Abstract

Alopecia in a linear pattern is very rare with only a few cases reported in the medical literature. We report a case of linear non scarring alopecia involving the scalp in a 17-year-old boy with a histological diagnosis of lupus panniculitis. We report this case because of its rarity and also the inclusion of this entity as one of the rare differential of non scarring alopecia.

Key Words: Linear, lupus panniculitis, non scarring alopecia

Introduction

Linear lesions in dermatology are commonly encountered, but alopecia in a linear pattern is rare. Alopecia of the scalp can be of various shape, from small round patch to total alopecia but only a few cases of linear alopecia have been reported in the medical literature. We recently observed a case of alopecia of the scalp in a linear pattern in 17 year old boy which clinically simulated alopecia areata, but the histopathological diagnosis was compatible with lupus panniculitis (LP).

Case Report

A 17-year-old boy presented to our outpatient department with a history of hairless patches on the scalp in a linear pattern for the past 7 years (age of onset 10 years). Physical examination revealed two alopecic patches measuring 10 cm long and 2 cm wide involving the temporal and frontal scalp [Figure 1]. The lesions were smooth, mildly erythematous, and tenderness was present. Skin biopsy revealed moderate pericapillary lymphocytic infiltration with fat necrosis myxoid degeneration and hyaline deposits in the interlobular septa suggestive of LP [Figures 2 and 3]. Routine investigations were within normal limit, and antinuclear antibodies (ANAs) was 0.51 (negative). The patient was started on oral prednisolone 20 mg and oral hydroxychloroquine 200 mg twice daily. Follow up at 3 months after treatment [Figure 4].

Discussion

LP is a small subset of all cases of cutaneous lupus erythematosus involving the deep dermis and subcutaneous fat, representing 2–3% of this group.[1] LP with a linear pattern is rare with only few case reports in the medical literature. The first case of linear LP involving the leg was reported by Tada et al.[2] in 1991. The first case of linear LP localized on the scalp was reported by Nagai et al.[3] in 2003. Subsequently, a number of cases have been reported, the majority of it being from East Asia, younger age of onset, male predominance with exclusive involvement of the scalp.[4-8] Kossard[8] in 2002 reported a case of LP simulating alopecia areata of a common patchy type in a 27-year-old female with a known case of systemic lupus erythematosus. The author described that the alopecic lesion showed only faint erythema and it rather simulated the lesion of alopecia areata. The present case also simulated alopecia areata.

What was known?

Lupus panniculitis is a variant of cutaneous lupus erythematosus involving the deep dermis and subcutaneous fat.
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Alopecia areata commonly manifest as a patch of non scarring alopecia, but annular and linear morphology have been described. The histopathology findings in linear LP include a predominantly lobular lymphocytic panniculitis with hyaline fat necrosis. In our case, it revealed myxoid degeneration, fat necrosis and hyaline deposits in the interlobular septa with moderate lymphocytic infiltration. This signifies the importance of histological confirmation in aiding to the diagnosis in such unusual manifestation of the disease.

ANA is positive in 70% of cases of LP. ANA was negative in the present case. ANA negativity have also been described in few of the cases of linear LP.

Our diagnosis of LP was made on the grounds of the unusual manifestation of the disease as linear non scarring alopecia with subtle clinical signs such as mild erythema and scalp tenderness and the typical histopathological changes but with negative ANA.

To the best of our knowledge, this is the first case being reported from India. We report this case because of its rarity and the consideration of this entity in the differential diagnosis of non scarring alopecia of the scalp of any shape.

**Conclusion**

Linear alopecia is a rare and unique manifestation of LP. Clinical pointer to diagnosis in our case was a patch of non scarring alopecia with subtle erythema and scalp tenderness with characteristic histological findings.

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Nil.

**Conflicts of interest**

There are no conflicts of interest.

**What is new?**

Lupus panniculitis should be considered as a differential in a case of non scarring alopecia of any shape.
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