Dermatology Practical & Conceptual

Lichenoid Pseudovesicular Papular Eruption on the Nose With Dermoscopic Features: A Case Series

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Introduction

Lichenoid pseudovesicular papular eruption on nose (LIPEN) is a newly described clinical entity characterized by monomorphic skin-colored to translucent micropapules over centro-facial region especially, nose. It resembles various facial papular disorders, hence usually misdiagnosed. We enumerate a case series of four patients having similar lesions over face along with dermoscopic features.

Case Presentation

Four patients (one male, three females), in the age range of 20-50 years, North-Indians, skin type IV, presented with asymptomatic skin-colored to erythematous lesions over centro-facial region with duration varying from two months to two years. History of excessive sweating, flushing or exacerbation with spicy food and sunlight was absent. Drug, family and occupational history were insignificant.

Clinically, multiple, grouped, skin-colored to slightly erythematous micropapules with normal underlying skin were present on dorsum of nose, bilateral nasal alae, cheeks and forehead. Involvement of cutaneous upper lip was seen in two patients (Figure 1, A-D). Cutaneous examination elsewhere was normal. Diascopy was negative. Routine blood investigations were normal.

Dermoscopic examination revealed multiple pink-clods with brown dots in clusters distributed in the center and rim

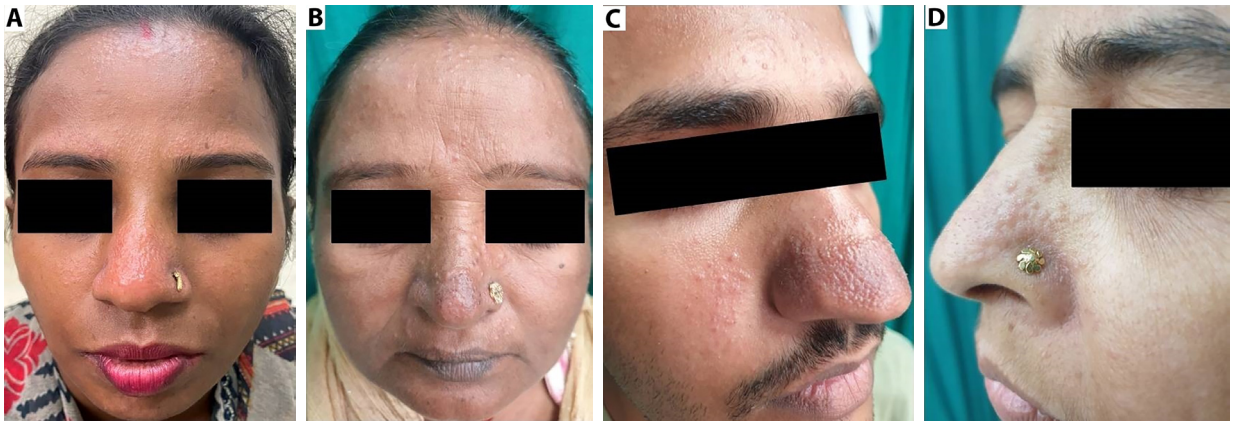

Figure 1. Multiple grouped pseudovesicles and micropapules over nose, forehead, bilateral cheeks in all patients (A-D), and upper lips in two patients (B and D).

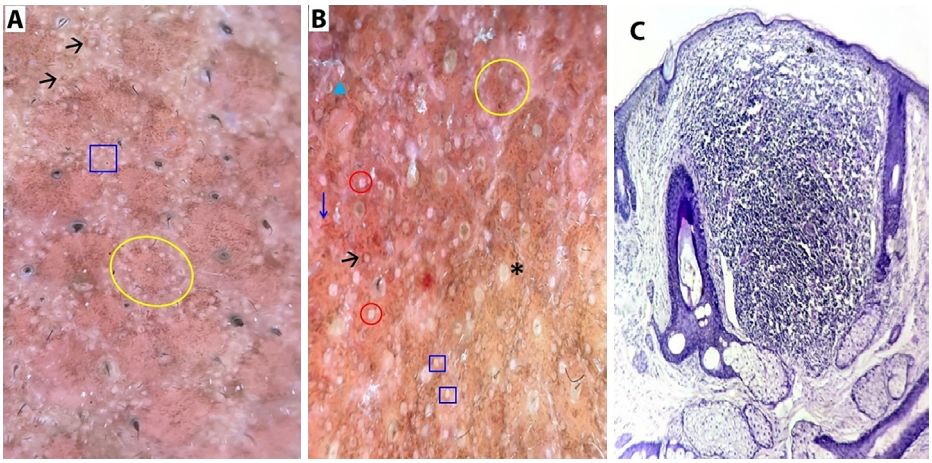

Figure 2. (A-B) Multiple pink-clods with brown dots in the center and around the clods (yellow circles), multiple white dots (blue square), peri-eccrine brown circles (black arrows); in addition white scales (sky-blue triangle), rosettes (red circles), yellow dots (black asterisk) and telangiectasias (blue arrow) in (B); (C) Histopathology showing epidermal thinning, flat rete ridges, focal basal vacuolar degeneration, dense nodular lymphocytic infiltrate along dermo-epidermal junction in upper dermis (H& E, ×100).

of these clods, multiple white dots interspersed between the pink-clods, brown circles in the peri-eccrine area, and fine white scales (Figure 2, A-B). Yellow dots, rosettes and telangiectasias were also observed in single patient.

Histopathology from two patients (others denied consent) revealed epidermal thinning, flattened rete ridges, focal basal hydropic degeneration and dense lymphocytic infiltrate along dermo-epidermal junction and around hair follicles, admixed with mononuclear cells, consistent with diagnosis of LIPEN. Special stains like alcian blue, periodic acid-Schiff and Ziehl-Neelsen were non-contributory (Figure 2C).

Conclusions

LIPEN presents as asymptomatic, monomorphic, skin-colored, erythematous or hyperpigmented grouped micropapules and translucent pseudovesicles in young to middle-aged population, predominantly over nose and centro-facial region mainly involving cheeks, forehead and less commonly upper lips (seen in three previous case reports). Most common site is nasal alae. Its exact pathogenesis is unknown. First clinical and histopathological description of LIPEN was given in a case series in 2019 [1]. The histopathological features are characterized by focal lymphocytic infiltrate in upper

Table 1. Comparison of lichenoid pseudovesicular papular eruption on nose with other differential diagnoses summarized.

S.no.	Differential diagnosis	Characteristic dermoscopic findings	Histopathological findings
1.	Granulosa rubra nasi	Discrete round pink and red structureless areas are present over-erythematous background with scattered to grouped brown dots	Dilated blood vessels and eccrine ducts with surrounding lymphocytic infiltrate
2.	Papular sarcoidosis	Multiple arborizing vessels over yellow-orange globular structures and scarred areas	Non-caseating, lymphocyte-poor, epithelioid cell granulomas in superficial and deep dermis admixed with multinucleated giant cells
3.	Micro-papular polymorphic light eruption	Ring-shaped scales	Hyperkeratosis, spongiosis, dense dermal perivascular lymphocytic infiltrate
4.	Granulomatous rosacea	Orange-yellow areas with polygonal network of vessels	Granulomas with adnexal destruction and demodex mite infiltration in follicular infundibulum with peri-follicular lympho-histiocytic infiltrate
5.	Lupus miliaris disseminates faciei	Perifollicular structureless yellow-orange areas with keratotic plugs	Dermal caseating epithelioid cell granulomas with multinucleated giant cells and lymphohistiocytic infiltrate
6.	Lichenoid pseudo-vesicular/papular eruption of nose	Multiple clustered red clods, white dots, peri-eccrine brown dots and circles, telangiectasias, fine white scales and yellow dots; multiple rosettes in one-case	Focal, dense lymphocytic dermal infiltrate, focal epidermal atrophy and basal epidermal degeneration

dermis, basal cell damage (necrotic/ vacuolar) and focal epidermal atrophy. Its various differentials with dermoscopic features are delineated in Table 1. The clinical distinction of LIPEN from these entities sometimes becomes very difficult especially in patients reluctant for facial biopsy. Hence, dermoscopy may have a useful adjunctive role. Dermoscopy in LIPEN has only been described in six cases previously. In a published series of dermoscopic features, multiple structureless clustered red clods (corresponding to lymphohistiocytic infiltrate), scattered white dots (empty eccrine openings) were most consistent findings [2]. Brown and gray dots or globules (suggestive of pigmentary incontinence) appear to be concentrated in the peri-eccrine and peri-follicular locations [3]. Fine scales and yellow dots were not seen in previously reported cases.

The clinical, dermoscopic and histopathological data about LIPEN is limited. As it resembles other facial papular disorders, apparently the disease has either been misdiagnosed or under-diagnosed in previous studies. This study will aid in the distinction of this uncommonly diagnosed entity.

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