**DERMATOLOGY** PRACTICAL & CONCEPTUAL

www.derm101.com

## Dermoscopic features of conjunctival, mucosal, and nail pigmentations in a case of Laugier-Hunziker syndrome

Nida Kaçar<sup>1</sup>, Ceren C. Yildiz<sup>1</sup>, Nese Demirkan<sup>2</sup>

Department of Dermatology, Pamukkale University, Denizli, Turkey
Department of Pathology, Pamukkale University, Denizli, Turkey

Key words: dermoscopy, Laugier-Hunziker syndrome

Citation: Kaçar N, Yildiz CC, Demirkan N. Dermoscopic features of conjunctival, mucosal, and nail pigmentations in a case of Laugier-Hunziker syndrome. Dermatol Pract Concept 2016;6(1):7. doi: 10.5826/dpc.0601a07

Received: July 29, 2015; Accepted: October 6, 2015; Published: January 31, 2016

**Copyright:** ©2016 Kaçar et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Funding: None.

Competing interests: The authors have no conflicts of interest to disclose.

All authors have contributed significantly to this publication.

Corresponding author: Nida Kaçar, MD, Pamukkale Universitesi Tip Fakultesi, Dermatoloji Anabilim Dali, E-409, Kinikli, 20070 Denizli, Turkey. Tel. 905326977935; Fax. +902582424010. Email: n\_gelincik@yahoo.com

A 23-year-old man presented with multiple lip pigmentations. Longitudinal hyperpigmented streaks on his nails, as well as an ill-defined 2x3 mm pigmented spot on his right eye were noted (Figure 1). The family history was unremarkable. He was not taking any medication. Colonoscopy and barium radiography of intestine were unremarkable. Complete blood count, complete metabolic panel, and urinalysis were within normal limits. The patient was diagnosed with Laugier-Hunziker syndrome (LHS).



**Figure 1.** Clinical view of labial (A), ungual (B) and conjunctival (H) pigmentations are shown. Dermoscopic findings included reticular lines (B), globules (C), and parallel lines (D) in the labial pigmentation; brown to gray longitudinal regular lines (F, G) in the ungual pigmentationand light brown colored homogeneous pattern (I) in the conjunctival pigmentation (10X). [Copyright: ©2016 Kaçar et al.]

Dermoscopic examination of the lip pigmentations disclosed parallel lines, reticular lines and globules. The only recognized color was brown, which had a grayish hue in some parts of the lesion. A light brown colored homogeneous pattern was observed in the conjunctival pigmentation. The pigmented nail streaks showed brown-to-gray longitudinal regular lines (Figure 1).

Histopathological examination of the labial pigmentation revealed basal keratinocyte pigmentation. No increase in the melanocyte count was identified with S100 and HMB45 immunohistochemical staining. Iron accumulation was not seen with specific Perls' stain. The histopathological findings were compatible with the diagnosis of melanotic macule. Impression cytology examination of the conjunctival pigmentation revealed melanocytes with only a mild atypia suggesting a benign nature. The patient was processed to follow-up.

LHS is a rare, acquired disease characterized by hyperpigmented macules of the lips and oral mucosa along with longitudinal melanonychia. Pigmentations in other mucosal surfaces may also exist. Although this syndrome is being regarded as benign, invasive mucosal melanoma has been reported in a case of LHS [1].

Parallel ridge pattern and irregular diffuse pigmentation in acral lesions; irregular lines on a brown background and micro-Hutchinson's sign in nail apparatus lesions [2]; and the combination of blue, gray, or white color with structureless zones in mucosal lesions are the dermoscopic findings suggestive of melanoma [3]. Little data exists regarding the dermoscopic features of conjunctival pigmentations in the literature. Atypical pigment network, irregular dots and globules, regression structures, and a blue-white veil are the dermoscopic findings reported in a case of palpebral conjunctival melanoma [4].

Dermoscopic findings may differ from usual in some pigmentation syndromes including LHS. Parallel ridge pattern has been determined in benign acral pigmentations of several LHS cases [5-7]. Although nail pigmentations in LHS have been found to demonstrate similar dermoscopic findings with that seen in ethnic type and drug induced pigmentation, which are regular linear pigmentation lines on a grayish background, micro-Hutchinson's sign have also been reported in benign nail pigmentations of some LHS cases [2,5,8].

Parallel furrow pattern, brown and blue-gray granular pigmentation along with linear and dotted vessels on whitish pink areas are the dermoscopic findings reported in labial pigmentations of LHS cases [5]. The only LHS case with labial melanoma in the literature exhibited blue-whitish veil on dermoscopic examination [1].

Dermoscopic findings in the present case were consistent with benign nature. The dermoscopic finding of a conjunctival pigmentation in LHS is being reported for the first time by the present study. The identification of dermoscopic features of this syndrome may simplify the management of LHS. Further reports are necessary to arrive at a conclusion.

This case was presented in a poster presentation at the 11th European Academy of Dermatology and Venereology Spring Symposium 2014, Belgrade, Serbia.

## References

- 1. Simionescu O, Dumitrescu D, Costache M, et al. Dermatoscopy of an invasive melanoma on the upper lip shows possible association with Laugier-Hunziker syndrome. J Am Acad Dermatol. 2008;59:S105-8.
- 2. Thomas L, Phan A, Pralong P, et al. Special locations dermoscopy: facial, acral, and nail. Dermatol Clin. 2013;31:615-24.
- Blum A, Simionescu O, Argenziano G, et al. Dermoscopy of pigmented lesions of the mucosa and the mucocutaneous junction: results of a multicenter study by the International Dermoscopy Society (IDS). Arch Dermatol. 2011;147:1181-7.
- Li K, Xin L. Palpebral conjunctiva melanoma with dermoscopic and clinicopathological characteristics. J Am Acad Dermatol. 2014;71: e35-7.
- Tamiya H, Kamo R, Sowa J, et al. Dermoscopic features of pigmentation in Laugier-Hunziker-Baran syndrome. Dermatol Surg. 2010;36:152-4.
- Ko JH, Shih YC, Chiu CS, et al. Dermoscopic features in Laugier-Hunziker syndrome. J Dermatol. 2011;38:87-90.
- Sendagorta E, Feito M, Ramírez P, et al. Dermoscopic findings and histological correlation of the acral volar pigmented maculae in Laugier-Hunziker syndrome. J Dermatol. 2010;37:980-4.
- Ronger S, Touzet S, Ligeron C, et al. Dermoscopic examination of nail pigmentation. Arch Dermatol. 2002;138:1327-33.