

Tuberculoid leprosy on hairy scalp: a case report

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Summary Involvement of the hairy occipital area of scalp in a patient having tuberculoid leprosy is reported. To the best of our knowledge involvement of hairy scalp by a tuberculoid lesion has not been reported so far.

Introduction

Scalp is considered to be one of the 'immune zones' in leprosy. The involvement of the scalp in leprosy has been reported, though rarely. In the cases reported so far, the scalp was found to be affected mainly in bacilliferous leprosy and the involvement was mostly on the bald area of the scalp. However, in the present case a tuberculoid lesion was found on the hairy occipital area of the scalp, well inside the hair line.

Case report

K.R. a 45-year-old Indian male, a worker in the Bhilai Steel Plant, presented to us with the complaints of erythematous skin lesions on both his legs and scalp, of 6-months duration. The lesions were asymptomatic and were gradually increasing in size. There was no family history of similar lesions.

Cutaneous examination revealed a well-defined erythematous, dry, anaesthetic, raised circular plaque about 1" in diameter with sparse hairs over the occipital area of the hairy scalp (Figure 1). Two similar natured bigger lesions were seen, one on the dorsum of the right foot and the other on the medial aspect of the lower part of the left leg. There was no nerve thickening. The slit-smear examination from the skin lesions did not reveal any acid-fast bacilli. Histopathology from the scalp lesion showed well defined, compact granulomas consisting mainly of lymphocytes and histiocytes with a few Langhans' type of giant cells (Figure 2). These granulomas were located in the upper part of the dermis and at places were eroding the epidermis from below. No acid-fast bacilli were seen in the section.

The patient was put on tablet dapsone, 100 mg daily and capsule rifampicin 600 mg once a month on an empty stomach (supervised). All the lesions responded well after 8 months of combination therapy with dapsone and rifampicin.

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Figure 1. Tuberculoid lesion on occipital area of hairy scalp.

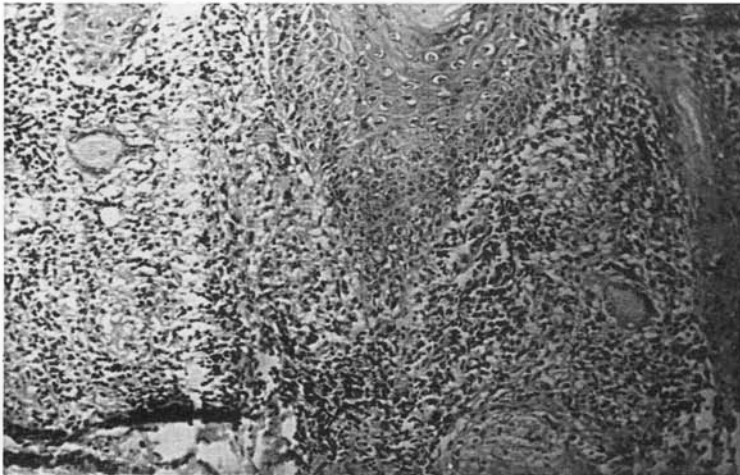


Figure 2. Tuberculoid granuloma with Langhans' giant cells (H&E original magnification $\times 100$).

Discussion

It is known that *Mycobacterium leprae* has a distinct predilection for the cooler areas of the body. Scalp, which has been shown to have a higher temperature¹ as compared to that of the forearm, was considered to be one of the 'immune zones' for leprosy. However, in rare instances involvement of the scalp has been described in borderline lepromatous and lepromatous leprosy. Out of the 10 cases of lepromatous leprosy observed by Faget,² 3 showed clinical involvement, 2 of them had diffuse infiltration while 1 had a nodular lesion. Involvement of the scalp was also reported³ in newly diagnosed cases of lepromatous leprosy. Kaur & Kumar⁴ observed acid-fast bacilli in all the 16 cases of lepromatous leprosy and in 4 cases of borderline leprosy. Bedi *et al*⁵ after a study of 20 cases of

lepromatous leprosy, detected acid-fast bacilli in 2 cases and histopathological changes of leprosy in the scalp of 4 patients. Parikh *et al.*⁶ observed the involvement of scalp in lepromatous and borderline lepromatous leprosy. Malviya *et al.*⁷ found lepromatous nodules on a bald area of scalp in a patient of lepromatous leprosy. Parikh *et al.*⁸ came across a case of borderline tuberculoid leprosy on the scalp of an Indian Brahmin male who had followed the ritual of shaving off his scalp hair throughout his life. In this case, the involvement of scalp was probably due to the equivalent temperature of the shaved and the bald scalp.

However, in the present patient, the tuberculoid lesion was on the hairy occipital area of the scalp. The clinical impression was confirmed after histopathological examination from the scalp lesion. This case suggests that hairy scalp may not always act as an 'immune zone' for leprosy.

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NEWS AND NOTES

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This agency '... collects donations to help missionaries and others in their work among victims of leprosy throughout the world'. Address: 21 The Boltons, London SW10 9SU. Medical adviser: Dr T J Ryan, Consultant Dermatologist, Slade Hospital, Headington, Oxford OX3 7JH, England.

Dermatology and Leprology Research Institute, India

We are grateful to Mr V Peria Swami, Project Director for the above Institute, Main Road, Anakapalli-531 001, Visakhapatnam District, Andhra Pradesh, India, for the following information:

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