

CHRYSLIS SIGN– A NEW DERMOSCOPIC ENTITY IN THE DIAGNOSIS OF ANGIOLYMPHOID HYPERPLASIA WITH EOSINOPHILIA

Aseem Sharma¹, Rachita Dhurat¹, Tejas Vishwanath¹, Sandip Agrawal¹, Deep Jarsania¹, Richa Sharma¹
¹Dept of Dermatology, Lokmanya Tilak Municipal Medical College & General Hospital, Sion, Mumbai – 50

Corresponding Author:

Dr Rachita Dhurat

OPD 16, 2nd floor, New OPD building, Sion Hospital, Mumbai-400022

Email: rachitadhurat@yahoo.co.in

Sir,

Dermoscopy plays a very important role in differentiating this benign, vasoproliferative disorder from ominous diseases such as Kaposi's sarcoma, Kimura's disease and cutaneous metastases. Dermoscopic signs, reported herein, and in a seven-case-series by Padilla et al include linear vessels, red dots, red lacunae, ulceration over a pale red background, when ALHE is examined under polarizing dermoscopy. In our observation of three cases, we found another sign – the Chrysalis sign, which is an established sign in a few conditions, viz., basal cell carcinoma, melanomas, dermatofibromas and scar tissue. But this has not been reported in conjunction with ALHE.

In our cases, the site of presentation varied from the centro-facial region, to the concha of the ear and scalp. (Figure-1) Ulceration, with or without frank hemorrhage was noted in two cases. All three cases showed a central, yellow structureless area with chrysalis-like, white streaks on a homogenous red background with few linear and dotted vessels. This chrysalides pattern is seen, particularly, as short, white orthogonal and parallel streaks, akin to the structural framework of the pupa, an intermediate stage between larval and adult life in a butterfly or a moth, and hence the nosological analogy. It is seen exclusively on polarized dermoscopy due to refringence from the hypertrophic or disoriented collagen in the dermis. (Figure-1) Fig 1



Figure 1 a,b,c,d,e: a. Multiple grouped skin coloured to erythematous papules to nodules over scalp in third case which is described by polarized dermoscopy of the lesions over the scalp; with contact plate; 50x magnification [Dinolite AMZ413ZT], b. Papulo-nodular lesion over the ala of left nostril, in the second case, c. Two erythematous nodules over the right concha, in the first case, d. Polarized dermoscopy of the right conchal lesions showing diagonal and orthogonal lines arranged perpendicularly – Chrysalis-like structures, using immersion oil as a contact medium; 50x magnification [Dinolite AMZ413ZT], e. Polarized dermoscopy of the lesion over the right nostril, with contact plate; 12x magnification [Dinolite AMZ413ZT]

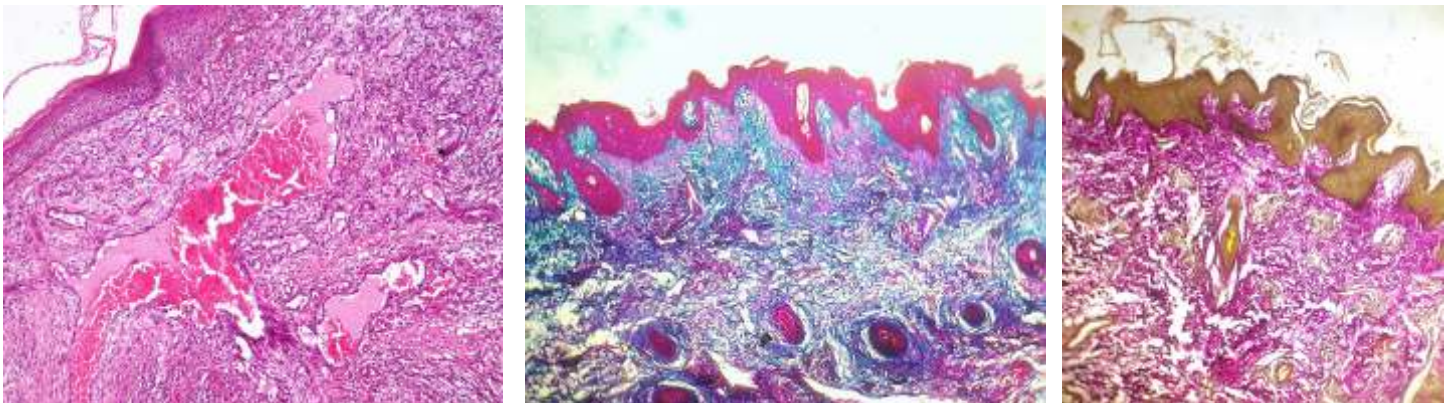


Figure 2 a,b,c: a. Multiple proliferating blood vessels, with plump endothelial cells, with abundant extravasation of RBCs and few eosinophils in the dermis and haphazardly arranged collagen fibres; 20x Hematoxylin-Eosin, b. Haphazardly arranged collagen fibres and bundles were noted, in both vertical and horizontal orientations; 10x Masson trichrome histochemical stain and on, c. Verhoeff-Van Gieson histochemical stain 10x

All three cases underwent a skin biopsy to confirm the diagnosis. Hematoxylin and eosinstaining revealed multiple proliferating blood vessels with abundant extravasation of RBCs and a few eosinophils in the dermis. These changes were consistent with ALHE. Haphazardly arranged collagenfibers and bundles were noted, in both vertical and horizontal orientations, which was confirmed on staining with Verhoeff Van-Geison and Masson's trichrome (Figure-2). This disorientation contributes to the Chrysalis-like pattern.

We analyzed the dermoscopic pictures by Lomba et al and noticed features consistent with the Chrysalis sign, and we discussed the same with the principal author. This sign should be added to the dermoscopic constellation of ALHE, to further knowledge on this enigmatic entity.



How to cite this article:

Sharma S, Dhurat S, Vishwanath T, Agarwal S, Jasrania D, Sharma R. Chrysalis sign– A new dermoscopic entity in the diagnosis of angiolymphoid hyperplasia with eosinophilia. *JDA Indian Journal of Clinical Dermatology* 2020;3:15-16

References

1. Padilla-España L, Fernández-Morano T, del Boz J, Fúnez-Liébaña R. Angiolymphoid Hyperplasia With Eosinophilia: Analysis of 7 Cases. *Actas Dermo-Sifiliográficas* (English Ed. 2013;104:353-355.
2. Marghoob AA, Cowell L, Kopf AW, Scope A. Observation of Chrysalis Structures With Polarized Dermoscopy. *Arch Dermatol.* 2009;145(5):618.