A POSSIBLE ‘FLU’ SYNDROME ON ONCE-MONTHLY RIFAMPICIN

Sir,

Recently, changes have occurred in the management of leprosy with rifampicin becoming the mainstay of modern treatment, alongside the traditional dapsone.

In countries which can afford daily rifampicin, this is seen to produce few side-effects, except occasional gastrointestinal or cutaneous complaints and, in a few cases, drug-induced hepatitis, especially when given in combination with ethionamide or prothionamide (Pattijn 1983, personal communication).2

In the WHO recommendation for leprosy control, once-monthly rifampicin is advised. From tuberculosis treatment it was known that intermittent rifampicin administration given once or twice weekly could lead to a potentially dangerous reaction called the ‘flu’ syndrome.1 It was considered unlikely that such reaction could occur when rifampicin was given only once monthly.

We would like to report a patient who presented with features of ‘flu’ syndrome on the once-monthly rifampicin regimen.

The patient, a 55-year-old caucasian woman with subpolar lepromatous leprosy, had started multiple drug treatment (MDT) 9 months previously (rifampicin 600 mg once monthly, clofazimine 300 mg once monthly, clofazimine 50 mg daily and dapsone 100 mg daily). She took her monthly dose of rifampicin in the morning and a little over half-an-hour later she felt a sharp pain from her midthorax extending downwards into her lower limbs. She found it very difficult to stand and walk. One hour after taking the drug she felt cold, nauseous and developed a headache. After 2 h she was shivering severely, which was extremely painful due to muscle-ache. Five hours after taking the tablets, the shivering subsided but she felt pyrexic and started sweating. During the afternoon she started feeling better. The next morning the fever and pain had abated but she remained slightly nauseous and exhausted. She recovered completely later that day. There was no evidence of malaria or erythema nodosum leprosum which could have produced similar symptoms. The patient reported that on previous occasions she had experienced slight discomfort after taking rifampicin and this had gradually become worse but not severe enough to report.

Although the diagnosis of ‘flu’ syndrome was not definite (provocation was considered unethical under local circumstances) her treatment was changed to ethionamide, isoniazid, dapsone and clofazimine, in daily dosage and a similar ‘reaction’ has not occurred again.

Over 3000 patients are taking or have been taking rifampicin once-monthly within our programme and until now we have not encountered any serious side-effects. If our patient was indeed suffering from the ‘flu’ syndrome, which we think very likely, it indicates that this reaction with its unknown mechanism can also occur when rifampicin 600 mg is given once monthly.

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References

1 Barton RPE, Davey TF, McDougall AC, Rees RJW, Weddell AGM. Clinical and histological studies of the nose in early lepromatous leprosy. 10th International Leprosy Congress, Bergen (1973) Paper 6/47.
SCAR LEPROSY FOLLOWING NEEDLE INOCULATION

Sir,

Although inoculation leprosy following mechanical trauma such as tattooing\(^1\-^3\), vaccination,\(^4\) dog bite,\(^5\-^6\) or roadside injury\(^7\-^8\) is well documented, it is as yet sparingly reported. The case reported here is of a 12-year-old boy who presented with numbness and tingling of 5 years' duration over the outer aspect of the left arm. He had been given an intradermal injection of smallpox vaccine on this site a few days after birth. He started experiencing numbness, tingling and heaviness over the scar mark 7 years later. Subsequently, his mother noticed a peculiar change in the colour of the skin. It was fainter than the surrounding skin. Ever since it has continued to progress and erythema and scaling appeared over it. At present, the patch is prominent and completely numb.

Cutaneous examination revealed a single, conspicuous hypopigmented plaque of the size of 7 x 5 cm. Its margins were serrated and clearly defined. The periphery of the lesion was indurated, while its centre had a scar mark of 1 x 1 cm size. The lesion was erythematous, dry, scaly and showed loss of sweat. The plaque had impairment of temperature touch and pain sensation. The nerves supplying the plaque were greatly thickened and tender.

A haematoxylin-eosin stained section revealed a compact granuloma formed by epitheloid cells, lymphocytes and attempted giant cells. The granuloma was situated in the upper dermis. The nerves were infiltrated and identifiable. No acid-fast bacilli could, however, be seen in the Ziehl–Neelsons stained section.

Ordinary skin slit smear examination revealed no acid-fast rods. A lepromin test (early-Fernandez reaction) was 15 mm (+ +).

Laboratory investigations were Hb 12.5 g%, TLC 4800/Cmm; DLC, P56% L34% M2% E8%, RBCs, normochromic, normocytic, platelets adequate, total T-lymphocytes 34%, Tpan 55% B, cells 26%, T-4 subsets, 26%, T8 subsets 22%, IgG 1980 mg/dl, IgA 340 mg/dl, IgM 162 mg/dl and complement C3 67.5 mg/dl.

Based on the preceding parameters, the diagnosis of borderline–tuberculoid leprosy was formed.

It is, indeed, intriguing to note that most of the cases of inoculation leprosy reported thus far have manifested either as tuberculoid (TT) borderline–tuberculoid (BT) or indeterminate (I), that too, affecting the uncovered areas.\(^9\) This is a salient observation and may explain that some known or unknown mechanical factors which cause discontinuity or abrasion of the skin serve as the nidus for implantation of *Mycobacterium leprae*. It is likely that the very lodgement of the organisms in the tissue subserves as a microvaccine causing resultant localized phenomenon.

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