TO THE EDITOR:

Four recent publications (<sup>1,2,4,5</sup>) have drawn attention to the unexpected significance of the fingers in leprosy with particular regard to slit-skin smears, and the subject has been fully reviewed by Jopling (<sup>3</sup>). These interesting and original observations have so far related entirely to patients with lepromatous leprosy and are to some extent understandable since apparently uninvolved skin in this form of leprosy quite regularly contains bacilli. Clearly this new knowledge should now be applied to much larger numbers of lepromatous patients, before and after treatment, and including those who are dapsone resistant.

The purpose of this letter, however, is to suggest that such examination should be extended to include patients with non-lepromatous leprosy in whom apparently uninvolved skin is considered not to contain leprosy bacilli. This suggestion is prompted by the observations of Pearson (Pearson, J. M. H. personal communication, 1979), who took skin biopsies from patients with BT leprosy in reversal (upgrading) reaction. These patients showed active discrete lesions of the trunk and limbs, but there were no evident lesions of their warm swollen hands and feet. Biopsies were taken from a skin lesion and from the dorsum of a finger; they showed epithelioid granulomata at both sites though no acid-fast bacilli were seen.

It is generally believed that reversal reactions are the clinical manifestations of temporarily enhanced cell mediated immune responses to antigens of *M. leprae*. Pearson's findings suggest that the hand may, even in non-lepromatous leprosy, be a site of predilection for leprosy bacilli. Skin smears and biopsies could be taken from the fingers and hands in patients with active untreated non-lepromatous leprosy; such studies might provide new information on the localization of *M. leprae* and could also throw light on the pathogenesis of reversal reactions. Dr. Jopling has reminded me that the possible presence of "hidden foci" of *M. leprae* in dermal nerves in the hands and fingers would be of particular interest and importance.

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## REFERENCES

- HAIDAR, A., BELEHU, A., STONER, G., TOUW, J. and ATLAW, T. Selection of sites for slit-skin smears. Lepr. Rev. 50 (1979) 283–287.
- HIRAMALINI, S., JOSEPH, N. A. and CHACKO, C. J. G. Concentration and persistence of bacilli in the fingers and toes of patients with lepromatous leprosy. Lepr. Rev. 49 (1978) 223–229.
- JOPLING, W. H. The saga of the skin smear. Editorial. Lepr. Rev. 50 (1979) 272–273.
- JOPLING, W. H., REES, R. J. W., RIDLEY, D. S., RIDLEY, M. J. and SAMUEL, N. M. The fingers as sites of leprosy bacilli in pre-relapse patients. Lepr. Rev. 50 (1979) 289–292.
- RIDLEY, M. J., JOPLING, W. H. and RIDLEY, D. S. Acid-fast bacilli in the fingers of long-treated lepromatous patients. Lepr. Rev. 47 (1976) 93–96.