IMPLEMENTATION OF MULTIDRUG THERAPY FOR LEPROSY CONTROL PROGRAMMES

Sir,

In a recent article (*Lepr Rev*, 1990; **61**: 64–72) Georgiev & McDougall put forward certain important proposals that emphasized a change in the strategy of MDT in leprosy control programmes. On more than one occasion the authors have expressed concern at the inadequacy of peripheral laboratory services, ¹⁻² their articles bear numerous references which indicate that the functioning of smear laboratories continue to be unsatisfactory in many of the control programmes. We have been involved in organizing the smear laboratory in some of the MDT districts in India and our experience is also disappointing. In response to their correspondence we also presented certain views which appeared in a subsequent issue of the Journal.³ Some of our proposals contained in the said correspondence were:

The replacement of inadequately staffed and equipped peripheral laboratories with one well organized laboratory at district level, where smears of only selected cases would be examined.

- 2 Discontinuation of routine smear examination in each and every case.
- 3 Identification of a cut-off point to stop treatment in multibacillary cases. These patients become clinically inactive much earlier to smear negativity. There is evidence that bacilli clearance continues even after stoppage of chemotherapy. ^{4,5} Hence it is recommended that clinical inactivity and the absence of solid and fragmented bacilli may be considered as the cut-off point for ceasing therapy.
- 4 Liberalization of the smear reporting system. It is peculiar to leprosy that:
- (i) a negative smear report does not exclude the disease, since about 80% of cases are smear negative.

- (ii) the extent of tissue damage is proportional to the hosts aberrent tissue behaviour rather than to bacterial load.
- (iii) the number of bacilli in a microscopic field can be anything from 1 to >1000 and any count whatsoever deserves three drugs for a minimum period of two years. Hence, as in any other bacterial disease, why not concentrate our expertise on reporting only 'positive' or 'negative' with accuracy. Grading no doubt gives the density of bacteria as the source of infection. For this a less comprehensive system, which can be done by visual impression alone, as proposed below will suffice.

< 100 per field 1 + or few

100–1000 per field 2+ or numerous >1000 per field 3+ or innumerable

Such less precise grading has already been advocated and practised.⁶

5 Laboratory reports are mostly either supportive or confirmative, both in diagnosis and classification. One needs to know clinically whether a disease is generalized or localized before deciding on a particular schedule of treatment. The number of skin and nerve lesions would no doubt be an important parameter for clinically classifying the disease. Whether these lesions are produced directly due to *Mycobacterium leprae* (as in BL or LL) or indirectly due to its products (as in BT or TT) is immaterial. Two more aspects, namely the active or inactive status of the disease and the reaction proneness must also be kept in mind. They considerably influence the length of treatment.

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References

- ¹ Georgiev GD, McDougall AC. Skin smear and bacterial index (BI) in Multi Drug Therapy Leprosy Control Programmes: An unsatisfactory and potentially hazardous state of affair, correspondence. *Int J Lepr*, 1988; **56:** 101–4.
- ² Georgiev GD, McDougall AC. The bacteriological examination of slit skin smear in leprosy control programmes using multidrug therapy: A plea for radical changes in current operational methodology. *Ind J Lepr.*, 1987, **59**: 373–86.
- ³ Agrawal MN, Porichha D. Skin smears and Bacterial Index in Multiple Drug Therapy, correspondence. *Int J Lept.*, 1988; **56**: 628–30.
- ⁴ Ganapati R, Revankar CR, Pai RR. Three years assessment of multidrug therapy in multibacillary leprosy cases. *Ind J Lepr*, 1987; **59**: 44–9.
- Jopling WH. A follow up investigation of the Malta-project 1983 and 1986. Lepr Rev, 1986; 57 (Suppl 3): 47–53.
- ⁶ Jopling WH. Bacterial and pathological aspect. In: *Handbook of Leprosy*, 3rd ed. Jopling WH (ed.), London: Heineman Medical Books Ltd, 1984, pp. 8-46.