INTRODUCTION

Alopecia areata (AA) is a complex genetic, immune-mediated disease that targets anagen hair follicles[1] of the hair-bearing areas of the body.[2,3] Atypical hair regrowth in AA is considered a rare phenomenon.[4]

We show a case of AA treated with intralesional corticosteroid with an unusual concentric targetoid hair regrowth pattern (THRP).

CASE REPORT

A 28-year-old male presented a 1-year history of hair loss in the beard and scalp. He was previously treated with intralesional corticosteroid. Examination revealed a single patch of alopecia on the scalp, with polycyclic aspect [Figure 1] consisting of central zone (A), intermediate zone (B), and peripheral zone (C). Zone A showed an area of thinning white hair, exclamation mark hair, and broken hair [Figure 2a]. The zone B showed healthy brown-colored hair [Figure 2b]. Zone C showed an area white hair, exclamation mark hair, and broken hair [Figure 2c].

DISCUSSION

Hair recovery in AA usually occurs as a uniform process with thin white hair emerging first, followed by healthy hair. However, some authors have described atypical patterns of hair growth.[4-6] THRP in AA was first described by Orecchia and Rabbiosi in 1988.[7] El-Dars et al. also described a THRP in a patient with AA treated with topical corticosteroid gel.[8] Del Río described a patient treated with intradermal triamcinolone for AA and developed a THRP.[9] The THRP was also described by Tan and Delaney in eight patients as a possible result of the centrifugal accumulation of the corticosteroid cream.[10] Priego-Recio et al. described paradoxical hair regrowth forms in 1.84% of the patients and the
most frequent forms were THRP (43%) and castling phenomenon (43%). Ramot et al. reported atypical regrowth of black hair in two red-haired patients.

A theory proposed in 1968 by Eckert et al. claims that AA occurs as an earthquake, beginning in an epicenter and expanding peripherally in a waveline manner. According to Eckert et al., an anagen/telogen wave enlarges from a core marginally expanding the alopecia.

The theories of the anagen/telogen wave and the possible corticosteroid accumulation effect are not fully understood.

Recently, Li and Sinclair measured the hairs plucked from the alopecia patch and discussed the anagen wave theory: Initially, a single hair in telogen is triggered to enter anagen and at the same time communicates with its immediate neighbor a signal for that hair to enter anagen. The initial regrowth signal is communicated to all the hairs within the patch of alopecia in a domino fashion.

**CONCLUSIONS**

Atypical hair regrowth in AA is considered a rare phenomenon but is possibly overlooked in the dermatologic literature.

Our patient presented the THRP, revealing the so-called anagen wave possibly due to a hair follicle signaling that allows follicles to communicate and follows a pattern of anagen growth, as suggested by Li and Sinclair.

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**Conflicts of interest**

There are no conflicts of interest.

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