Central Frontoparietal Band-Like Alopecia in a 40-Year-Old Woman

Awatef Kelati Fatima Zahra Mernissi

Department of Dermatology, University Hospital Hassan II, Fez, Morocco

Question

This is the case of a 40-year-old woman with a 3-year history of asymptomatic hair loss of the central frontoparietal line. She was treated as androgenetic alopecia (AGA) with minoxidil 2% and 5% before she was referred to our Dermatology department.

Physical examination revealed a reduction of the number of follicular ostia in a band-like alopecia of the central

frontoparietal area. Slight erythema was observed without any visible scales. The pull test was positive in some spots. The rest of the clinical examination was normal (Fig. 1).

Dermoscopic examination revealed a partially scarring alopecia with features of perifollicular scales, erythema around the follicular openings, whitish areas, and a pink-whitish background (Fig. 2).

What is your diagnosis?

Fig. 1. Clinical challenge. Central frontoparietal band-like alopecia in a 40-year-old woman.

Fig. 2. Trichoscopy with findings of lichen planopilaris: partially scarring alopecia with perifollicular scales (blue arrows), erythema around the follicular openings (violet arrow), whitish areas, and a pink-whitish background (green arrow).

Answer

Lichen planopilaris (LPP) based on the dermoscopic findings of partial scarring alopecia with features of perifollicular scales (blue arrows), erythema around the follicular openings (violet arrows), whitish areas, and a pink-whitish background (green arrows) (Fig. 2).

Dermoscopy-guided skin biopsy revealed follicular and perifollicular hyperkeratosis, follicular hypergranulosis, and band-like infiltrate of lymphocytes with sparing of interfollicular areas (Fig. 3).

LPP is the most common cause of cicatricial alopecia that frequently affects middle-aged women. Its presentation in the early stage may be confusing. Non-cicatricial or partially cicatricial alopecia may be observed. It appears as irregular white-purplish plaques on the scalp, with perifollicular erythema and follicular plugging [1]. The pull test is positive for anagen at the site of active disease. The course is often progressive resulting in atrophy and permanent alopecia [2].

The diagnosis of LPP is usually made at this stage of late cicatricial alopecia with fibrosis and absence of follicular openings; however, the distinction between various cicatricial alopecia etiologies, mainly discoid lupus erythematosus, may be difficult. Folliculitis decalvans may also have a similar presentation clinically and in der-

moscopy in the late stage of the disease with patches of cicatricial alopecia [1–3].

Without dermoscopy, the initial pattern of hair loss in our patient was misdiagnosed as AGA because of the band-like pattern in the AGA's usual area of hair loss.

In order to reach the correct diagnosis and for a better evaluation of the hair and the scalp, it is important to use trichoscopy as a noninvasive, quick diagnosis tool to correct the naked eye mistakes and to increase the accuracy of the clinical examination in hair disorders [2].

In our case, trichoscopy was of great help in the diagnosis of LPP based on the presence of partially scarring alopecia with features of perifollicular scales, erythema around the follicular openings, whitish areas, and a pink-whitish background.

Trichoscopy is also useful to choose the skin biopsy site in an active area of the disease [4], in order to confirm the diagnosis by the presence of specific pathological signs of LPP as perifollicular and infundibular hyperkeratosis, follicular hypergranulosis, and band-like infiltrate of lymphocytes.

Statement of Ethics

The patient was informed and gave her consent to describe the case.

Fig. 3. Dermoscopy-guided scalp biopsy (hematoxylin and eosin stain). **a** In cicatricial alopecia: rarification of hair follicles, follicular hypergranulosis, follicular hyperkeratosis (magnification: $\times 50$). **b, c** In an area of active disease (erythema and perifollicular scales): follicular and perifollicular hyperkeratosis, follicular hypergranulosis, band-like infiltrate of lymphocytes with sparing of interfollicular areas (magnification: **b** $\times 100$, **c** $\times 200$).

Disclosure Statement

The authors have no conflicts of interest to disclose.

Keywords

Lichen planopilaris · Trichoscopy · Alopecia

References

- 1 Tosti A, Ross EK: Patterns of scalp and hair disease revealed by videodermoscopy. In: Tosti A (ed): *Dermoscopy of Hair and Scalp Disorders*. 1st ed. London: Informa Healthcare, 2007, pp 1–14.
- 2 Ankad B, Beergouder S, Moodalgiri V: Lichen planopilaris versus discoid lupus erythematosus: a trichoscopic perspective. *Int J Trichology* 2013;5:204.
- 3 Rudnicka L, Olszewska M, Rakowska A, Slowinska M: Trichoscopy update 2011. *J Dermatol Case Rep* 2011;5:82–88.
- 4 Miteva M, Tosti A: Dermoscopy guided scalp biopsy in cicatricial alopecia. *J Eur Acad Dermatol Venereol* 2013;27:1299–1303.