A Large Hypoanesthetic Patch in Borderline Tuberculoid Leprosy

TO THE EDITOR:

The clinical course of human leprosy is variable and is determined by the cell-mediated immune response of the individual host against *Mycobacterium leprae* ([4]). Hence, the cutaneous manifestations differ according to the type of disease in the leprosy spectrum, ranging from tuberculoid leprosy (TT) to lepromatous leprosy (LL) ([2]). The skin lesions in TT and borderline

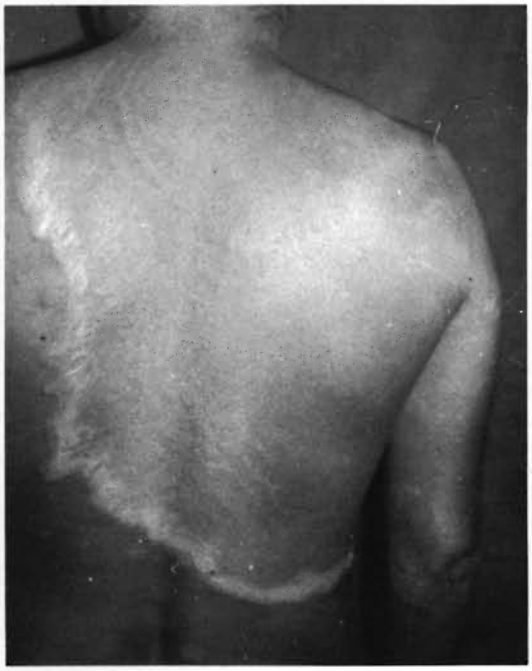

FIG. 1. Large patch on back surrounded by a double-edged irregular border.

tuberculoid (BT) leprosy may be single or few ([1]), and their sizes and shapes are characteristically dissimilar. I would like to record a very large hypoanesthetic patch in a patient with BT leprosy.

A 31-year-old Indonesian male presented with a large hypopigmented patch of several months duration covering about three fourths of the anterior chest, back of chest, and the whole of the right upper limb with extensions to the abdomen and lumbar regions (Figs. 1 and 2). The patch was delineated by an erythematous, well-defined, raised annular ring with irregular inner and outer edges (Fig. 1). It was dry and smooth. The skin at the center was of normal appearance; at the periphery it was hypopigmented. Generally, there was diminished-to-absent sensation for touch, pain, and temperature in most of the affected areas. Hair growth was less at the areola of the right breast which was of normal size (Fig. 2). The right ulnar nerve was tender and enlarged. Mild deformities and associated motor changes due to the involvement of the ulnar nerve ([3]) were seen in the right hand. The area of involvement was assessed using Wallace's "Rule of Nine" for estimating the extent of a burn ([5]):

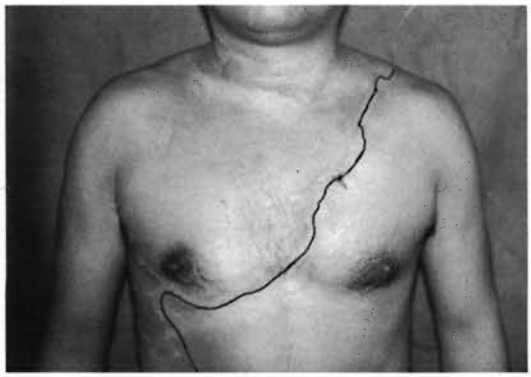

FIG. 2. Course of the ring on front of the body, traced in pen.

Right upper limb	9%
Anterior chest and abdomen	7%
Back of chest and lumbar region	11%
Total affected body surface	27%

The ring whose perimeter was 115 cm started clearly at the middle of the back of the left shoulder, crossed to the right lumbar region, ascended to the right, and ended on the left front of the chest. The face was not involved. Anteriorly, the patch stretched 27 cm longitudinally, 34 cm vertically; posteriorly, the longitudinal extension was 31 cm and vertically, 45 cm. A slit-skin smear for acid-fast bacilli was negative. A skin biopsy confirmed BT leprosy; a lepromin test was weakly positive. The patient received the World Health Organization regimen for multidrug therapy (MDT) for paucibacillary leprosy. An oral steroid was also started which arrested further damage to the right ulnar nerve. With regular physiotherapy, the function of the right hand was restored satisfactorily, although deformity persisted. After 1 year of MDT, he was converted to dapsone monotherapy. During the treatment, the border of the lesion became blurred, ill-defined, and replaced by areas of hypopigmentation which were negative for tinea versicolor. There were no significant changes in sensory impairment. Although BT leprosy is notorious for nerve damage, this case is of interest due to a single patch occupying 27% of the body's surface area which included an upper limb and was surrounded by a border of 115 cm.

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