Single Lesion Subpolar Lepromatous Leprosy and Its Possible Mode of Origin

TO THE EDITOR:

It is, indeed, intriguing to go through the article titled above by eminent authors ([1]), supplementing their observation made earlier ([12]). They have undoubtedly endeavored to put forth a provocative and innovative hypothesis on the backdrop of intensive current research on animal inoculation and the armadillo as a model for human leprosy. One would have thought it imperative, however, to clearly define the criteria for arriving at a diagnosis of subpolar lepromatous leprosy, which appears to be the major thrust of the article. There are certain glaring omissions of clinical data which, it appears, make it convenient to come to the above diagnosis. Although the morphological characteristics of the lesions are well described, the details regarding evolution of the lesions supplied to the reader can hardly be called lucid and, if elaborated further, may have strengthened the hypothesis advanced by the authors.

There is hardly any dispute as far as inoculation as a mode of transmission of leprosy is concerned. This has been illustrated through several recent reports ([2–8]). In these reports, the cases usually conform to either indeterminate, borderline tuberculoid, or tuberculoid tuberculoid leprosy. Furthermore, the location of the lesions was usually on areas amenable to trauma ([6]). Lepromatous leprosy has thus far never been reported, and the authors need to be complimented for endeavoring to do so. However, the sequence of events resulting in a single isolated nodule of subpolar lepromatous leprosy, in the absence of any immunological evidence for the same, remains unconvincing. The lepromin skin test, other clinical tests to determine the status of the cell-mediated delayed hypersensitivity, tests

to establish the status of the immunity and response of lymphocytes to *Mycobacterium leprae* antigens would, if done, have gone far to further the case for the authors while arriving at the immunological diagnosis and ultimate classification of these cases.

The morphological and histopathological findings of the lesions, especially in patients 2 and 3, are clearly consistent with the histoid variant of multibacillary leprosy. This clinical entity has recently been the subject of several publications ([9-11]). It is characterized by translucent papules, nodules and/or plaques appearing over an apparently normal skin. The history of evolution of these lesions is fairly important. Demonstration of solid-staining, discrete *M. leprae* in slit-skin smears is an important supplement. Diagnosis is usually confirmed further by the characteristic findings in hematoxylin and eosin-stained paraffin sections, wherein spindle-shaped histiocytes displaying either crisscross, parallel or whorled patterns of alignment are observed. Sometimes the differentiation between histoid leprosy and histiocytoma cutis can only be made after histochemical studies. The lepromin skin test in patients with such lesions is usually negative.

—Virendra N. Sehgal, M.D., F.N.A.Sc.
Sambit N. Bhattacharya, M.B.B.S.

Department of Dermatology and Venereology
Maulana Azad Medical College and associated LNJPN and GB Pant Hospitals
New Delhi 110002, India

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