

Letter to the Editor

Dermoscopy – a promising tool in monitoring treatment in isolated lip lichen planus – A case report

Arun Somasundaram¹, Vinupriya Sakkaravarthi¹, N. N. Veenaa², Sanath Aithal¹

Departments of ¹Dermatology and ²Pathology, KMCH Institute of Health Sciences and Research, Coimbatore, Tamil Nadu, India.



***Corresponding author:**
Arun Somasundaram,
Department of Dermatology,
KMCH Institute of Health
Sciences and Research,
Coimbatore, Tamil Nadu, India.
arunsomasundaram25@gmail.
com

Received: 11 August 2023
Accepted: 07 September 2023
Published: 23 September 2023

DOI
10.25259/CSDM_140_2023

Quick Response Code:



Dear Sir,

The dermoscopy of cutaneous lichen planus has been extensively studied and reported in the literature; however, only very few case reports on the dermoscopy of lip lichen planus exist.^[1] Herein, we report a leaf venation-like pattern of Wickham's Striae (WS) on dermoscopy observed and monitored in a patient with lip lichen planus.

A 44-year-old healthy female presented to the dermatology outpatient department seeking an asymptomatic skin lesion over her lip for 8 months. She had complaints of a burning sensation while having spicy foods. There were no history drugs intake before the onset of skin lesions. The patient denied a history of photosensitivity as well. Cutaneous examination revealed an isolated single discrete violaceous oval plaque over the upper lip [Figure 1]. Nail, scalp, and genitalia examination was within normal limits. Differential diagnoses of lichen planus, discoid lupus erythematosus, and prokeratosis were considered for the lip lesion. A biopsy confirmed the diagnosis of lichen planus [Figure 2]. Dermoscopy (Dermlite DL4 ×10) examination revealed a radial stream-like pattern of WS and in addition, we also observed a leaf venation-like pattern of WS suggestive of lichen planus [Figure 3a]. She was initiated on topical steroids and was asked to follow-up after a month. Post 1-month follow-up, she had almost a resolution of the skin lesion.



Figure 1: A 44-year-old healthy female patient with lip lichen planus presenting with a well-demarcated violaceous oval plaque over the upper lip.

This is an open-access article distributed under the terms of the Creative Commons Attribution-Non Commercial-Share Alike 4.0 License, which allows others to remix, transform, and build upon the work non-commercially, as long as the author is credited and the new creations are licensed under the identical terms.

©2023 Published by Scientific Scholar on behalf of CosmoDerma

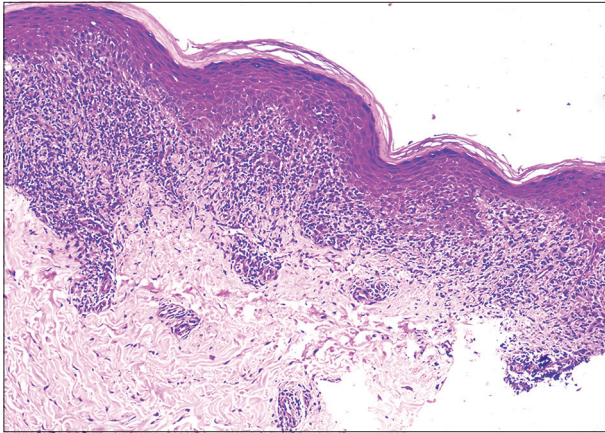


Figure 2: Histopathology showing basal vacuolar degeneration and band-like lymphocytic infiltrates (H&E ×200).

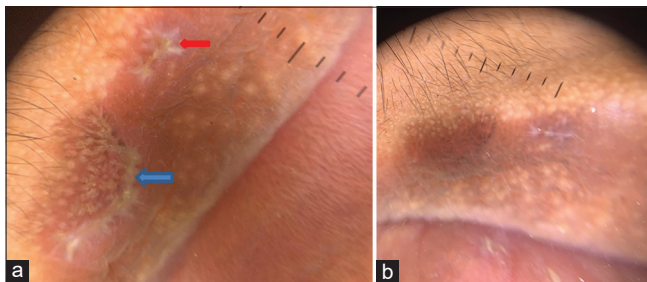


Figure 3: Dermoscopy image (Dermlite ×10) showing (a) blue arrow indicating leaf venation-like pattern of Wickham striae and red arrow depicting the radial stream-like pattern of Wickham striae and (b) post-treatment there is some resolution of the same.

Dermoscopy showed a partial clearance of Wickham's striae [Figure 3b] and patient symptoms were better.

Oral lichen planus presents more commonly in the fourth decade with female preponderance.^[2] The buccal mucosa is most commonly affected while other sites such as the tongue, gingiva, floor of the mouth, and lips can also be affected. Isolated lip lichen planus can mimic many conditions including discoid lupus erythematosus, actinic cheilitis, prokeratosis, pemphigus vulgaris, herpes simplex infection, etc. Dermoscopy plays a major role in diagnosing lichen planus and ruling out other causes. The major advantage is that it is a non-invasive tool that can be helpful for both diagnoses and monitoring following treatment.

Dermoscopy of cutaneous and oral lichen planus revealed specific clues like various patterns of Wickham's striae and vascular patterns. On scrutinizing the literature, we could find very few isolated case reports of dermoscopy of lip lichen planus. There was one study from India that reported on isolated lichen planus with various dermoscopic patterns observed.^[3] WS, scaling, pigmentation, and telangiectasia are the hallmarks of lip lichen planus. The various patterns of WS include reticulate (most common), circular, annular, radial

streaming, leaf venation-like, linear, round, and starry sky patterns.^[4,5] WS histopathologically correlates with wedge-shaped hypergranulosis.

A leaf venation-like pattern was observed in our patient on dermoscopy, which was, further, confirmed with a biopsy. The patient was started on topical steroids and was asked to follow-up after a month. Follow-up dermoscopy revealed partial clearance of Wickham's striae; thus, dermoscopy is a promising tool to monitor the response following treatment later. Dermoscopy, thus, plays a key role in narrowing down the diagnosis before biopsy and would serve as a promising non-invasive investigational modality in the near future. Early recognition and diagnosis are prudent to exclude the other closest mimics and to identify malignant transformation earlier.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

Use of artificial intelligence (AI)-assisted technology for manuscript preparation

The authors confirm that there was no use of artificial intelligence (AI)-assisted technology for assisting in the writing or editing of the manuscript and no images were manipulated using AI.

REFERENCES

1. Mathur M, Acharya P, Karki A, Kc N, Shah J, Jha A. Isolated lichen planus of lip: Diagnosis and treatment monitoring using dermoscopy. *Clin Case Rep* 2019;7:146-8.
2. Lavanya N, Jayanthi P, Rao UK, Ranganathan K. Oral lichen planus: An update on pathogenesis and treatment. *J Oral Maxillofac Pathol* 2011;15:127-32.
3. Neema S, Sandhu S, Kashif AW, Sinha P, Kothari R, Radhakrishnan S. Dermoscopy of lip lichen planus-a descriptive study. *Dermatol Pract Concept* 2020;10:e2020076.
4. Mittal S, Vinitha NM, Chaitra V. Dermoscopy of isolated lip lichen planus. *Indian Dermatol Online J* 2022;13:165-6.
5. Güngör Ş, Topal IO, Göncü EK. Dermoscopic patterns in active and regressive lichen planus and lichen planus variants: A morphological study. *Dermatol Pract Concept* 2015;5:45-53.

How to cite this article: Somasundaram A, Sakkaravarthi V, Veenaa N, Aithal S. Dermoscopy – a promising tool in monitoring treatment in isolated lip lichen planus – A case report. *CosmoDerma* 2023;3:129.