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Novel Insights from Clinical Practice

Dermoscopic findings of Discoid Lupus Erythematosus involving the

eyelids

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Short Title: Dermoscopic findings of Lupus involving the eyelids

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1 Established Facts and Novel Insights

Established Facts

- · The eyelid involvement is uncommon in discoid lupus erythematosus (DLE).
- · Dermoscopy is a valuable tool for diagnosing DLE and the literature is poorly described when affecting eyelids.

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Novel Insights

- · We report the main dermoscopic findings seen in two patients diagnosed with DLE, who presented an uncommon involvement of the eyelids.
- · We reinforce the importance of considering DLE when facing inflammatory lesions and hair loss in the eyelids, especially using dermoscopy.

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Abstract

Although facial involvement in discoid lupus erythematosus (DLE) is common, eyelid involvement is atypical. Identifying this condition is challenging due to misdiagnosis and it is important to avoid potential deformities of the eyelid margin. The aim of this paper is to report the main dermoscopic findings in two female patients with a confirmed diagnosis of DLE, who presented eyelids involvement. This study highlights the importance of performing a dermoscopy examination to help physicians to obtain an early diagnosis of DLE.

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Introduction

The eyelid involvement is uncommon in DLE, affecting only 5–6% of the patients [1]. As it is an atypical presentation, it may easily lead to misdiagnosis [2]. Dermoscopy is a valuable tool for diagnosing DLE in several locations. Its findings correspond to histopathology and disease duration [1,3]. However, the literature remains scarce about the dermoscopy of DLE affecting eyelids.

This article aims to report the dermoscopic features in two DLE patients with eyelid involvement and confirmed by histopathology, reiterating dermoscopy as an adjunctive tool for this diagnosis.

Case Presentation

The first patient was a 38-year-old Afro-descendant female diagnosed with DLE, presenting an erythematous scaly patch in the lower eyelids and ciliary madarosis for 4 years. Dermoscopy showed hair loss, dystrophic hair, telangiectasias, polymorphic vessels, red globules (red lacunes), milky red area, yellowish scales, whitish structureless areas, reduced follicular openings, erythematous background, and scattered brown discoloration. Additionally, we referred the patient to an ophthalmologist evaluation to avoid a possible eye dysfunction.

The second patient was an 87-year-old Caucasian female, diagnosed with DLE, who presented a 2-year history of an erythematous and scaling patch on the upper left eyelid without the involvement of eyelashes. Dermoscopy revealed telangiectasias, erythematous background, and yellow dots. The main dermoscopic findings of both cases are presented in **Figure 1**.

Discussion/Conclusion

The features found in the two patients follow the most common in scalp DLE, a site with well-established dermoscopic criteria [4]. As described in the literature for scalp and non-scalp DLE, red dots, milky red areas, scattered brown discoloration, and blue-grey dots are referred to as active DLE, whereas white structureless areas, telangiectasias, thin arborizing vessels on yellow dots, and loss of follicular openings are found in late inactive DLE [4].

DLE may lead to disfiguring scarring and permanent hair loss in the affected areas. Particularly, the unusual involvement of the eyelids may be even more challenging due to misdiagnosis and it is important to avoid potential deformities of the eyelid margin.

This report summarized the dermoscopic findings of eyelid DLE, which were very similar to those previously described in other areas. Furthermore, we highlight the importance of considering

- DLE when facing inflammatory lesions and hair loss in the eyelids, especially using dermoscopy. In
- 44 conclusion, despite the lack of criteria for this anatomical region, dermoscopy remains an auxiliary tool
- 45 to help physicians obtain an early diagnosis of DLE.

46 **Statements**

47 These data have not been previously presented. This work has not been submitted to another journal.

48 Statement of Ethics

- 49 The study complies with the internationally accepted standards for research practice and reporting.
- 50 Subjects have given their written informed consent to publish photos and details of the case. Ethical
- approval was not required for this study following national guidelines.

52 Conflict of Interest Statement

- Dr. Antonella Tosti acts as consultant for: Monat Global, Almirall, Tirthy Madison, Eli Lilly, Bristol Myers
- 54 Squibb, P&G, Pfizer and Myovant. The other authors have no conflict of interest to declare.

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57 Author Contributions

- D.F.M. and A.T. conceived the study. R.F.C.A., B.F.M.F., D.F.M., M.B. and C.V. wrote the manuscript
- 59 and collected the data. M.S. and A.T. reviewed the text. All authors discussed and reviewed the final
- 60 manuscript.

61 Data Availability Statement

All data generated or analyzed during this study are included in this article. Further enquiries can be directed to the corresponding author.

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Figure Legends

Fig. 1. Dermoscopic findings in Discoid Lupus Erythematosus involving the eyelids (a) presence of hair loss, reduced follicular openings, red globules (like red lacunes), milky red area, yellowish scales, whitish structureless areas, and scattered brown discoloration on dermoscopy of the right lower eyelid from patient 1. 3Gen DermLite® DL4 at 20-fold magnification (b) presence of dystrophic hair, hair loss, reduced follicular openings, red globules, telangiectasias, yellowish scales and whitish structureless areas on dermoscopy of the left lower eyelid from patient 1. 3Gen DermLite® DL4 at 20-fold magnification (c) close-up view showing the polymorphic vessels on dermoscopy of the left lower eyelid from patient 1. Fotofinder Dermoscope Germany at 20-fold magnification. (d) presence of telangiectasias, erythematous background and yellow dots on dermoscopy of the left upper eyelid from patient 2. Fotofinder Dermoscope Germany at 20-fold magnification.