

## The Fingers in Non-lepromatous Leprosy

TO THE EDITOR:

Dr. McDougall <sup>(1)</sup> comments on Dr. Pearson's finding of inflammatory cells in the skin of the fingers of patients with non-lepromatous leprosy in the absence of skin lesions. He concludes that the fingers may be a focus for leprosy bacilli similar to the observations in patients with lepromatous leprosy. However, in describing Dr. Pearson's findings, he states that although inflammatory cells were present "no acid-fast bacilli were seen." Previously, I described inflammatory cells in the skin of the hand of a patient who had severe edema of the hands and feet and acute sensory loss. There was no hypopigmented skin lesion at this site, and in spite of inflammatory cells, no acid-fast bacilli were found <sup>(1)</sup>. At the X International Leprosy Congress at Bergen in 1973, I described two further non-lepromatous leprosy patients who had edema of the hands and feet in which skin biopsies showed inflammatory cell infiltrates at these sites <sup>(2)</sup>. Dr. Pearson's observations in patients with swollen extremities would be consistent with these findings.

The significance of these findings lies in the fact that this inflammatory cell infiltrate is associated with sensory loss which may be acute and is of glove and stocking distribution, i.e., a sensory polyneuritis prob-

ably occurring in the *absence* of leprosy bacilli. If unrecognized and untreated, sensory loss will be irreversible, leading to the inevitable sequelae: mutilation of the fingers and toes, ulcers of the feet, osteomyelitis, and Charcot's joints. Current descriptions of "reversal reactions" emphasize the pain and swelling in the hypopigmented skin lesions and also in the peripheral nerve trunks but infrequently mention the edema of the hands and feet. In my opinion, it is the edema of the hands and feet which is much more important in indicating nerve damage, and it usually occurs in the absence of visible changes in the skin lesions and pain in the nerve trunks <sup>(3)</sup>. Furthermore, the experimental finding of foot pad swelling, mononuclear cell infiltration, and cutaneous nerve damage in thymectomized and irradiated mice which have been given injections of lymphocytes is similar to this clinical syndrome <sup>(5)</sup>.

Dr. McDougall's suggestion of the need for further investigation of this syndrome is welcome. The dose and timing of corticosteroid therapy could be monitored by performing serial skin biopsies in the hands and feet.

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