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Dermoscopy of cutaneous lymphangioma circumscriptum

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ABSTRACT Lymphangiomas are congenital lymphatic malformations. They are clinically characterized by clusters of translucent vesicles, and on dermoscopy, yellow lacunae surrounded by pale septa as well as reddish to bluish lacunae have been described. A young male presented with a seven-year history of a vesicular lesion. Dermoscopy revealed multiple white-yellowish well-circumscribed roundish areas (lacunae) surrounded by pale septa. A few lacunae contained blood, which was characteristically accumulated in the lowest part of the lacuna, resulting in an appearance similar to the so-called "hypopyon" of the eye. We suggest a new "dermatologic" metaphoric term to desrcibe this peculiar feature (half-and-half lacuna).

Introduction

An 18-year-old male presented with a plaque consisting of vesicles containing serum and serohematic fluid on the upper back (Figure 1). The plaque appeared seven years earlier and gradually acquired its current size. The overal clinical aspect was suggestive of a lymphatic or venous tumor or malformation. Dermoscopy (polarized, 10X) revealed multiple white-yellowish well circumscrimbed roundish areas (lacunae), which were surrounded by pale septa (Figure 2). Several lacunae included variable amounts of blood. In some of them, the blood was characteristically accumulated in the lowest part of the lacuna, resulting in an appearance similar to the so-called "hypopyon" of the eye or the "half-and-half" blister seen in Sneddon-Wilkinson disease. Histopathology confirmed the diagnosis of cutaneous lymphangioma circumscriptum (CLC).

Discussion

Lymphangiomas are hamartomatous, congenital malformations of the lymphatic system derived embryologically from five primitive buds developing from the venous system [1]. Histologically, there are mainly three types of lymphangioma, depending on the size of the lymphatic channels: cystic



Figure 1. Plaque consisting of vesicles on the upper back. [Copy-right: ©2017 Jha et al.]

(macrocystic), capillary (super-microcystic), and cavernous (microcystic).

It has been suggested that dermoscopically CLC displays two distinct patterns: yellow lacunae surrounded by pale septa without inclusion of blood and yellow to pink lacunae alternating with dark-red or bluish lacunae, due to the inclusion of blood. CLC displaying the latter pattern might occasionaly be difficult to discriminate from haemangiomas [2,3]. An additional dermoscopic clue has recently been described as the "hypopyon-like feature." As sedimentation of blood occurs, its corpuscles aggregate according to their density, with cellular components lying at the bottom and serum at the upper part, resulting in a color transition from dark to light in some lacunae, creating a similar effect to that seen on the eye-the hypopyon [4]. Our case confirms that the latter feature might be typical of CLC. In addition, we suggest a new "dermatologic" metaphoric term to desribe this peculiar feature (half-and-half lacuna). This is based on the morpho-

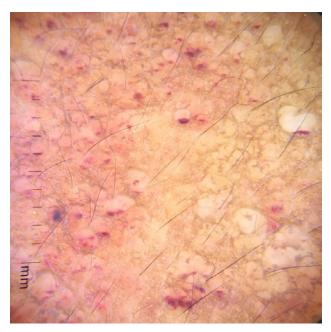


Figure 2. Dermoscopy [polarized, 10X] revealed multiple whiteyellowish well-circumscribed roundish areas (lacunae) surrounded by pale septa. Few lacunae contained blood, which was characteristically accumulated in the lowest part of the lacuna. [Copyright: ©2017 Jha et al.

logic similarity of this feature to the characteristic blisters of Sneddon-Wilkinson disease, which is better known among dermatologists and, therefore, easier to remember.

References

- Singh S, Baboo ML, Pathak LC. Cystic lymphangioma in children: report of 32 cases including lesions at rare sites. *Surgery*. 1971;69: 947–951.
- 2. Arpaia N, Cassano N, Vena GA. Dermoscopic features of cutaneous lymphangioma circumscriptum. *Dermatol Surg.* 2006;32:852–854.
- Amini S, Kim NH, Zell DS, Oliviero MC, Rabinovitz HS. Dermoscopic-histopathologic correlation of cutaneous lymphangioma circumscriptum. *Arch Dermatol.* 2008;144:1671–1672.
- 4. Gencoglan G, Inanir I, Ermertcan AT. Hypopyon-like features: new dermoscopic criteria in the differential diagnosis of cutaneous lymphangioma circumscriptum and haemangiomas. *J Eur Acad Venereol.* 2012;26:1023–1025.