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Original Article

Dermoscopy of lichen planus hypertrophicus: a retrospective analysis

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Abstract

Objective To evaluate dermoscopic pattern of lichen planus hypertrophicus (LPH).

Methods Retrospective analysis of 24 patients who were clinically and histopathologically diagnosed cases of LPH were included in the study. Dermoscopy was performed using Dermlite II® hybrid m dermatoscope at 10X magnification in polarized mode and photographs were captured.

Results Dermoscopy of LPH demonstrated structureless white areas and with linear streaks arranged in a radial manner in all patients (100%), structureless polychromatic areas including brown, gray and black in 14 patients (58.3%) , comedo-like openings in 10 patients (41.6%), brownish-black globules in 13 patients (54.6%), and structureless yellowish areas structures in 16 patients (66.6%).

Conclusion Dermoscopy is helpful in establishing a diagnosis of LPH.

Key words
Lichen planus hypertrophicus, dermoscopy.

Introduction

Dermoscopy devices can overcome the refractive properties of stratum corneum by cross polarisation such that the lesion can be easily seen. Lichen planus (LP) is a common papulosquamous disorder involving the skin, nails and mucosae.[1] Although it is a benign disorder, malignant changes may happen, such cases have been reported.[2]

Methods

Retrospective analysis of twenty four patients who were clinically and histopathologically diagnosed cases of LP hypertrophicus (LPH) were included in the study. Dermoscopy was performed using Dermlite II hybrid m dermatoscope at 10X magnification in polarized mode and photographs were captured by Apple I phone 6.

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Results

Dermoscopy of LPH demonstrated structureless white areas and with linear streaks arranged in a radial manner in all patients (100%), structureless polychromatic areas including brown, gray and black in 14 patients (58.3%) , comedo-like openings in 10 patients (41.6%), brownish-black globules in 13 patients (54.6%), and structureless yellowish areas structures in 16 patients (66.6%), vascular component like red dots (**Figure 1-4**).

Discussion

A variant of LP is the hypertrophic or warty type better known as LPH. Lesions of LPH are characterized by hypertrophic verrucous plaques predominantly distributed over the

Figure 1 Hyperkeratotic, plaques and nodules on the legs in lichen planus hypertrophicus.

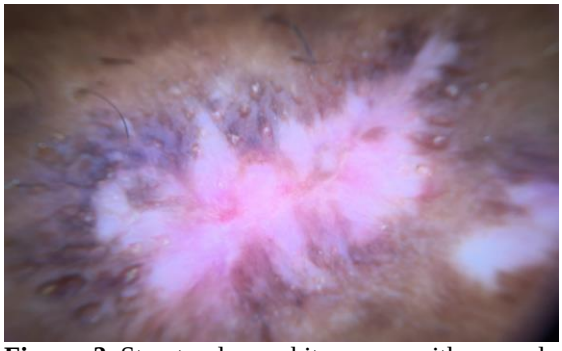

Figure 3 Structureless white areas with comedo like openings.

shins or dorsal aspect of feet.[2] 'Dermoscopy' is short and popular, whereas 'dermatoscopy' is traditional and rooted in history and language.[3] Both terms are considered appropriate.

On dermoscopy pearly white areas correspond histopathologically to compact orthokeratosis above zones of wedge-shaped hypergranulosis and acanthosis.[4] Comedo like openings (CLO) with filled yellow keratinous plugs were observed in LPH by Vazquez-Lopez *et al*.[4] CLO correspond to dilatation, plugging and hypergranulosis of infundibulum and they are suggestive of transepithelial elimination. Melanocytes in the epidermis appear as brownish-black globules in dermoscopy and their arrangement is diffuse, annular or in dotted patterns in classical LP.[5]

In our study structureless white areas and with linear streaks arranged in a radial manner, structureless polychromatic areas including

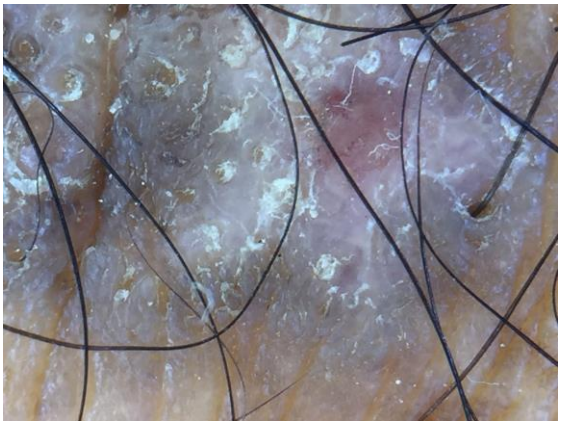

Figure 2 Structureless white and brown areas seen with yellowish scale.

Figure 4 Structureless yellowish areas with comedo like openings.

brown, gray and black, CLO, brownish-black globules and structureless yellowish areas structures were seen. Similar correlation has been described by Haldar *et al*.[6] and Ankad *et al*.[7,8] Our findings were similar in relation with these studies.

Conclusion

Dermoscopy can be used as as auxiliary tool for diagnosis of LPH.

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