TWISTS IN THE TREATMENT OF BT LEPROSY

Dear Editor,

This refers to the study 'Borderline Tuberculoid Leprosy : Clinicopathological evaluation of Multidrug Therapy' (MJAFI 1997; 53: 91-94).

Following 6 months of adequate paucibacillary multidrug therapy (PB-MDT), persistence of clinical activity was seen in 57 (45.6%), dermal cellular infiltrate in 111 (88.8%) and compact granulomas in 30 (24%) cases. These figures exceed those reported by other workers, and so assume importance. Clinically persistent erythema could be mistaken as persistence of disease activity when hypopigmented atrophic lesions (with resolving dermal granulomas) over photo exposed areas react to incident UV light and result in vasodilation of dermal blood vessels [1]. Slow clearance of dead bacilli and their antigens is known to delay the exhibition of clinical and pathological cure, and regression continues even after stopping treatment [2]. Though clinical and pathological reassessment 6 months after stopping PB-MDT would reveal the outcome of such cases, the study nonetheless underscores the importance of keeping all leprosy patients under surveillance till complete clinical and pathological cure is achieved.

There is an alarmingly high number of cases with clinical (14 cases, 11.2%) and pathological (14 cases, 11.2%) increase in activity (presumably the same group of cases, though this is not clear from the study) after completion of adequate PB-MDT. If the 3 cases of type I reaction are excluded from this group on grounds of confusing clinical and pathological picture, it leaves 11 cases (8.8%) with unexplainable increase in activity. Assuming compliance to MDT was good, this finding could presumably be due to:- (a) Drug Resistance: Primary Dapsone and Primary Rifampicin resistance in PB is low and it is unlikely that these 11 cases had combined drug resistance. Multi drug resistance to MDT has not been reported till date [3]. (b) Mis-categorising Multibacillary (MB) leprosy as PB

WHO redefined PB and MB leprosy and categorised all smear positive cases irrespective of classification as MB, recommending MB-MDT in all such cases [4]. The study has recorded 11 smear positive (8.8%) BT cases who were exhibited PB-MDT. NLEP recommends MB-MDT in all those BT cases with more than 10 lesions including nerve and skin lesions; and review of classification in cases with widely disseminated lesions [5].

Though it is not clear from the study whether the 11 cases showing increased activity after adequate PB-MDT were (i) among the 11 smear positive cases, or (ii) had multiple nerve and skin lesions, it is imperative to exhibit MB-MDT in both these groups. It would also be worthwhile to investigate these cases for associated immunosuppression. More studies need to be done to reclassify and recommend appropriate MDT in PB cases with widely distributed skin lesions.

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REFERENCES

1. Girdhar BK. Clinical problems in treatment of Leprosy. Proceedings of the workshop on Multidrug Therapy (DANIDA); 1989 Nov 12; Kerala. Indian Association of Leprologists.
2. Job CK. Histopathological features of relapsed leprosy. Indian J Lepr 1995; 67: 69-80.
3. WHO. MDT: Questions and answers: Action programme for Elimination of Leprosy. World Health Organization. 1996. Geneva.
4. WHO. A Guide to Leprosy Control. Ed 2. World Health Organization. 1988. Geneva.
5. NLEP. Operational guidelines on case detection, treatment, follow up and reporting forms. 1992: 1-25. New Delhi.

Authors' Reply

In our study out of 125 borderline tuberculoid (BT) leprosy patients, the signs of clinical activity had shown regression (active) in 57 (45.6%) cases following 6 months of paucibacillary (PB) multidrug therapy (MDT). There are several reports documenting persisting clinical activity in a significant proportion of PB patients after 6 months of MDT which varied from 21.4 per cent to 56 per cent of the patients so treated [1]. The point of clinical and histological cure may be delayed for many months after the treatment is stopped [2,3].

The reduction in the size of the granuloma during MDT does not depend on the rate of killing of M leprae but on the degradation and disappearance of their antigens. There is no fibrous replacement of the skin adnexa and the dermal collagen tissue are destroyed during the inflammatory process. Therefore the healed skin lesions look atrophied and wrinkled [2]. We have not come across any atrophic BT lesions which had developed persistent erythema on photoexposed areas.

In another study Job et al [1] found that out of the 20 PB leprosy cases 5 (25%) patients a significant proportion, were still active 18

months after MDT. There is no doubt that pathologically active skin lesions continue to exist in certain proportion of PB patients at the end of 6 months of fixed duration MDT and long after [1,3].

Six months after PB-MDT, there was increase in activity clinically in 14 cases (11.2%) and were confirmed histologically in the same group of 14 (11.2%) cases. Three cases had developed type I reaction. Eleven cases showing increased activity after adequate PB-MDT were among the 11 smear positive cases with bacteriological index (BI) less than 2 on Ridley's scale prior to MDT. They had multiple nerve thickenings and multiple skin patches less than 5 in numbers showing features of BT leprosy histologically. Hence reclassification of those cases was not necessary prior to starting PB-MDT. Six months after MDT, AFB (L) was found in skin smear only in 1 patient with BI less than 1 on Ridley's scale which showed that those cases had responded well to PB-MDT. Reappearance of positivity of AFB (L) in any of those cases who became negative, was not encountered in any case in our study. These findings have shown that all those patients have responded well to MDT and there was no possibility of drug resistance in those cases.