

Malignant transformation in long-standing hypertrophic lichen planus

Prateek Maharana¹, Swapnil Surajsingh Thakur², Mahima Soni²

From ¹Assistant Professor, ²Senior Resident, Department of Dermatology, Veer Surendra Sai Institute of Medical Sciences and Research, Sambalpur, Odisha, India

A 63-year-old man presented with multiple thickened, pruritic, hyperpigmented verrucous plaques over both legs for the past 30 years. He noticed a recent yellowish-brown verrucous outgrowth over a pre-existing plaque on the medial aspect of the right leg, associated with serosanguinous discharge for 3 months.

On general examination, the patient was clinically stable with normal vital parameters. Cutaneous examination revealed a solitary, firm, hyperkeratotic nodule measuring approximately 3 × 3 × 3 cm, arising from a lichenified hypertrophic plaque on the medial aspect of the right leg (Fig. 1). The surrounding skin showed multiple healed lesions with post-inflammatory hypo- and hyperpigmentation consistent with long-standing hypertrophic lichen planus.

Histopathological examination of the verrucous plaques showed features consistent with hypertrophic lichen planus. Scrape cytology from the nodular outgrowth revealed a fibroepithelial lesion with moderate cytological atypia, suggestive of squamous cell carcinoma arising in hypertrophic lichen planus.

Malignant transformation in hypertrophic lichen planus is rare but well recognized, particularly in long-standing lesions over the lower extremities. Sigurgeirsson and Lindelöf, in their epidemiological study, highlighted an increased risk of squamous cell carcinoma in patients with chronic lichen planus, especially in hypertrophic variants of long duration [1]. Bhattacharya *et al.* reported squamous cell carcinoma arising in hypertrophic lichen planus after several decades of disease, predominantly involving the lower limbs, similar to our case [2].

The salient similarities between previously reported cases and the present case include long disease duration, hypertrophic morphology, localization to the lower extremities, and the emergence of a new verrucous or nodular lesion over a pre-existing plaque. The proposed pathogenesis of malignant transformation in hypertrophic lichen planus includes chronic inflammation, persistent epidermal hyperproliferation, repeated trauma and scratching, and prolonged immune-mediated basal



Figure 1: Hyperkeratotic verrucous nodule with a yellowish-brown surface arising from a lichenified plaque of hypertrophic lichen planus on the medial aspect of the right leg above the knee showing malignant transformation. Multiple healed post-inflammatory hypo and hyperpigmentation over the leg

cell damage, leading to genomic instability and carcinogenesis. These factors act synergistically over time, particularly in untreated or long-standing lesions.

This case highlights the importance of regular surveillance and prompt biopsy of any new or rapidly changing lesions in patients with hypertrophic lichen planus to enable early detection of malignant transformation.

REFERENCES

1. Sigurgeirsson B, Lindelöf B. Lichen planus and malignancy. An epidemiologic study of 2071 patients and a review of the literature. *Arch Dermatol* 1991;127:1684-8.
2. Bhattacharya M, Kaur I, Kumar B. Squamous cell carcinoma arising in hypertrophic lichen planus: A review and analysis of 38 cases. *Dermatol Surg* 1999;199:345-6.

Funding: Nil; Conflicts of interest: Nil.

How to cite this article: Maharana P, Thakur SS, Soni M. Malignant transformation in long-standing hypertrophic lichen planus. *Indian J Case Reports*. 2026; 12(2):134

Access this article online

Received - 17 December 2025
Initial Review - 07 January 2026
Accepted - 19 January 2026

Quick Response code



DOI: 10.32677/ijcr.v12i2.8013

Correspondence to: Prateek Maharana, Assistant Professor, Department of Dermatology, Veer Surendra Sai Institute of Medical Sciences and Research, House no- 27, Balaji City, PO/Dist-Bargarh, Sambalpur, Odisha - 768028, India. E-mail: drprateekmaha@gmail.com

© 2026 Creative Commons Attribution-NonCommercial 4.0 International License (CC BY-NC-ND 4.0).