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Letters to the Editors

A SUGGESTED NEW METHOD TO MEASURE PATCH AREA IN PAUCIBACILLARY LEPROSY

Sir,

Medical personnel usually depend on clinical parameters to judge the regression of lesions in order to assess the effect of treatment in paucibacillary leprosy where the BI is zero. Mitsuda reaction is almost always positive in PB cases and has a limited role. Periodic histopathological examination of PB lesions would be a useful parameter for the assessment of therapy but may not always be practicable under field conditions. However, because the usual techniques of clinical evaluation are subjective and prone to inter-personnel variations they cannot be used for research purposes.

During the Phase III immunotherapy trials with the ICRC vaccine, we have attempted to use the reduction in area of the patch as an objective parameter, as follows:

- 1 A piece of polythene transparency (used for overhead projection) measuring 10 mm \times 10 mm (i.e. 100 mm²) was weighed on an electronic balance (METTLER[®] Model AE 240, which has an accuracy of up to 10⁻⁴ grammes) to obtain the known weight of 100 mm² of transparency.
- 2 The margin of the patch was traced onto the transparency described above, with a microtip sketch pen, while the patient was supine or prone. The transparency was cut along the outlined border using a Tuc's knife (as used in cataract surgery).
- 3 This cut-out was weighed on the same electronic balance. The weight of the cut-out was divided by the known weight of 100 mm² of transparency (as recorded above) to calculate the area of the patch.
- 4 In each case, the outline on the transparency was traced on to millimetre squared graph paper and the number of millimetre squares were counted to calculate the area of the patch.

The area of the patch measured by this technique correlated with the standard technique of counting millimetre squares on graph paper.

This suggested method is simple, less time-consuming and is thus an improvement on the more tedious graph method, the only drawback being that a sophisticated electronic balance is necessary.

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