Original Article

A Clinicopathological Study of Polymorphous Light Eruption

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Abstract

Background: Polymorphous light eruption (PLE) is the most common idiopathic photodermatoses, with a wide range of clinical presentations that tends to mimic a number of dermatoses. **Aim:** The aim was to study the clinicopathological profile in patients diagnosed with PLE. **Methods:** This was a cross-sectional, descriptive study of seventy clinically diagnosed cases of PLE over a period of 1 year, wherein following patient enrolment, they underwent a thorough clinical evaluation, followed by a skin biopsy that was studied categorically. **Results:** A male preponderance (62.8%) was observed. Majority of patients were in the 21-30 years' age group (28.6%). Pruritus was witnessed in 98.5% of patients. The most common morphological type encountered was plaque PLE (35.7%), followed by lichen nitidus type (11.4%). Commonest site of involvement was sides and back of neck (75.7%), followed by dorsolateral aspect of both arms (31.4%). Hyperkeratosis was identified in 82.8%, spongiosis in 87.1%, liquefactive degeneration of basal cell layer in 82.8%, atrophy in 24.2%, and moderate-to-severe lymphocytic dermal infiltrates in 90% of our cohorts. **Conclusion:** PLE is a disorder with diverse clinical presentations, manifesting usually in the third decade of life that closely mimics a variety of other cutaneous disorders. Histological examination with certain specific criteria enables the clinician to arrive at a concrete conclusion in those cases where clinical findings alone pose diagnostic difficulties.

Keywords: *Histopathology, lichen nitidus type of polymorphous light eruption, micropapular polymorphous light eruption, polymorphous light eruption*

Introduction

Polymorphous light eruption (PLE) is the most common idiopathic photodermatoses. It was first described by Willan, who designated the term "eczema solare" for the same.[1]

As the name suggests, PLE demonstrates myriad clinical phenotypes and mimics a number of other dermatological conditions. Some of them include lichen planus, lichen nitidus (LN), strophulus, discoid lupus erythematosus (DLE), and eczemas. Though symptomatic in most cases, it may not elaborate any symptom in many patients. It therefore becomes imperative on the part of the clinician to perform a skin biopsy along with special stains (if warranted), in order to aptly evaluate these patients, and arrive at a definitive diagnosis, so that appropriate treatment can be promptly instituted.

Paucity exists with respect to studies evaluating the clinicopathological profile of PLE. We therefore attempted this study to analyze the clinicopathological findings of PLE in a hospital-based population in eastern India.

Methods

Our study was conducted in the department of dermatology of our institute after obtaining permission from the Institutional Ethical Clearance Committee (Registration number: KMC/IEC/2019–2022/004/MD[DVL]). This was a descriptive, cross-sectional study done over a 1-year period. We were able to obtain seventy patients of PLE during this time frame, who were willing to enroll themselves for the study (as a skin biopsy was required). Only those patients who had not been treated earlier for their cutaneous disease were included in the study. Once patients were selected, a written and informed consent was taken from each of them, following which relevant history concerning the disease was recorded, which was furthered by a cutaneous biopsy, that was sent for histopathological examination. In patients diagnosed with plaque PLE, apart from routine hematoxylin and eosin stained biopsies, alcian blue staining was

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performed along with blood examination for anti-nuclear antibody (ANA) in order to rule out evolving lesions of DLE (that could closely simulate plaque PLE). We postulated diagnostic criteria (after studying the sensitivity and specificity of these criteria in combination, while diagnosing PLE) that grouped patients into the following three categories: namely patients having definitive PLE, possible PLE, and probable PLE. These criteria have been stated in Table 1.

Statistical analysis

As all values in our study were categorical, they were expressed as numerical values and percentages.

Results

Out of the seventy patients studied, 44 (62.85%) were males and the remaining 26 (37.14%) were females, with the male-to-female ratio being 2.2:1.3.

Majority of our patients belonged to the 21–30 years' age group (28.6%), followed by 31–40 years (20%), 11–20 years (15.7%), 41–50 years (14.3%), 51–60 years (12.6%), 61–70 years (7.14%), and 1–10 years (1.4%).

Duration of lesions ranged from ≤ 1 month in 33 (47.14%) patients, 2–3 months in 20 (28.57%) patients, 4–6 months in 12 (17.14%) patients, and 7–12 months in the remaining 5 (7.14%) patients.

None of our patients had a family history of PLE and neither was a history of sunscreen use forthcoming from anyone of them.

Out of the seventy patients, only 20 (28.57%) had professions involving chronic exposure to sunlight, and included farmers (14), watchmen (3), and construction workers (3). The remaining 50 (71.42%) had occupations which did not predispose to long hours of photo-exposure. A detailed description of the same has been collaborated in Table 2.

Major symptoms obtained from our patients included pruritus (98.5%), burning (27.1%), and pain (22.8%). Only one patient was asymptomatic (1.4%).

Associated atopy was identified in one patient and milk protein dermatitis was identified in another patient. Ichthyosis vulgaris was seen in one patient and in another patient, nephrotic syndrome was detected.

Lesions of PLE demonstrated a transient character in 53 (75.71%) patients, with recurrence occurring in the remaining 17 (24.28%) patients.

Out of the 70 patients, 55 (78.57%) had Fitzpatrick skin Type IV, 11 (15.71%) had Fitzpatrick skin Type V, and 4 (5.71%) had Fitzpatrick skin Type III.

A number of morphological patterns of PLE were identified in our patients and are elucidated in Table 3.

Table 1: Histological criteria formulated by authors of the current study for polymorphous light eruption

Epidermal
Major criteria
Spongiosis
Liquefactive degeneration of basal cell layer
Minor criteria
Hyperkeratosis (not to be included for macular lesions of PLE, but applicable for all other clinical variants)
Atrophy
Dermal
Major criteria
Perivascular and interstitial lymphocytic infiltrates in the upper and mid dermis (moderate to dense)
Absence of dermal mucin on staining with alcian blue (only applicable in those patients with plaque type PLE)
Minor criteria
Perivascular and interstitial lymphocytic infiltrates in the upper and mid dermis (mild)
For definitive PLE
Both epidermal major criteria + any one epidermal minor criteria + both dermal major criteria
For possible PLE
Any one epidermal major criteria+one epidermal minor criteria+either dermal major criteria 1 or dermal minor criteria
For probable PLE
Any 1 epidermal criteria (major or minor) + dermal minor criteria

PLE: Polymorphous light eruption

Table 2: Various occupations of those patients without consistent photoexposure

Profession	Male	Female	Total
Student(s)	13	2	15
Teacher(s)	2	2	4
Homemakers	0	15	15
Doctor	0	1	1
Milk seller	1	0	1
Shopkeeper	1	0	1
Pharmacist	1	0	1
Reporter	1	0	1
Clerk	1	0	1
Chauffeur	1	0	1
Businessmen	9	0	9

In 69 of the 70 patients, a single morphological pattern of PLE was witnessed. In the remaining one patient, two morphological variants were identified (LN type and macular type).

ANA testing was negative in all 25 patients of plaque PLE.

Various sites of lesional distribution in our study population has been explained in Table 4.

The characteristic histological findings that we observed included hyperkeratosis (58, 82.85%), parakeratosis

Table 3: Various clinical morphological types of polymorphous light eruption identified in our study population

Morphological type	Number of patients, *n* (%)
Plaque type [Figure 1]	25 (35.72)
Lichen nitidus type [Figure 2]	8 (11.42)
Eczematous type	7 (10)
Lichen simplex type	6 (8.57)
Lichenoid variant	6 (8.57)
Macular variant [Figure 3]	7 (10)
Papulovesicular type	3 (4.28)
Papular type	2 (2.85)
Psuedolymphomatous type	2 (2.85)
Micropapular type [Figure 4]	1 (1.42)
Juvenile spring eruption	1 (1.42)
Mimicking actinic lichen planus [Figure 5]	1 (1.42)
Vesiculobullous type	1 (1.42)

Table 4: Site-wise distribution of lesions in our study participants

Number of sites involved	Number of patients, *n* (%)
Single site (face - 4, neck - 30, arm - 5, hands - 2, trunk - 1)	43 (61.4)
Two sites (face+neck - 5, neck+trunk - 3, neck+arm - 2, neck+forearm - 1 and hand+forearm - 1)	12 (17.1)
Three sites (face+neck+arm – 3, face+neck+trunk - 2, neck+trunk+forearm - 2 and neck+arm+trunk - 2)	9 (12.8)
Four sites (face+neck+arm+forearm - 1, neck+arm+forearm+trunk - 1 and neck+arm+forearm+hands - 1)	3 (4.2)
Five sites (face+neck+trunk+arm+forearm - 1, face+neck+trunk+arm+legs - 1 and neck+trunk+arm+forearm+hands - 1)	3 (4.2)

(5, 7.14%), basket weave pattern of stratum corneum (1, 1.42%), epidermal atrophy (17, 24.28%), spongiosis (61, 87.14%), acanthosis (2, 2.85%), papillomatosis (3, 4.28%), suprapapillary thinning (2, 2.85%), liquefactive degeneration of basal cell layer (58, 82.85%), psoriasiform elongation of rete ridges (11, 15.71%), flattening of rete ridges (2, 2.85%), increased pigmentation of basal cell layer (4, 5.71%), dense perivascular lymphocytic infiltrates (34, 48.57%), moderate perivascular lymphocytic infiltrates (29, 41.42%), minimal perivascular lymphocytic infiltrates (7, 10%), dermal edema (40, 57.14%), lymphocytic exocytosis (17, 24.28%), follicular plugging (6, 8.57%), and hyalinization of collagen fibers (1, 1.42%).

Out of the 70 biopsy specimens 50 (71.42%) were definitively diagnostic for PLE [Figure 6a and b], 11 (15.71%) were possibly diagnostic for PLE

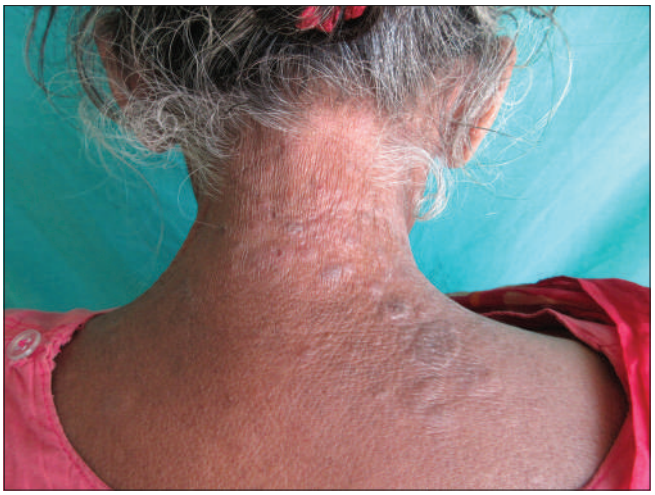

Figure 1: Plaque-type polymorphous light eruption over the neck and adjacent areas

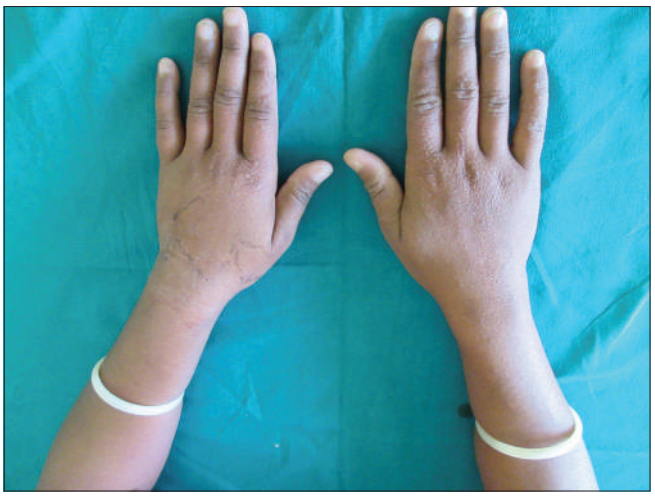

Figure 2: Lichen nitidus-type polymorphous light eruption over the dorsa of both hands

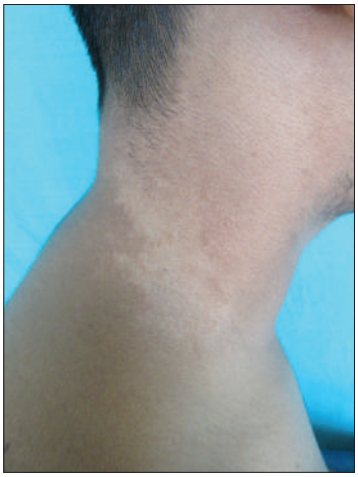

Figure 3: Macular polymorphous light eruption over the neck

[Figure 7a and b], 8 (15.71%) demonstrated probability of having PLE [Figure 8], and one specimen was

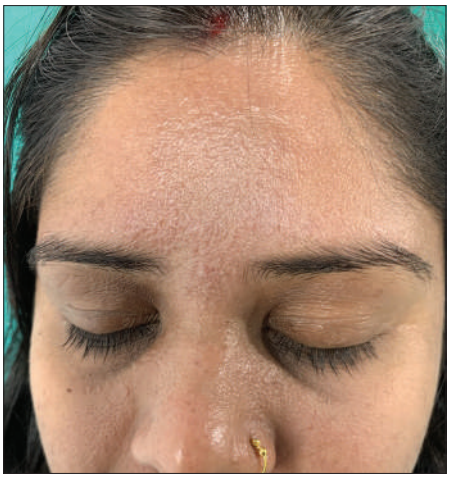

Figure 4: Micropapular polymorphous light eruption over the forehead

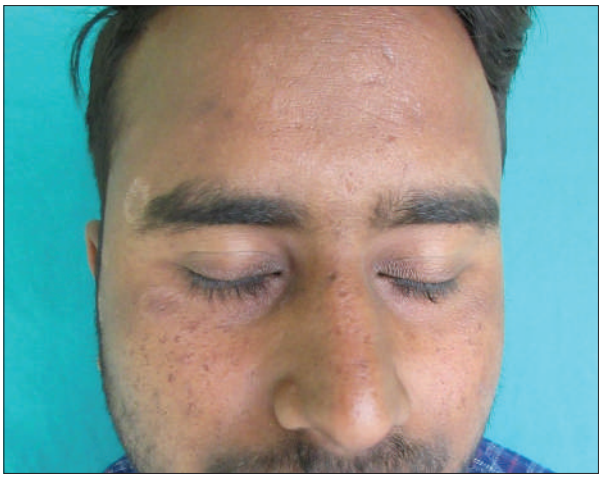

Figure 5: Polymorphous light eruption mimicking actinic lichen planus with a hyperpigmented plaque, and surrounded by a hypopigmented halo

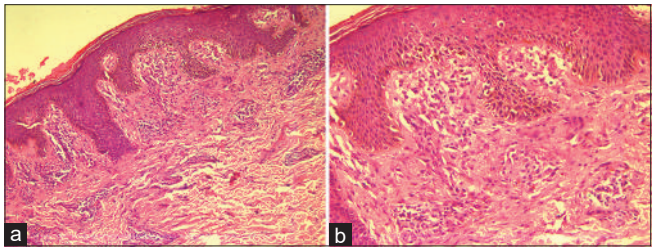

Figure 6: (a) Histology demonstrating the definitive diagnostic grade of polymorphous light eruption with hyperkeratosis, spongiosis, liquefactive degeneration of the basal cell layer, and an abundant lymphocytic dermal infiltrate. Other features identified include dermal edema and lymphocytic exocytosis (H and E, ×10) (b) Higher magnification revealing spongiosis, liquefactive degeneration of the basal cell layer along with pronounced dermal edema and lymphocytic exocytosis (H and E, ×20)

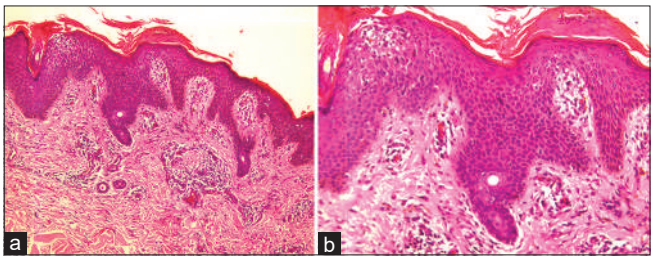

Figure 7: (a) Histology demonstrating the possible grade of polymorphous light eruption with hyperkeratosis, spongiosis, and a moderately dense dermal lymphocytic infiltrate. Also featuring here is pronounced dermal edema (H and E, ×10). (b) Higher magnification revealing spongiosis and pronounced dermal edema (H and E, ×20)

nondiagnostic. Histological grading observed in various phenotypes of our PLE patients has been elucidated in Table 5.

Discussion

The present study was done to throw light on the clinical and histopathological features in patients diagnosed with PLE.

The salient demographic characteristics witnessed amongst our patients have been compared with that of previous studies in Table 6.

Clinically, an acute presentation (duration ≤1 month) was seen in 47.14% of our participants, with only 7% of patients exhibiting a chronic presentation (7–12 months). However, in the study by Chacko *et al*.,[2] 31% of patients equally demonstrated an acute presentation (≤1 month), as well as a chronic presentation (≥3 months). In the study by Pullabatta *et al*.,[6] the median duration of disease was 3.2 months (10 days–8 months), and studies by Boonstra *et al*.[10] and Mastalier *et al*.[11] portrayed a mean duration of 9.2 years and 6.2 years, respectively.

Pruritus featured in 98.5% of our participants, which was strikingly higher when compared to studies from Salem (30%), Chidambaram (54%), Varanasi (68.63%), and Mumbai (72%).[2,3,5,6] Burning was another complaint witnessed in 27.1% of our patients. This was slightly higher than the report by Chacko *et al*.[2] (18%) and Kharkar and Kanade,[3] (7%). Only one patient in our study was asymptomatic. This was in contrast with the conclusion made by Chacko *et al*.,[2] Kharkar and Kanade,[3] and Pullabatta *et al*.,[6] where asymptomatic patients were 43%, 9%, and 17%, respectively. PLE rash was transient in 75.7% of our participants and recurrent in the remaining 24.3%. Chacko *et al*.[2] reported a transient pattern of PLE in 48% of their subjects, with 36% of their patients portraying a recurrent pattern. Further, in 16% of their cohorts, lesions were persistent, which was not observed in any of our study subjects. In the study from Varanasi, a recurring pattern was witnessed in 45% of their patients and a persistent pattern affected 11% of the same.[5]

Plaque PLE was seen as the major phenotype affecting 35.7% of our participants. Our findings were in accordance with the results of Lamb *et al*.,[12] who also observed plaque PLE as the major morphological type of PLE in their study. Chacko *et al*.,[2] Pullabatta *et al*.,[6] Sharma and Basnet,[5] and Guarrera *et al*.[13] on the other hand demonstrated

Table 5: Various clinical types of polymorphous light eruption and with their histological classification observed in our study

Clinical variant of PLE	Definitive PLE	Possible PLE	Probable PLE	Non diagnostic PLE
Plaque type	16	6	3	0
Lichen nitidus type	7	0	1	0
Lichen simplex type	6	0	0	0
Lichenoid type	6	0	0	0
Eczematous type	5	1	1	0
Papulovesicular type	3	0	0	0
Macular type	2	3	1	1
Pseudolymphomatous type	2	0	0	0
Mimicking acinic lichen planus	1	0	0	0
Micropapular type	1	0	0	0
Vesiculobullous type	1	0	0	0
Papular type	0	1	1	0
Juvenile spring eruption	0	0	1	0

PLE: Polymorphous light eruption

Table 6: Demographic profile of our patients as compared with previous studies

Author(s)	Sex ratio (male:female)	Age distribution	Associated family history amongst patients (%)	Major patient occupations observed
Chacko *et al*.[2]	1:4.5	Maximum in third decade (36%), followed by fourth decade (25%) and least in seventh decade (2%)	11	Farmers (29%) Homemakers (26%) Students (22%)
Kharkar and Kanade[3]	1:2.9	Maximum in third decade (27.5%) followed by fourth and second decade (20% each), and least in seventh decade (1.6%)	3	Outdoor occupations (60%) Indoor occupations (40%)
Deshmukh *et al*.[4]	2:2.7	Maximum in third decade (30%) followed by 6–19 years (20.77%) and least in the age group of 60-81 years (4.7%)	-	Farmers (37%) Homemakers (28%) Students (15%) Office goers (11%)
Sharma and Basnet[5]	1.3:2.2	Majority≤30 years (59.55%) followed by 31-50 years (34.54%)	10	Homemakers (37%) Students (31%) Farmers (10%)
Pullabatta *et al*.[6]	1:1.7	Maximum in third decade (53%)	4	Manual laborers (60%) Students (19%)
Verma *et al*.[7]	1:1.56	Maximum in 35-40 years (28%) followed by 30-34 years (19%), 25-29 years (16%) and least in age group>60 years (3%)	-	Farmers and laborers (38%) Housewives (18%)
Ross and Wennersten[8]	-	-	6.25	-
Millard *et al*.[9]	-	-	12	-
Authors of the current study	2.2:1.3	Maximum in third decade (28.6%) followed by fourth decade (20%) and least in first decade (1.4%)	None	Homemakers and students (24.43% each) Farmers (20%)

papular PLE as the major clinical pattern in 46%, 41%, 54.09%, and 72.4% of their cohorts, respectively.

Surprisingly, in our study, papular PLE was observed in only two patients. Other rarer variants happened to occupy a higher position in our study. Amongst them, the variant of PLE simulating LN was elucidated in 11.4% of our participants followed by the eczematous type (10%). Micropapular PLE that has been currently under close scrutiny was reported in only one of our study subjects. Karthikeyan and Aishwarya[14] have elaborated a number of clinical variants of PLE in their review. Amongst numerous phenotypes described, we felt the need to elaborate on the LN variant

because of its greater occurrence in our study, and the micropapular type, owing to its rarity. Actinic LN is a well-documented variant of LN, affecting photo-exposed areas closely simulating classical LN phenotypically as well as histologically.

Though some authors consider actinic LN to be a variant of PLE, others believe it to be an independent entity.[15,16] We consider actinic LN as a separate entity owing to its classical microscopic findings, that are distinctive and characteristic (demonstrating focal collections of lymphocytes, histiocytes, and few giant cells under a considerably atrophic epidermis, and embraced on both sides by elongated rete ridges that is often described as a claw clutching a ball). Out of the eight patients of LN type PLE in our study, none demonstrated the histological pattern of classic LN on microscopy. Moreover, seven of them satisfied the definitive diagnostic criteria of PLE and the remaining one patient showed findings consistent with possible PLE. We therefore regard actinic LN and LN type of PLE as completely distinct entities with only phenotypic overlap.

Bansal *et al*.,[17] have elaborated on the micropapular variant of PLE in their research paper comprising six patients. Based on duration of lesions, they classified micropapular PLE into acute (up to 1 week) and subacute (1–4 weeks) types, and delineated their histological findings accordingly. For acute lesions, they demonstrated microscopic findings in favor of PLE, whereas subacute lesions confirmed with findings of LN. In our patient with micropapular PLE, who had a subacute presentation, we did not encounter any finding of LN on microscopy. Rather, microscopic features precisely aligned with definitive PLE. We therefore feel that patients designated as subacute PLE by Bansal *et al*.[17] could have actually been actinic LN rather than PLE, owing to the pathognomonic findings of LN on microscopy. Nevertheless, studying larger sample sizes would help in furthering this concept better.

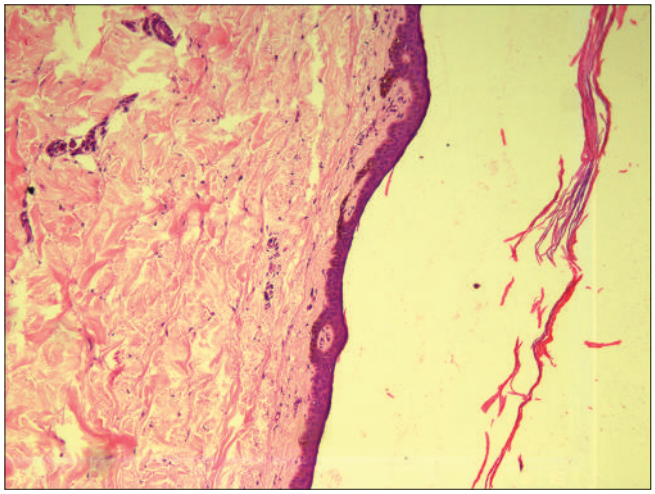

Figure 8: Histology demonstrating the probable grade of polymorphous light eruption with epidermal atrophy and minimal dermal lymphocytic infiltrate (H and E, ×10)

Regarding distribution of PLE lesions, 60% of our participants demonstrated single-site involvement, out of which majority of them had the disease confined to the neck (42.8%), followed by the upper arm (7.1%).

As many as 17.14% of them had involvement of two areas, whereas 12.8% had involvement of three body parts. The remaining 10% had involvement of multiple sites.

Similarly, in the study by Sharma and Basnet,[5] the neck was the most common site of involvement (61.82%), followed by the arms (55%).

Chacko *et al*.,[2] and Pullabatta *et al*.,[6] however iterated the forearms to be the most common site of involvement in 25% and 50% of their subjects, respectively.

We analyzed the histopathologic specimen in each of our patients and evaluated the microscopic findings. In order to get a systematic outcome, we enumerated our own criteria which can be viewed in Table 1.

Based on our criteria, we observed a definitive diagnostic histologic pattern in 71.4% of our patients, a possible histologic pattern in 15.7%, and probable microscopic findings of PLE in the remaining 11.4%.

Pullabatta *et al*.[6] in their study had also systematically outlined the histopathological features of PLE. Their criteria has been featured in Table 7.

Our histological criteria had subtle differences from that stated by Pullabatta *et al*.[6] An important inclusion by us was alcian blue staining for mucin in those patients with plaque PLE, to exclude evolving lesions of DLE. This feature did not occur in the histopathologic criteria of PLE in the report by Pullabatta *et al*.[6] Further, unlike the

Table 7: Histopathological diagnostic criteria of polymorphous light eruption as per the study by Pullabatta *et al*.[6]

Grade	Histopathological features
Diagnostic	Epidermis: Hyperkeratosis/atrophy/spongiosis
	Liquefactive degeneration may or may not be present
	Dermis: Dense perivascular lymphocytic infiltrate in the upper and mid dermis
Possible	Epidermis: Atrophy or spongiosis
	No basal cell degeneration
	Dermis: Lymphocytic infiltrate around the blood vessels but not dense
Probable	Epidermis: No marked changes
	No basal cell degeneration
	Dermis: Minimal lymphocytic infiltrate around the blood vessel

study from Chidambaram, for diagnostic PLE, our study had liquefactive degeneration of the basal cell layer as a compulsory inclusion, which was an optional feature in that study. Also, either epidermal atrophy or hyperkeratosis was good enough to qualify the placement of our participants in the histologic category of definitive PLE, unlike the mandated presence of both, as in the study by Pullabatta *et al*.[6] Despite these differences, we certainly can compare and analyze our histopathological findings with that of Pullabatta *et al*.[6]

In none of our patients diagnosed with plaque PLE did we encounter mucin positivity. Of these 25 patients, 16 (64%) demonstrated a histological pattern that confirmed to the suggested definitive diagnostic criteria for PLE. The study by Pullabatta *et al*.,[6] on the other hand demonstrated this histological pattern in a whooping 91.1% of their subjects with plaque PLE.

In none of our two cases of papular PLE was a definitive diagnostic histological pattern evident. In one, a possible pattern was seen, and in the other, a probable grade of PLE was observed. This was in contrast to the cases of papular PLE evaluated by Pullabatta *et al*.[6] wherein 31% of their subjects fitted with the diagnostic grade of PLE histologically.

Out of the seven patients diagnosed with macular PLE in our study, only 2 (2.85%) satisfied the definitive diagnostic criteria, 3 (4.2%) had features consistent with possible PLE, 1 (1.42%) had features of probable PLE, and the remaining 1 (1.42%) was nondiagnostic. In the study from Chidambaram however, none of the seven patients with macular PLE had features consistent with diagnostic PLE on microscopy. Three of them had features of possible PLE and four were consistent with probable PLE.

Prasad *et al*.[6] further elaborated histopathological findings based on duration of lesions. Majority of their patients with diagnostic PLE (28, 28%) had a duration of disease ranging from 3 to 4 months.

In our study, however, only 8 (11.42%) patients whose disease ranged from 3 to 4 months defined a definitive diagnostic histopathologic grade for PLE.

Rather, majority of our patients with a definitive diagnostic histologic pattern had the disease duration for <1 month (31, 44.28%), which was in absolute contrast with the values of Pullabatta *et al*.,[6] wherein none of their patients in the above time frame had similar findings.

This makes us speculate the fact that more than the disease duration, it may be the autoimmune response of each individual that finally defines the ultimate histologic outcome. As this differs in various individuals and populations, genetic studies could be of value in investigating these parameters.

Two other microscopic findings, though not stated in the diagnostic criteria, need mention, and include dermal edema and lymphocytic exocytosis. They were not included here as both represent secondary changes rather than primary pathology. Nevertheless, both these features prompt attention, as their presence enables the pathologist in ruling out other PLE mimickers, especially DLE.

Dermal edema was observed in 40 (57.14%) of the 70 histopathologic specimens examined, with majority of patients having plaque-type PLE (13, 18.57%), followed by LN-type PLE (7, 10%), eczematous PLE (6, 8.57%), lichen simplex-type PLE (3, 4.28%), lichenoid PLE (3, 4.28%), macular, papulovesicular, pseudolymphomatous PLE (2 each, 2.85%), and vesicular and LP type PLE (1 each, 1.42%).

Out of these 40 patients, 20 (28.57%) had the disease for a duration of ≤1 month, 8 (11.42%) of them presented with a duration of 1–2 months, 5 (7.13%) of them for a duration for 3–4 months and in the remaining 7 (10%), the disease duration exceeded 5 months.

Lymphocytic exocytosis was observed in 17 (24.28%) patients. Six (8.57%) of them had plaque PLE. Lichenoid and LN-type PLE were identified in 3 (4.28%) patients each. Lichen simplex and eczematous-type PLE were seen in another 2 (2.85%) patients and papulovesicular type was seen in 1 (1.42%) patient. Out of the 17 patients, 9 (12.84%) had the disease for ≤1 month, 5 (7.13%) presented for a duration of 2–3 months, and the remaining 3 (4.28%) had a chronic presentation of ≥6 months.

We therefore reiterate that a prolonged duration of disease is not mandatory to obtain these characteristic findings on microscopy. This could once again be attributed more to the individual's immune response against the antigenic effect of ultraviolet rays, rather than the increased time span. This concept, however, can only be validated by meticulously studying these immune-mediated responses, coupled with comparative microscopy of biopsy specimens.

Currently, based on our findings, we can strongly suggest that histological parameters pointing toward a higher inflammatory response do not necessarily correlate with longer disease duration.

Limitations of the study

Direct immunofluorescence, immunohistopathological staining for CD4 and CD8, and phototesting could not be performed, owing to nonavailability in our institute. Their inclusion in our study could have enhanced the strength of our findings.

Conclusion

To conclude, PLE is a common condition with diverse clinical presentations, making it mandatory for dermatologists to be well versed with each of the newer clinically described variants. In our study, we detected

rarer clinical types of PLE to be more common when compared to the usual morphological patterns reprised in previous studies. Interestingly, in majority of these presentations, definitive diagnostic criteria of PLE were fulfilled on histopathology. Also, we realized that the duration of PLE did not affect the severity of microscopic findings.

Owing to phenotypic overlap, often the clinician could miss the possibility of these rarer PLE subtypes. Although the diagnosis of PLE is primarily clinical, histopathology becomes mandatory in those cases where phenotypic overlap with other dermatoses exist. In such cases, it becomes essential to be cognizant with the microscopic findings of PLE. As PLE does not demonstrate specific histological findings, outlining microscopic diagnostic criteria would help the dermatopathologist in evaluating these biopsy specimens in a more systemic manner.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Conflicts of interest

There are no conflicts of interest.

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