Relapse After Long-Term Follow Up of Multibacillary Patients Treated by WHO Multidrug Regimen

To the Editor:

Up to 1993, more than 4 million leprosy patients ([5]) in the world have completed their treatment with multidrug therapy (MDT) recommended by a WHO Study Group ([4]) in 1982. Data from routine leprosy control programs have indicated that, after completion of MDT, the relapse rates are well below 1% ([1, 6]). However, the low relapse rates must be interpreted with great caution, because the durations of follow up in the majority of patients are relatively short and the relapses after treatment with any rifampin-containing regimens occur late, at least 5 ± 2 years after starting treatment.

Thirty-five multibacillary patients, treated with MDT for 2 years between 1984 and 1986 at the Institute Marchoux, with all drugs administered under supervision, have been seen at least once later than 12 months after completing MDT. Relapse was diagnosed if two or the following three criteria were met: a) increase of bacterial index (BI) by at least 2+ over the previous value, b) occurrence of a definite new leprosy skin lesion, and c) demonstration of viable organisms by mouse foot pad inoculation ([2, 3]).

After 41.9 ± 12.1 months of follow up, only one patient relapsed for a relapse rate of 2.9% or 0.8 per 100 patient-years ([3]). Additional follow up was done. Six additional relapses were diagnosed during the next 2½ years for an overall relapse rate of 20.0% or 3.3 per 100 patient-years. The mean interval between stopping treatment and the appearance of relapse was 62.7 ± 18.7 months, a figure similar to that of relapses after stopping treatment with other rifampin-containing regimens.

To date, the relapsed cases had significantly greater bacterial loads before or at the end of the 2 years of MDT: 38.9% and 41.7% relapsed, respectively, among patients who had an average BI ≥4.0 before MDT or BI ≥3.0 at the end of MDT; whereas the relapse rates were respectively 0% and 8.7% among patients who had an average BI <4.0 before MDT or BI <3.0 at the end of MDT. In other words, relapse was significantly more frequent among patients with BI ≥4.0 before MDT or BI ≥3.0 at the end of MDT.

A full manuscript, analyzing the long-term, follow-up results has been submitted to this Journal.

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