

ABSENCE OF HTLV-III/LAV ANTIBODIES IN EX-RESIDENTS FROM ANGOLA AND MOZAMBIQUE RETURNING TO PORTUGAL BEFORE 1979

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SUMMARY

We analyzed the prevalence of antibodies to HTLV-III/LAV in ex-residents from Angola and Mozambique who returned to Portugal (Lisbon) before 1979. The absence of antibodies to HTLV-III/LAV suggests that the infection was not highly prevalent in these African countries before the development of the AIDS epidemic in the United States. Further studies of this type in ex-residents from other areas of Africa may be of help in the analysis of the difficult question of whether HTLV-III/LAV originated in the African continent.

RESUMO

Ausência de anticorpos anti-HTLV-III/LAV em ex-residentes em Angola e Moçambique regressados a Portugal antes de 1979

Analisou-se a prevalência de anticorpos anti-HTLV-III/LAV em ex-residentes em Angola e Moçambique regressados a Portugal antes de 1979. A ausência de anticorpos contra o HTLV-III/LAV sugere que a infecção não era prevalente nestes países antes do aparecimento da epidemia nos Estados Unidos. Estudos deste tipo em ex-residentes de outros territórios africanos poderão ser de interesse para a análise da difícil questão da origem africana do HTLV-III/LAV.

The problem of the possible African origin of the HTLV-III/LAV infection is a controversial topic which is receiving much attention in medical literature.¹⁻³ For instance, recently Hunsmann and colleagues⁴ suggested that the HTLV-III/LAV infection did not originate from Africa; this contrasts with previous suggestions based on studies reporting a high prevalence of HTLV-III/LAV in different African countries (Zaire, Zambia, Uganda, Rwanda, Kenya).⁵⁻⁹ However, most of these studies with one exception⁹ were done in samples collected after the development of the AIDS epidemic in the USA (1981).

We studied a group of 100 healthy ex-residents from Angola (41) and Mozambique (59) (mean age: 39.2 ± 8.6 years, 35 males, 65 females) who returned to Portugal (Lisbon) between 1973 and 1979 and who did not revisit Africa since then. They lived in Africa for periods between 4 and 50 years (mean 23.2 ± 11.6). Fifty three were white, 26 black, 19 mixed and 2 were chinese. Seventy two had previous episodes of Malaria, 12 were exposed to blood transfusions and 32 received parenteral injections during their period of residence in Africa (Table 1). Blood samples were collected in 1985 and tested for HTLV-III antibodies by a immunofluorescence assay using HTLV III infected Hq cells (supplied by Robert Gallo) and by an antibody capture ELISA (Abbott). All sera were negative. These results contrast

with the ones reported from other neighbouring countries (e.g. Zaire which has a border with Angola and Uganda and Rwanda, close to Mozambique), where a high prevalence of HTLV-III infection in the population was reported in samples collected after 1981.⁵⁻⁸ It is worth noting that individuals in our group were negative for HTLV-III antibodies in spite of having a high rate of exposure to transfusions and parenteral injections.

These preliminary results suggest that in Angola and Mozambique, infection with HTLV-III was not highly prevalent before the development of the AIDS epidemic in the USA. On the other hand it may be hard to exclude the possibility that remote parts of the region were areas of high local prevalence, whence infection spread with the movement and changing behaviour of peoples. Further studies of this type in ex-residents from other areas of Africa may be of help in the analysis of the difficult question of whether HTLV-III/LAV originated in the African continent. Such an approach circumvents both the problem of the lack of old stored sera from residents of such countries and the problems caused by sub-optimal storage conditions of those sera that are available. However the somewhat academic interest in the origins of the retrovirus must not be allowed to obscure what will now be all too evident current problems in Central African countries arising from the effects of the virus, irrespective of its origin.

TABLE 1 Characteristics of the individuals studied

1. Total:	100 individuals
2. Ex-residents in:	
Mozambique:	59
Angola:	41
3. Age (years):	
Mean + SD =	39.2 ± 8.6
Limits:	24 to 62
4. Sex:	
Males:	35
Females:	65
5. Place of birth:	
Portugal:	32
Mozambique:	35
Angola:	21
Other:	12
6. Race:	
White:	53
Black:	27
Mixed:	18
Other:	2
7. Periods in Africa (duration):	
4 - 10 years -	12
11 - 20 years -	26
More than 20 years -	62
8. Year of Return to Portugal:	
1974 and 1975:	39
1976 and 1977:	46
1978 and 1979:	15
9. Previous history of:	
Malaria:	72
Transfusions (blood):	12
Parenteral drugs:	32

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