Frontal Hairline Recession: A Diagnostic Pitfall

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Question

A 38-year-old woman was referred to the Department of Dermatology at the University Hospital Hassan II, Fez, Morocco, for a 1-year history of asymptomatic frontal hairline recession diagnosed as frontal fibrosing alopecia resistant to treatment with corticosteroids.

Physical examination revealed the presence of a frontal hairline recession without any scales or erythema. The

pull test was negative. We noticed the presence of a small erosion of the frontal area, which was a traumatism according to the patient. The rest of the clinical examination was normal (Fig. 1).

The dermoscopic examination revealed a nonscarring alopecia with features of flame hairs, dystrophic hairs, black dots, and coma hairs (Fig. 2).

What is your diagnosis?

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Fig. 1. Clinical challenge. Frontal hairline recession in a 38-year-old woman.

Fig. 2. Trichoscopy of the frontal hairline recession area with findings of trichotillomania: flame hairs (green triangles), dystrophic hairs (orange triangles), black dots (red triangle), and coma hairs (blue triangle). (Colors refer to the online version only.)

Answer

Trichotillomania (based on the dermoscopic findings of nonscarring alopecia, flame hairs, dystrophic hairs, black dots, and coma hairs; Fig. 2).

Trichotillomania is a form of traction alopecia resulting from habitual, repetitive removal of one's own hair; it is a syndrome of pathological hairpulling [1]. Clinically, patients present with patches of irregular hair length or hairless areas. Commonly, the vertex is affected, but multiple sites may be affected.

The presentation of trichotillomania in the present case with frontal hairline recession is very rare, and the frontal hairline recession was mainly attributed to frontal fibrosing alopecia in the first diagnosis. The diagnosis of frontal fibrosing alopecia is usually easy for clinicians because it has often been described in postmenopausal women with a possible concomitant thinning or complete loss of the eyebrows [2]. Frontal fibrosing alopecia is a form of scarring alopecia which requires a clinical pathologic correlation, especially in difficult cases of non-postmenopausal women, as it was reported in some rare publications [2]. This asymptomatic, progressive recession of the frontal hairline may lead clinicians to a wrong diagnosis and a needless invasive biopsy. Also, a differential diagnosis of trichotillomania has often been difficult in clinical practice.

In order to reach the correct diagnosis and for a better evaluation of the hair and scalp, it is important to use trichoscopy as a noninvasive, quick diagnostic tool after the clinical examination in order to correct mistakes made by the naked eye, especially in difficult cases.

In our case, the trichoscopy was of great help in the diagnosis of trichotillomania, so that there was no need for a pathologic examination, based on the presence of flame hair, broken hairs with different length and morphology, coma hairs, and dystrophic hairs (Table 1). These signs have already been described in the literature as specific and sensible signs for trichotillomania [1, 3, 4]. There were no findings of frontal fibrosing alopecia as a

Table 1. Description of the dermoscopic features seen in the present case

Dermoscopic signs	Definition
Flame hair	Short broken hair with a distal wavy tip
Black dots	Pigmented hairs broken or destroyed at the scalp level
Broken hairs	Short terminal hairs with fractured tips, which show extreme variability in length and morphology
Coma hairs or coiled hairs	In response to a pulling force, a hair shaft fractures, and the remaining, distal part may contract and coil with an irregular shape
Dystrophic hairs	The hair shaft is fractured and short with different shapes, such as V-sign (2 hairs emerging from 1 follicular opening are broken at an equal level) and other shapes

scarring alopecia with perifollicular scales, erythema, or follicular hyperpigmentation and blue-gray dots [5].

In conclusion, frontal hairline recession is not specific for frontal fibrosing alopecia and may be another clinical presentation of trichotillomania.

Statement of Ethics

The patient and her family were informed and gave their consent to the publication of the case report.

Disclosure Statement

The authors declare that they have no conflicts of interest, and there are no funding sources for this work.

Keywords

Frontal hairline recession · Clinical challenge · Dermoscopy

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