

## **THE USE OF COLCHICINE IN THE MANAGEMENT OF TYPE 2 LEPRA REACTION (ERYTHEMA NODOSUM LEPROSUM)**

Sir,

Patients with mild or intermittent Type 2 lepra reaction can be adequately and safely managed using analgesics, chloroquine, antimonials, and short courses of steroids. But of the drugs available to manage severe reaction, clofazimine causes disfiguring discolouration, thalidomide is teratogenic, and long-term continuous corticosteroid treatment causes multiple toxic side-effects. There is clearly need for an acceptable and safe drug to treat severe Type 2 lepra reactions. Sarojini & Mshana<sup>1</sup> have described the rationale for the use of colchicine for this purpose, and report its use in a trial which included 10 patients; their study, however, was uncontrolled.

We have carried out an internally controlled outpatient trial of the use of colchicine to treat patients with severe Type 2 lepra reaction. Five patients, all adult Indian men, were included; all had suffered from recurrent and often almost continuous reaction for at least 2 years prior to the trial. All were receiving dapsone 50–100 mg daily together with clofazimine 100 mg daily, and all required corticosteroids, in short repeated courses and sometimes almost continuously. One patient had received a course of thalidomide a year prior to the study. The diagnosis of Type 2 lepra reaction was confirmed in all cases by biopsy of an active skin nodule during the course of the trial.

The trial covered a period of 6 months, during which dapsone and clofazimine were continued in unchanged dosage. Each patient received colchicine 2 mg daily during months 3 and 4; the first and last 2 months were control periods. Prednisolone was prescribed according to need, using the usual criteria of this centre, and patients were (almost) always seen by the same physician (JNAS). The effect of the colchicine was determined by its impact on the steroid requirement.

The results of the study, showing the number of mgms of prednisolone prescribed for each patient month by month, are shown in Table 1. It is clear that colchicine had little or no effect on the steroid requirement of these patients, individually or as a

**Table 1.** Total dosage of prednisolone (mg) prescribed monthly to trial patients

| Case no. | Bacterial index | Monthly total dosage of prednisolone (mg) |     |      |     |      |     |
|----------|-----------------|---|-----|------|-----|------|-----|
|          |                 | 1   | 2   | 3    | 4   | 5    | 6   |
| 1        | 3.6             | 220                                       | 310 | 245  | 130 | 280  | 85  |
| 2        | 4.2             | 355                                       | 55  | 255  | 310 | 405  | 270 |
| 3        | 0.7             | 100                                       | 150 | 100  | 130 | 105  | 135 |
| 4        | 2.3             | 220                                       | 140 | 235  | 95  | 180  | 205 |
| 5        | 4.5             | 370                                       | 305 | 315  | 155 | 80   | 100 |
| Total    |                 | 1265                                      | 960 | 1150 | 820 | 1050 | 795 |

group. Diarrhoea was a common side-effect, being severe enough to compel 3 patients (cases 2, 4 and 5) to reduce their colchicine dosage to 1 mg daily for part of the trial period. Nevertheless, 2 patients (cases 2 and 4) have reported an increased sense of well being during the period of colchicine treatment, and one of them has requested that it be prescribed for him again.

This study has the usual limitations of outpatient trials in which the drug intake is unsupervised. Nevertheless the results indicate that colchicine is not a 'wonder drug' for more severe Type 2 lepra reaction, though it may have mild activity, equivalent possibly to that of the antimonials. It will probably be unacceptable for patients to whom loose stools are unwelcome.

The results of this study differ considerably from those reported by Sarojini and Mshana. The reasons for this are uncertain. It is likely that the patients in our study had more severe reaction, and any effect of the colchicine may have been masked by the concurrent administration of clofazimine and corticosteroids. Another difference is that Sarojini's patients appear to have been hospitalized; that study may therefore have demonstrated the improvement that commonly occurs without specific medication when patients with Type 2 lepra reaction are admitted to hospital. Our study indicates that colchicine does not answer the need for a safe and acceptable drug to manage severe Type 2 lepra reaction.

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**Reference**

<sup>1</sup> Sarojini PA, Mshana RN. Use of colchicine in the management of erythema nodosum leprosum (ENL). *Lepr Rev*, 1983; **54**: 151–2.