

## CLINICAL NOTES

*In an effort to increase the utility of the JOURNAL in continuing medical education, in this section we welcome contributions dealing with practical problems in leprosy work. Submissions to this section will undergo minimal editorial changes and may well contain controversial points. Letters to the Editor pointing out other viewpoints are welcome.*

## Discoid Lupus Erythematosus and Lepromatous Leprosy

Leprosy can, in our experience, be confused with lesions from a number of other diseases, prominent among which are granuloma annulare, granuloma multiforme, pseudolymphoma, Jessner's lymphocytic infiltrate, eosinophilic granuloma, leishmaniasis, sarcoidosis, syphilis, morphea, tinea, lupus vulgaris and necrobiosis lipoidica which is frequently anesthetic.<sup>1</sup> Even sporotrichosis may be considered within the differential diagnosis.<sup>2</sup> In addition, a patient may, of course, have more than one disease.

**Case report.** A 30-year-old woman had been diagnosed as having multibacillary (MB) leprosy by a medical assistant in October 1993 in Battambang, Cambodia. Slit-skin smears were reported as being positive at that time, and she was registered and treated with multidrug therapy as recommended by the World Health Organization (WHO/MDT) for MB leprosy.<sup>3</sup> Findings at registration had included several erythematous plaques, mostly on the body, but there were no enlarged nerves or disabilities. During subsequent months a type 2 reaction was diagnosed on several occasions by the medical assistant who started treatment with up to 40 mg of prednisolone/day on each occasion. These type 2 reaction symptoms were only poorly described and were never confirmed by the supervisor.

In view of this history of recurrent type 2 reactions, the patient was reviewed by JMP and DL in May of 1994. On the basis of the facial lesions a diagnosis of discoid lupus erythematosus was made (Fig. 1). Although it was not feasible to carry out any confirmatory laboratory examinations, the diagnosis of discoid lupus erythematosus satisfactorily explained all skin lesions found, including the few seen on the rest of the body, and it was assumed that the diagnosis of lepromatous leprosy made in October of 1993 was incorrect and that the slit-skin smears had been misread. On the other hand, there remained a slight suspicion that the right superficial radial nerve was enlarged. Therefore, a split-nerve biopsy was taken under local conditions.

The result of the histopathological examination by SL was as follows: the nerve biopsy showed a chronic, active, lepromatous leprosy neuritis with a bacterial index



FIG. 1. Typical white atrophic lesions of discoid lupus erythematosus on the face of the patient.

<sup>1</sup> Mann, R. J. and Harmann, R. R. Cutaneous anaesthesia in necrobiosis lipoidica. *Br. J. Dermatol.* **110** (1984) 323-325.

<sup>2</sup> Mehta, S. D., Handa, U., Dawn, G., Handa, S. and Kaur, I. Borderline lepromatous leprosy masquerading as lymphocutaneous sporotrichosis. (*Letter*) *Lepr. Rev.* **66** (1995) 259-260.

<sup>3</sup> Bryceson, A. and Pfaltzgraff, R. E. *Leprosy*. 3rd edn. Edinburgh: Churchill Livingstone, 1990.

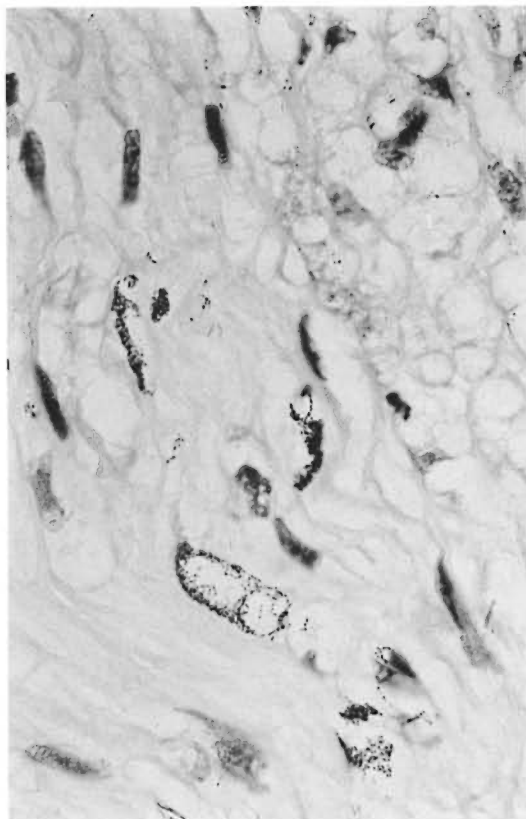


FIG. 2. Longitudinal section of the right superficial radial nerve showing clusters of acid-fast bacilli (Fite-Faraco stain).

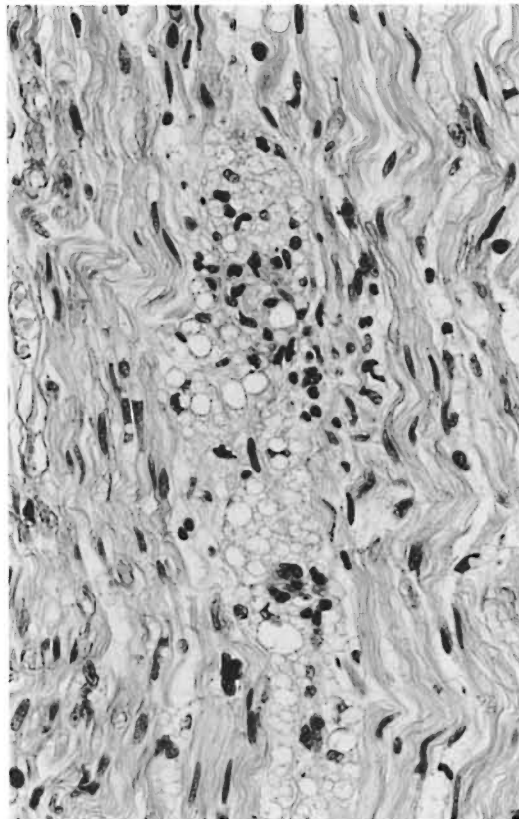


FIG. 3. Longitudinal section of the right superficial radial nerve showing neuritis (hematoxylin and eosin stain).

of 4.5 (fragmented). There was no influx of polymorphonuclear cells to support the diagnosis of intraneural erythema nodosum leprosum (Figs. 2 and 3).

In June of 1994 the patient began treatment for discoid lupus erythematosus in addition to WHO/MDT for MB leprosy.

**Discussion.** The simultaneous occurrence of lupus erythematosus and leprosy has rarely been reported. In a case reported in 1967 lepromatous leprosy and systemic lupus erythematosus appear to have run a parallel course without clear indication which started first.<sup>4</sup> Lepromatous leprosy was only diagnosed 13 years after the onset of symptoms of one or the other or both

diseases. In a Japanese patient, systemic lupus erythematosus developed many years after lepromatous leprosy had been diagnosed.<sup>5</sup> The patient received dapsone and rifampin but the authors concluded that the patient did not suffer from a drug-induced lupus erythematosus. In a case reported in 1987, systemic lupus erythematosus was treated for 8 years with high dosages of prednisone before leprosy developed.<sup>6</sup> The authors did not classify the type of leprosy, but from their description it would appear that the patient had borderline tuberculoid leprosy.<sup>3</sup> Another case of systemic lupus erythematosus and lepromatous leprosy was presented at the 14th International Leprosy

<sup>4</sup> Bonomo, L., Dammacco, F., Tursi, A. and Barbieri, G. Lupoid features in a case of leprosy. *Int. J. Lepr.* **35** (1967) 65-71.

<sup>5</sup> Ohkawa, S., Ozaki, M. and Izumi, S. Lepromatous leprosy complicated with systemic lupus erythematosus. *Dermatologica* **170** (1985) 80-83.

<sup>6</sup> Posner, D. I. and Guill, M. A. Coexistent leprosy and lupus erythematosus. *Cutis* **39** (1987) 136-138.

Congress.<sup>7</sup> However, no details have been published so far.

We describe a patient for whom lepromatous leprosy and discoid lupus erythematosus appear to have developed at the same time. The diagnosis of lepromatous leprosy is based on a split-nerve biopsy (Figs. 2 and 3), the diagnosis of discoid lupus erythematosus on typical skin lesions as shown in Figure 1. We believe that one of these diseases can easily be overlooked in the presence of the other one. In particular, in the tropics where a patient may well have

more than one skin disease, it can be misleading to try to explain all signs and symptoms with one diagnosis. A careful examination and an open mind, supported by access to biopsy pathology, remain the essential tools of a dermatologist supervising a leprosy control service.

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<sup>7</sup> Arunthathi, S., Kumar, K. S. and Samuel, J. Systemic lupus erythematosus in a lepromatous leprosy patient: a diagnostic and therapeutic problem. (Abstract) *Int. J. Lepr.* **61** (1993) 28A.