Our Dermatology Online

Letter to the Editor

"Bouquet of white roses": A dermoscopic marker for hypertrophic lichen planus

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Sir,

Lichen planus hypertrophicus manifests itself clinically as itchy hyperkeratotic plaques and nodules and is a condition easily confused with prurigo nodularis, lichen simplex chronicus, and many others. There are certain dermoscopic features more specific to lichen planus hypertrophicus, such as corn pearls and blue-grey globules [1]. Herein, we propose a new dermoscopic metaphor, "bouquet of white roses," specific to lichen planus hypertrophicus, as well as explain its evolution.

A 48-year-old patient presented itchy, hyperkeratotic, violaceous-to-grey lesions on the lower extremities persistent for the past two years (Fig. 1a). Dermoscopy was performed with a DermLite III dermatoscope with 10× magnification and polarized light. The dermoscopic examination revealed comedo-like openings filled with keratinous plugs and corn pearls along with Wickham's striae. A diagnosis of hypertrophic lichen planus was considered (Fig. 1b). Dermoscopic evaluations were subsequently performed every few months. At first, the corn pearls increased in number to, later, begin to increase in both number and size: hyperplasia and hypertrophy setting in (Figs. 2a–2c). Seven months previously, the same patient developed a nodule on the preexisting plaque. Dermoscopy revealed that the hypertrophied corn pearls had begun to aggregate (Fig. 2d). A few months later, the nodule further increased in size to form a verrucous mass. The dermoscopic picture now showed a conglomeration of corn pearls in a curvilinear manner, each spiraling toward the apex. This structure was akin to the arrangement of the petals of a white rose and the conglomeration of these structures together resembled a "bouquet of white roses" when viewed aerially. This phenomenon corresponds histologically to the hyperkeratosis atop wedge-shaped hypergranulosis enclosed in hyperplastic appendages [2]. A biopsy of the nodule confirmed the diagnosis of hypertrophic lichen planus and ruled out malignancy (Fig. 2e – 2g). This sign is not seen in other forms of lichen planus as the degree of hyperkeratosis essential to produce a conglomeration of such structures is absent in other forms. The hyperkeratosis in hypertrophic lichen planus lies atop follicular or acrosyringeal openings and this is not the scenario in prurigo nodularis and lichen simplex chronicus. Hence, the hyperkeratosis with underlying wedge-shaped hypergranulosis centered atop hyperplastic appendages in hypertrophic lichen planus produces the "bouquet of white roses" on dermoscopy and this sign is absent in other hypertrophic conditions [3,4].

Thus, we propose that the presence of the dermoscopic sign of "bouquet of white roses" not only delineates hypertrophic lichen planus from other forms of lichen planus but also helps to establish a clinical diagnosis of hypertrophic lichen planus ruling out other hypertrophic clinical mimics.

Consent

The examination of the patient was conducted according to the principles of the Declaration of Helsinki.

The authors certify that they have obtained all appropriate patient consent forms, in which the patients gave their consent for images and other clinical information to be included in the journal. The patients understand that their names and initials will not be

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Figure 1: a. Multiple hyperkeratotic and hypertrophic violaceous-to-grey plaques on the shin persistent for two years. b. Dermoscopy of these plaques showed the presence of several corn pearls (at the arrows): comedo-like openings filled with keratinous material. Note the presence of Wickham's striae between the corn pearls. Wickham's striae are seen as pearly white structures. Dermoscopy demonstrated classical signs of hypertrophic lichen planus.

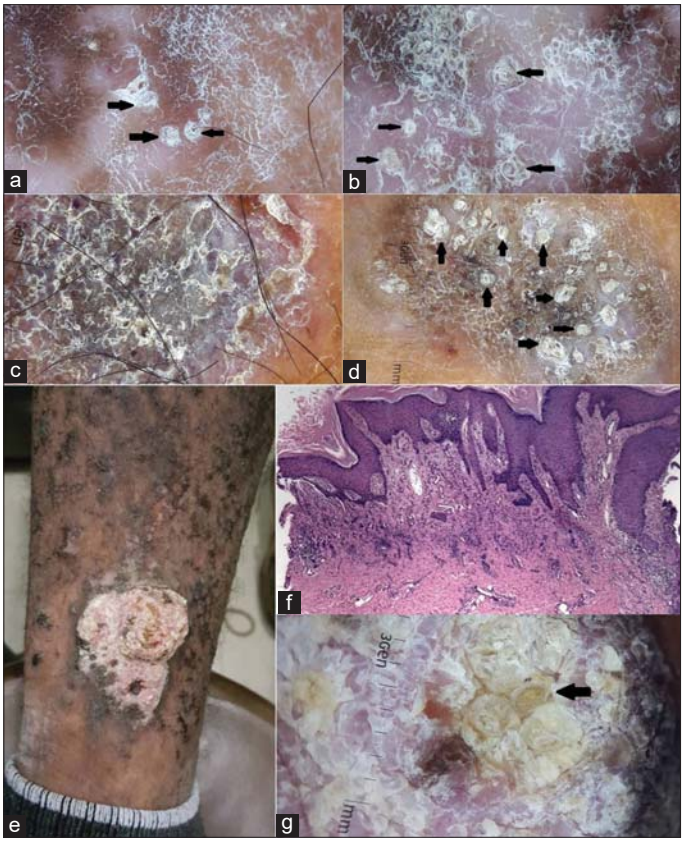

Figure 2: a.Repeated dermoscopic evaluation showed an increase in the number of corn pearls. b. Over a period of time, the corn pearls increased in size as well and showed some degree of hypertrophy. c. A subsequent dermoscopic evaluation demonstrated a simultaneous increase in the number and size of the corn pearls. d. As the patient developed a small nodule on a preexisting plaque of lichen planus, the hypertrophied corn pearls began to aggregate. e. The nodule increased in size to form a white-to-pink verrucous mass. f. Dermoscopy of the nodule showed that the corn pearls had conglomerated to form a "bouquet of white roses." g. A biopsy showed irregular epidermal hyperplasia. Wedge-shaped hypergranulosis was seen within hyperplastic appendages. The conglomerated corn pearls on dermoscopy, which formed the "bouquet of white roses" sign, histologically corresponded to the hyperkeratosis atop wedge-shaped hypergranulosis enclosed in hyperplastic appendages. (H&E, 10×).

published and due effort will be made to conceal their identity, but that anonymity cannot be guaranteed.

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