

## CORRESPONDENCE

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### Effect of Levamisole Therapy on Lepromin Reaction in Lepromatous Leprosy Cases

TO THE EDITOR:

Recently levamisole has been reported to restore cell-mediated immunity (CMI) (1, 5). In lepromatous leprosy (LL) cases there is selective depression of cell-mediated immunity (6). We tried this drug in 10 lepromatous leprosy cases, 150 mg per day three consecutive days every fortnight for three months, along with dapsone (DDS). Out of 10 LL cases, 5 were males and 5 were females. The age range was 12–56 years with an average age of 33. The majority of the patients had been ill for less than one year, and only three of them had had antileprotic treatment for variable periods. None of the patients had any other systemic illness.

The lepromin test was done to assess the change in the immune status of each patient before and after the levamisole therapy, using lepromin-A (armadillo derived) supplied by WHO containing  $4.0 \times 10^7$  bacilli/ml. The Fernandez reaction was read after 48 hr; the Mitsuda reaction was observed at the third and the fourth weeks. Dapsone (DDS) was started on the second day after the lepromin injection in all cases except one who was already on dapsone. Levamisole was started after the Mitsuda reaction was read. After three months of levamisole therapy another lepromin test was done. Slit and scrape examinations, hemoglobins and total and differential leukocyte counts were done every month.

We found no changes in the early lepromin reaction, while the late lepromin reaction was absent both before and after levamisole therapy. Meyers, *et al.* (2) and Sher,

*et al.* (4) could not find changes in lepromin reactions with levamisole therapy, and Yagnik, *et al.* (7) could not stimulate CMI in LL cases with levamisole. Our findings are similar to theirs. Ramu and Sengupta (3) found temporary conversion of the early lepromin reaction which we could not find.

There was a regular decline in the average morphological index throughout the period. We did not observe any adverse effect (severe side effects of the drug or type 1 or type 2 reactions of leprosy) during the period of study.

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