

## CORRESPONDENCE

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DDS 100 mg Daily Preventing Permanent Nerve  
Damage in Reversal Reaction

TO THE EDITOR:

The article "Reversal reaction: The prevention of permanent nerve damage. Comparison of short and long-term steroid treatment" (3) was read with much interest because I was involved in the management of these reactions at the Addis Ababa Leprosy Hospital (ALERT) from 1969 up to 1971. From this experience and from my present position as internist at the same hospital I feel justified to make a few comments.

The conclusion that prolonged steroid treatment was shown to be superior to short term treatment is not based on solid arguments gained from a controlled study. Therefore the results should be interpreted with caution, and the conclusion can only be preliminary. Comparison of results from a prospective study with those from a retrospective can easily lead to biasing past observations (2). The authors have not been successful in preventing this methodological fault because they require a sufficient number of voluntary muscle tests (VMT) to be available from cases seen in 1969–1973. By this requirement the very mild neuritis cases in that period are excluded, which is demonstrated in Fig. 1 of the article. The higher mean VMT deficit in the so-called mild neuritis from 1969–1973 is explained by the exclusion of the very mild ones. For example, a patient seen in 1970 with bilateral tender ulnar nerves and slight weakness of both mm. abd. dig. min., i.e., a VMT deficit of 2 or 4 was requested to

come back after 2 or 3 weeks of steroid treatment. At that second visit the doctor in charge of the neuritis clinic looked for nerve tenderness and tested the strength of the afflicted muscles. If no abnormalities were noted, the neuritis was considered to be cured and the VMT was not repeated. These cases are excluded by the requirement of a sufficient number of VMTs and explain the poor therapeutic results in the period 1969–1973, which are given in Table 3 of the article.

Regarding the statement that prolonged steroid treatment, i.e., prednisone for more than 3 months has proven to be superior, insufficient data have been presented. The improvement of VMT deficit after the first 3 months of treatment in severe neuritis from 20 to 7.5 (period 1974–1978) versus 30 to 12.5 (period 1969–1974) is in my opinion insufficient to claim that BL patients should get prednisone for 18 months.

The authors have only been able to demonstrate that severe neuritis in the period 1969–1973 responded less well in the first 3 months of treatment than in the period 1974 to 1978. However, it is simplistic to conclude that this success is due to a difference in steroid dosage. In the 2 observation periods there was also a difference in DDS dosage. From 1969 up to 1972 all patients were treated with DDS 200 mg weekly; in 1973, a gradual change in DDS dosage took place, and from 1974 the patients were treated with DDS 50 or 100 mg daily. Because DDS in daily dosage has

been suggested to prevent borderline leprosy reaction (1), one may question if the better treatment response from 1974–1978 was not in part due to the increase of the DDS dosage. Hence the provocative heading of this letter, which only illustrates that a controlled trial is needed to prove the value of long term steroid treatment in reversal reaction.

—J. Van der Meulen, M.D.

*All Africa Leprosy & Rehabilitation  
Training Centre (ALERT)  
P.O. Box 165  
Addis Ababa  
Ethiopia*

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### Reply to Dr. Van der Meulen's Letter to the Editor

#### TO THE EDITOR:

Dr. Van der Meulen's comments on our article, "Reversal Reaction: The prevention of permanent nerve damage" are, in our opinion, incorrect.

Only when Dr. Van der Meulen states that comparison of results from a prospective study can easily lead to biasing past observations is he right. However, when we analyzed our results, we were perfectly aware of such a pitfall. We did our best to avoid it, and we think we succeeded.

When he claims that the mild neuritis group in the 1969–1973 period is different from the group in the 1974–1978 period, based on a difference of 1½ points, he has to redo his statistics; such a difference is hardly significant.

We performed regularly careful assessments during the treatment of our neuritis cases, not only using the voluntary muscle testing (VMT) but also the motor nerve conduction velocity measurements and the sensory testing. Therefore, we were able to detect deterioration early. A patient, as mentioned by Dr. Van der Meulen, will certainly deteriorate after the discontinuation of steroid treatment. However, in this patient further VMTs were not done—as he claims—so deterioration was not noticed. It may be advisable to compare the original VMT-deficits of such patients with

the present ones (their records are still available). We are afraid that, when these patients are included, the difference between the 1969–1973 and the 1974–1978 period will be even more striking and will not prove his point.

When he compares the treatment results in points and states that the measured differences do not justify a longer period of steroid treatment, he should realize where these points stand in terms of disability.

In the 1969–1973 period, after 3 years of treatment of 25 patients, only 6 were without disabilities and 12 (50%) had at least 1 ulnar or median palsy. In the 1974–1978 period 20 out of 23 did not have any nerve damage while only 2 (10%) had more than an ulnar or median palsy. In our opinion these differences do matter, and we will seriously plead for longer periods of steroid treatment.

Recently, we were able to compare our results with a study done in the Masanga Leprosy Hospital (Sierra Leone). Their results agree perfectly with ours although they had slightly more complications (Dr. Kazen, personal communication; *Lepr. Rev.*, in press).

We agree that a high dosage of DDS may prevent reactions and may diminish the dosage of steroids needed. We were able to monitor the improvement of the patients in