusual prevalence of leishmaniasis in four families in the area and it is these families we wish to report here.

Table 1 lists relevant epidemiological data on the four families. High numbers of cases of leishmaniasis occurred in each family. From two patients in Family 1 with cutaneous disease and one patient with mucosal disease in each of families 3 and 4 stocks were recovered and identified as *Leishmania braziliensis braziliensis*.

A number of family members acquired the disease in the same year a situation resembling the micro epidemics seen in certain farms. These years were variable and in three instances (Family 2 and two occasions in Family 4) coincided with the clearing of forest for a new house or plantation. All families lived in heavily forested areas and we have recently reported an association between mucosal disease patients and

forest regions in this area⁴. The number of patients with mucosal disease is variable and will depend on the time interval after initial cutaneous infection³.

Negroid origins has been suggested as a factor favouring mucosal involvement but in the very mixed Brazilian populations skin colour was not associated with a greater incidence of mucosal disease⁵. In these four families Family 4 had the lightest skin colours and the highest number of patients with mucosal disease. It would seem that the unusual incidence of leishmaniasis in these families is not due to a genetic predisposition but to high risk epidemiological factors associated with house siting and forest clearing.

REFERÊNCIAS

1. Barreto AC, Cuba CC, Marsden PD, Vexenat A, De Belder M. Características epidemiológicas da leishmaniose tegumentar americana em uma região endêmica do Estado da Bahia, Brasil. I. Leishmaniose humana. Boletim Oficina Sanitária Panamericana 90: 415-422, 1981.
2. Cuba CC, Marsden PD, Barreto AC, Roitman I, Vexenat A, De Luna L, De Sá MH. Identification of human stocks of *Leishmania* spp. isolated from patients with mucocutaneous leishmaniasis in Três Braços, Bahia-Brazil, Transactions of the Royal Society of Tropical Medicine and Hygiene 78: 708-710, 1984.
3. Marsden PD, Llanos-Cuentas EA, Lago EL, Cuba CC, Barreto AC, Costa JM, Jones TC. Human mucocutaneous leishmaniasis in Três Braços, Bahia-Brazil. An area of *Leishmania braziliensis braziliensis*. III. Mucosal disease presentation and initial evolution. Revista da Sociedade Brasileira de Medicina Tropical 17: 179-186, 1984.

Table 1 - Prevalence of mucocutaneous leishmaniasis* in four families

Family No.	Initials of family head	No. of family members	No. with skin scars of leishmaniasis	No. acquiring disease in same year	Year of maximum acquisition	No. with mucosal disease
1	J T	9	8	4	1981	0
2	B O	13	8	7	1972	1
3	F S	10	7	3	1967	2
4	P S	9	6	3 and 3	1972 and 1975	3

(*) All skin scars were associated with a positive Montenegro test.

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4. Netto EM, Marsden PD, Costa JML, Barreto AC, Cuba CC. Procedência da paciente com leishmaniose de mucosa em área endêmica da Bahia, Brasil. *Revista da Sociedade Brasileira de Medicina Tropical* 19: 121-122, 1986.

5. Tavares-Neto J, Costa JML, Marsden PD, Barreto AC, Cuba CC. Composição racial e a avaliação da reação intradérmica de Montenegro em portadores de leishmaniose cutâneo-mucosa. *Revista da Sociedade Brasileira de Medicina Tropical* 19: 75-78, 1986.

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