Portuguese Journal of Dermatology and Venereology

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CASE REPORT

Trichoscopic findings in folliculotropic mycosis fungoides: case report

Achados tricoscópicos na micose fungóide foliculotrópica: a propósito de um caso

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Abstract

Folliculotropic mycosis fungoides (FMF) represents 10% of all mycosis fungoides cases and even though supraciliary lesions and alopecia are characteristic, there are few published papers documenting trichoscopic findings in these patients. We report the case of a 50-year-old man who presented to our department with FMF stage IB. Clinical findings included disseminated erythematous patches and plaques with a fine white-grayish scale, madarosis, and multifocal patchy alopecia of the scalp. Trichoscopy revealed a decreased number of pilosebaceous units, dilated follicular openings, black dots, vellus, and dystrophic hairs. Examination of the scalp presented widespread white scaling and areas with dotted and spermatozoa-like vessels. A revision of the literature showed that dilated follicular openings, black dots, and scale were less frequent findings in FMF, and dystrophic hairs were more common in advanced FMF. In the future, trichoscopic evaluation might guide differential diagnosis and define the threshold to biopsy lesions to identify early disease.

Keywords: Primary cutaneous T-cell lymphoma. Mycosis fungoides. Folliculotropic mycosis fungoides. Alopecia. Trichoscopy. Dermoscopy.

Resumo

A micose fungóide foliculotrópica (MFF) representa 10% dos casos de micose fungóide e, apesar das lesões supraciliares e alopecia serem características, os achados tricoscópicos destes doentes não se encontram bem definidos. Apresentamos o caso de um homem de 50 anos com MFF estádio IB, com múltiplas manchas e placas eritematosas com escama branco-acinzentada fina, madarose e alopecia multilocular do couro cabeludo. A triscoscopia revelou uma diminuição das unidades pilossebáceas, aberturas foliculares dilatadas, pontos negros e ainda cabelos velos e cabelos distróficos. A avaliação do couro cabeludo demonstrou escama esbranquiçada difusa e áreas com vasos punctiformes e vasos semelhantes a espermatozóides. A revisão da literatura mostrou que as aberturas foliculares dilatadas, pontos negros e a escama são achados relativamente incomuns e que os cabelos distróficos são mais comuns nas formas avançadas de MFF. No futuro, a tricoscopia poderá guiar o diagnóstico diferencial e definir o limiar de biópsia destes doentes.

Palavras-chave: Linfoma cutâneo primário de células T. Micose fungóide. Micose fungóide foliculotrópica. Alopecia. Tricoscopia. Dermatoscopia.

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Received: 10-07-2023
Accepted: 01-09-2023
DOI: 10.24875/PJDV.23000059

Available online: 22-09-2023
Port J Dermatol and Venereol. 2024;82(1):69-71
www.portuguesejournalofdermatology.com

Introduction

Mycosis fungoides (MF) is the most common type of cutaneous lymphoma and can be classified into distinct subtypes. Folliculotropic mycosis fungoides (FMF) is characterized by the folliculotropic infiltration of the epidermis by atypical T-cells, usually CD4+[1]. It represents 10% of all cases of MF[2], is more frequent in men, and usually diagnosed between 46 and 59 years of age[1].

The clinical manifestations of FMF are ample, making diagnosis a challenge. Because of this, delayed diagnosis is usual, ranging from 18 to 48 months after onset of symptoms[1,3], which is particularly concerning when considering that response to treatment is worse than classical MF and depends on staging.

Head and neck involvement is present in the majority of patients[1-3], and supraciliary lesions and alopecia are characteristic. These findings, associated with the histopathological presence of epidermal folliculotropic infiltration, make trichoscopic assessment of lesions appealing. Even so, there are few published papers documenting these trichoscopic findings.

Clinical case

We present the case of a 50-year-old man with a medical history of hepatitis B and C, medicated with tenofovir, who presented with a pruriginous disseminated dermatosis, affecting the head, neck, trunk, and limbs, characterized by erythematous patches and plaques with fine white-grayish scale, madarosis and multifocal patchy alopecia of the scalp (Fig. 1), and painless inguinal lymphadenopathies. Symptoms had started 1 year earlier and the first lesions appeared on the trunk.

Trichoscopy of the scalp (Fig. 2) revealed a decreased number of pilosebaceous units, with several dilated follicular openings (some with milky-white globules) with perifollicular accentuation, black dots, and some vellus hair and dystrophic hairs. White scaling in a widespread distribution, areas with dotted vessels, and spermatozoa-like vessels was also noted.

Hair and skin biopsies were compatible with FMF. Laboratory and imaging workup associated with lymph node biopsy led to a pT2bN0M0-IB staging. The patient was treated with acitretin and electron bath therapy and later with bexarotene and brentuximab. He later died of MRSA septic shock.

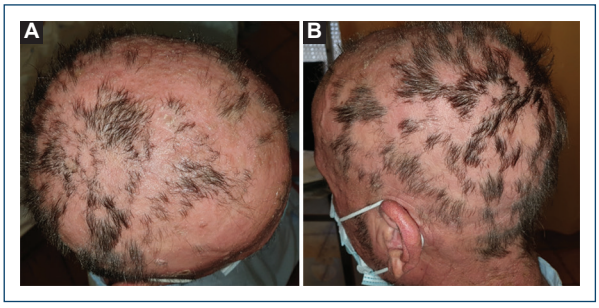

Figure 1. A and B: multifocal patchy alopecia and scaling of the scalp.

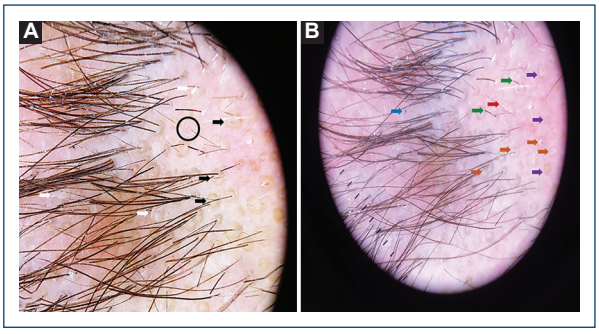

Figure 2. A: dilated follicular openings/yellow dots (black arrow), white scaling (white arrow), dotted vessels (black circle). **B**: decreased number of pilosebaceous units, milky white-globules (orange arrow), perifollicular accentuation (purple arrow), dystrophic hairs (green arrow), black dots (blue arrow), spermatozoa-like vessels (red arrow).

Discussion

Trichoscopy is an easy-to-use and non-invasive technique that allows the evaluation of the scalp and hair. At present, there is a lack of published data detailing these findings in FMF.

Sławińska et al.[2] published a systematic review detailing the dermoscopic and trichoscopic findings of cutaneous lymphomas, including FMF. In MF, dermoscopy can reveal spermatozoa-like vessels (first described by Lallas et al.[4]), which seem to be a somewhat specific finding[2]. This type of vessel was also present in our patient and is thought to represent the proliferation of vascular cells in dermal papillae (translating, in dermoscopy and trichoscopy, into a round shape) and through the underlying dermis (corresponding to the linear portion of the vessels)[5].

Gallo et al. published the biggest series of trichoscopic findings in FMF patients with scalp involvment[6].

This series of 18 patients, three of which with stage IB as our patient, and most with patchy-plaque alopecia, showed, in the majority of cases, a decreased number of pilosebaceous units, yellow dots, dystrophic hairs, vellus hair, dotted vessels, and spermatozoa-like vessels[6]. These findings translate follicular changes related to folliculotropic infiltration of atypical T-cells with disruption of the normal follicular cycle. Black dots and scale, which were readily identified in our patient, were less frequent findings[6].

Gallo et al. also presented a subgroup analysis comparing findings in generalized alopecia and patchy-plaque alopecia, and in early stage and advanced FMF. Scale was more common in patchy alopecia (but statistical significance was not met)[6]; this was, indeed, a prominent finding in our patient. On the other hand, broken (dystrophic) hairs were more common in advanced FMF, but not exclusive to this subgroup[6]. Accordingly, we found dystrophic hairs in our patient, which probably relates to the fact that FMF (and MF in a broader sense) is an asymmetrical pathophysiological processes that manifest, in the same patient, with lesions in different stages of its natural story.

The coexistence of several different (and often unspecific) trichoscopic findings in FMF contributes to the difficulty of standardizing the examination of these patients. When considering isolated trichoscopic findings, differential diagnosis is extensive: yellow dots are present in alopecia areata and discoid lupus erythematosus; dystrophic hairs are commonly found in trichotillomania and tinea capitis; and white scaling can be found in different forms of eczema, dermatomyositis, and even pityriasis rubra pilaris. To consider FMF, one should take into account the constellation of supporting findings in trichoscopy and correlate them with clinical and histopathological aspects. Regarding the later, trichoscopy can also be useful by guiding biopsy site selection, as perifollicular accentuation reflects folliculotropism in histopathological examination[7].

At this time, more data regarding the trichoscopic examination of FMF patients is needed; clinical algorithms based on larger series of patients and reports of findings in individual cases will contribute to help guide differential diagnosis and define the threshold to biopsy lesions, as early identification and treatment of these patients is of the utmost importance.

Funding

None.

Conflicts of interest

None.

Ethical disclosures

Protection of human and animal subjects. The authors declare that no experiments were performed on humans or animals for this study.

Confidentiality of data. The authors declare that they have followed the protocols of their work center on the publication of patient data.

Right to privacy and informed consent. The authors have obtained the written informed consent of the patients or subjects mentioned in the article. The corresponding author is in possession of this document.

Use of artificial intelligence for generating text. The authors declare that they have not used any type of generative artificial intelligence for the writing of this manuscript, nor for the creation of images, graphics, tables, or their corresponding captions.

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