

Abstracts

The following are reproduced with our grateful acknowledgement to the Bureau of Hygiene and Tropical Medicine, Keppel Street, London WC1E 7HT.

5. Epidemiology

PROST A, NEBOUT M, ROUGEMONT A (1979) **Lepromatous leprosy and onchocerciasis.** *British Medical Journal* 1 (Mar. 3), 589–590

The authors begin by quoting previous publications on the striking impairment of cell-mediated immunity in patients heavily infected with onchocerciasis, in areas where onchocerciasis is hyperendemic. Since cell-mediated immunity is known to be low or absent in lepromatous leprosy, they decided to compare the prevalence of leprosy, in districts with and without a high prevalence of severe onchocerciasis, in the Republic of Upper Volta.

They conclude that their results indicate that the prevalence of lepromatous leprosy is about twice as high in the areas where onchocerciasis is hyperendemic, and that this agrees with the hypothesis that ‘... a highly infected patient with onchocerciasis is more likely to develop the lepromatous form of leprosy and any other infection.’ [This very short communication does not do justice to the potentially great importance of such an assertion; one could wish for much more data on the immunological state of the patients studied, including a comparison between those with severe onchocerciasis only, and those with severe onchocerciasis plus fully developed lepromatous leprosy. If this important work is to be reported at greater length elsewhere, some information on the incidence of tuberculosis of various types

in patients heavily affected by onchocerciasis would also be of interest.

This paper is concerned with clinical findings and immunology, but it would be valuable if further studies in this and similar areas, endemic for onchocerciasis and leprosy, could pay some attention to the ingestion and fate of bacilli by Simuliidae from patients with untreated lepromatous leprosy.]

A C McDougall

FINE PEM *et al.* (1979) **HLA-linked genes and leprosy: a family study in Karigiri, South India.** *Journal of Infectious Diseases* 140 (2), 152–161

‘The evidence for a genetic determination of susceptibility to leprosy is reviewed. To test the hypothesis that an HLA (histocompatibility leukocyte antigen)-linked gene is associated with such susceptibility, the association between the distribution of leprosy within a family and the segregation of HLA haplotypes was investigated among 72 families who lived in Karigiri, Tamil Nadu State, South India. A statistically significant association was found for families in which siblings had tuberculoid leprosy and in which neither parent had leprosy. The findings from the data of this study agree with those of two previous studies carried out among smaller populations in Surinam and Wardha, Maharashtra State, India. Such an agreement suggests that a genetic determinant which is linked to the major HLA locus on chromosome 6 and which is probably recessive affects susceptibility to tuberculoid leprosy in humans.’

[See also *Trop. Dis. Bull.*, 1977, 74, abstr. 585.]