

# Multidrug Therapy in Geriatric Patients

TO THE EDITOR:

While several publications are available worldwide on the efficacy and safety of the World Health Organization multidrug therapy (WHO/MDT) (1) program, little has been reported on the safety of MDT in geriatric patients. The case report of the 141-year-old gentleman from Nepal, who had become symptomatic for multibacillary (MB) leprosy, should now stoke an interest in the chemotherapy of leprosy in elderly patients.

Since MDT for MB leprosy involves just once-a-month supervised therapy with clofazimine and rifampin and a daily dose of dapsone and clofazimine, the problem of patient compliance is not as great as one would otherwise imagine. Geriatric patients run the risk of adverse effects to drugs far more than younger patients. It is common knowledge that all of the drugs used commonly in the treatment of MB leprosy have side effects which are dose-related, some side effects being more tolerable than others. But where tissue perfusion is compromised due to senile and atherosclerotic changes, where drug metabolism is retarded

due to changes in hepatic cytoarchitecture, where drug elimination is reduced due to senile changes in renal function, drug toxicity (due to cumulative toxicity, reduced protein binding and drug interaction) becomes much more likely and the chemotherapy of leprosy needs to be reconsidered seriously.

While it is absolutely unethical to treat leprosy patients (irrespective of their age) with monotherapy, it is equally unethical to respect their age and leave them untreated. One alternative to this conundrum could be the refampin-ofloxacin-minocycline (ROM) therapy, perhaps with a single dose. If a modified ROM therapy can be customized, keeping in mind the age of the patient, body weight and lean body mass, the safety index would be even better.

The patient in question expired after 2 weeks of antileprosy treatment. This meant that he had been administered a total of 600 mg rifampin, 1000 mg of clofazimine and 1200 mg of dapsone, much of which would have still been retained in his body at the time of his death. Just as much as his death may have been due to cardiac failure secondary to age, it might also have been precipitated by severe abdominal cramps

caused by clofazimine or psychiatric or hematological changes caused by dapsone.

Since studies on the safety of MDT in geriatric patients have not been documented convincingly, it is suggested that such reports be made available, at least on the basis of retrospective analyses. With the changing scenario of leprosy globally, a multi-disciplinary approach to chemotherapy should be continued if the global elimination of leprosy is to be achieved.

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#### REFERENCE

1. AGRAWAL, S., JOSHI, A., JACOB, M., SAH, S. P., AGARWALLA, A. and GARG, V. K. Leprosy at the age of 141 years: a case report. *Int. J. Lepr.* **67** (1999) 471–472.