

TUBERCULOID LEPROSY INVOLVING HAIRY SCALP A CASE REPORT

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Tuberculoid leprosy involving the hairy scalp is described. The lesion was single, raised, involved the hairy area of scalp and extended to the surrounding non hairy area also. It is interesting to note that scalp, which is presumed to be immune to leprosy, was singled out by the *Mycobacterium leprae*, leaving other cooler areas free. To the best of our knowledge such a preferential scalp affliction has not been reported earlier in literature.

Key Words : Leprosy, Tuberculoid leprosy, Hairy scalp

Introduction

Mycobacterium leprae, which has a predilection for the cooler areas of body, is usually known to spare scalp especially hairy scalp, because of its higher temperature. Scalp is therefore considered to be immune to leprosy. The rare cases of scalp involvement reported were mostly in multibacillary leprosy. We had earlier reported tuberculoid leprosy involving the hairy scalp.¹ In the case mentioned here, the lesion was singularly involving the hairy scalp, the so called "immune zone" for leprosy.

Case Report

A 20-year-old Hindu male, resident of Bhilai consulted us for a hypopigmented patch on the nape of the neck behind left ear which was noticed by his sister about 10 days earlier. The exact duration of the lesion could not be ascertained, since it was asymptomatic and the patient was not aware of it. There was no family history of similar problem.

Cutaneous examination showed single, well defined, hypopigmented, dry, anaesthetic, slightly raised, pear shaped plaque about 4.5 cm in length on the hairy occipital area of scalp extending on to the non-hairy skin on nape of the neck. There was infiltration at the periphery (Fig. 1). Nearly half of the plaque was inside the hair line with sparse hairs in that part. There was no other skin lesion or nerve thickening. Systemic examination was not contributory. Histopathology from the lesion revealed multiple, well-defined granulomas of lymphocytes and epithelioid cells and few Langhan's giant cells in the upper dermis. There was no epidermal erosion and the tissue did not show any acid fast bacilli.

The patient showed remarkable improvement after 9 months of treatment with dapsone 100 mg daily and rifampicin 600 mg monthly (supervised).

Comments

Hairy scalp is the warmest area of the skin.² The scanty reports of scalp involvement in leprosy have been mostly on the bald areas of scalp. This has been explained to be due to the lower temperature of bald scalp as compared to the hairy scalp.³ Few cases of leprosy in whom scalp was found to be involved belonged to the

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multibacillary group only.^{4,5} A case of borderline tuberculoid leprosy on regularly shaved scalp has also been mentioned.⁶ We were the first to describe a raised plaque of tuberculoid leprosy involving the hairy occipital area of scalp.¹

According to Jøpling and McDougall², plaques and nodules are not found on the hairy scalp in leprosy. The presence of a well defined, raised plaque in the present case and the earlier one reported by us indicates that it may not always be true.

Moreover, all the cases described so far, mostly had lesions on other parts of the body also, in addition to the scalp lesions. In the case reported here, the single plaque of tuberculoid leprosy was prominent on the hairy scalp and there were no lesions elsewhere. The lesion had probably started on the hairy scalp and then spread onto the adjoining area of neck, after which it was

noticed. It is intriguing why the *Mycobacterium leprae*, which has a predilection for cooler parts of the body opted for the warmer area in the present case.

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