

Photoactivated 8-Methoxypsoralen in Repigmentation of Tuberculoid Leprosy

TO THE EDITOR:

Hypopigmentation at an over-exposed site due to tuberculoid leprosy can be cosmetically disfiguring. We wish to report a case which repigmented satisfactorily following treatment with photoactivated 8-methoxypsoralen.

A 15-year-old girl diagnosed as having a lesion of tuberculoid leprosy on the left side of her face for 2 years was treated with 100 mg of dapsone daily for 3 years. Because the hypopigmented lesion (Fig. 1) failed to

repigment, she was treated with 20 mg of 8-methoxypsoralen at 8 A.M. followed by exposure to sunlight between 10 A.M. and 10:15 A.M. daily for 6 months. The lesion showed significant repigmentation, and the borders of the lesion were less well-defined after treatment (Fig. 2).

The exact cause of hypopigmentation in leprosy remains unknown. The utilization of DOPA by *Mycobacterium leprae* leading to hypopigmentation (?) has been contradicted by others (^{1,3}). Correlation has been

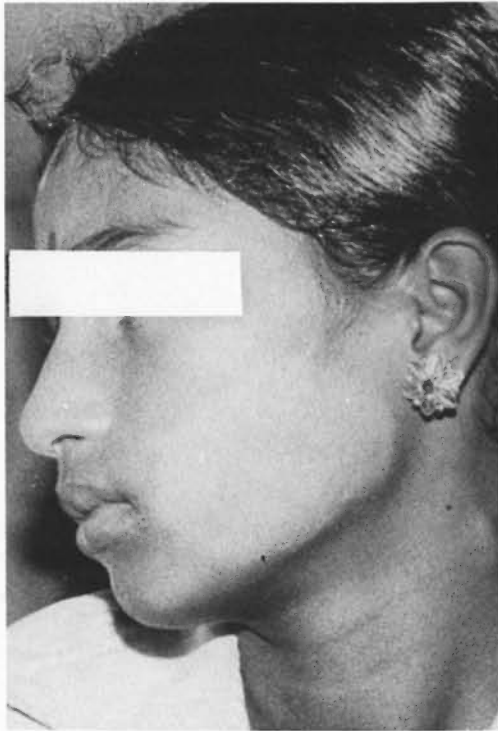


FIG. 1. Hypopigmented lesion of tuberculoid leprosy with well-defined margins.



FIG. 2. Same hypopigmented lesion showing early repigmentation; margins of lesion are ill-defined.

made between sensory impairment and hypopigmentation⁽⁸⁾. The role of cellular infiltrates in hypopigmentation⁽²⁾ has been refuted⁽⁴⁾. Reduction of the melanocyte population, alteration of the morphology of melanocytes, and melanotic-to-amelanotic melanocyte ratio have been reported⁽⁴⁾. Hypertrophy of melanocytes in hypopigmented lesions has in some cases been attributed to melanin block⁽⁵⁾. Central pigmentation of a hypopigmented lesion following topical psoralen has been recorded⁽⁴⁾. PUVA (psoralen plus ultraviolet A rays), an accepted mode of therapy in vitiligo, leads to hyperpigmentation which persists longer than hyperpigmentation due to suntan⁽⁶⁾. PUVASOL (psoralen plus ultraviolet A rays from the sun) may be used in repigmentation of lesions from the initial stage itself, especially if the lesions are situated in exposed parts of the body or are cosmetically embarrassing. The mode of action of PUVA in repigmentation of tubercloid lesions is to be determined.

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