Ring Scales: A New Dermoscopic Sign in Polymorphous Light Eruption

¹Subrata Malakar, ²Purva Mehta

How to cite this article: Malakar S, Mehta P. Ring Scales: A New Dermoscopic Sign in Polymorphous Light Eruption. Int J Dermoscop 2017;1(2):62-64.

Source of support: Nil
Conflict of interest: None

Sir,

Dermoscopy is the newest noninvasive diagnostic tool in clinical practice today. Here, we highlight a new dermoscopic sign in polymorphous light eruption that has varied clinical presentations.

CASE REPORTS

Case 1

A 65-year-old female presented with itchy lesions on her forearms and arms since 3 weeks. The subject gave history of aggravated itching on sun exposure. Clinical examination revealed erythematous and scaly plaques on bilateral forearms and arms (Fig. 1).

On the basis of history and clinical examination, a diagnosis of polymorphous light eruption was made. Dermoscopy of the lesions characteristically exhibited white scales that were circular in shape, resembling a ring. Thus, dermoscopy showed ring scales in polymorphous light eruption (Fig. 2).

Case 2

A 28-year-old male presented with itchy and scaly lesions on the arms since a month. On sun-exposed areas, the itching was exacerbated. Clinical examination showed hypopigmented, scaly lesions on the arms (Fig. 3A).

A clinical diagnosis of polymorphous light eruption was made. Dermoscopy was performed to confirm our previous finding and similar ring-shaped scales were seen through the dermoscope (Fig. 3B).

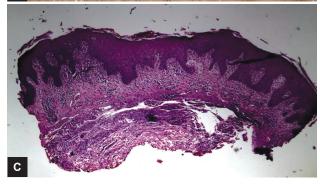
Corresponding Author: Purva Mehta, Consultant, Department of Dermatology, Rita Skin Foundation, Kolkata, West Bengal India, e-mail: purvamehta86@gmail.com



Fig. 1: Erythematous scaly plaques on arm and forearm of polymorphous light eruption







Figs 2A to C: (A) Dermoscopy of Case 1 exhibiting ring scales; (B) magnified view of ring scales; and (C) scale crust atop the stratum corneum corresponds to ring scale seen on dermoscopy in polymorphous light eruption



¹Medical Director and Chief Consultant, ²Consultant

^{1,2}Department of Dermatology, Rita Skin Foundation, Kolkata West Bengal, India



Figs 3A and B: (A) Light eruption in the form of scaly, hypopigmented lesions on the left arm; (B) dermoscopy of Case 2 showing white scales encircling lesions in a ring-shaped manner against a ochre to light brown background



Figs 4A to C: (A) Polymorphous light eruption showing erythematous and white-colored papules, a few coalescing to form a plaque; (B) dermoscopy of the papules in Case 3 demonstrating ring-shaped scales; (C) dermoscopy of the plaque in Case 3 again showing ring-shaped scales

Case 3

A 19-year-old female complained of lesions since 20 days. The subject gave history of exacerbation of itching on sun exposure. On clinical examination, there were erythematous and white-colored papules, a few coalescing to form a plaque (Fig. 4A).

Thus, a diagnosis of polymorphous light eruption was made on the basis of history and clinical examination. Dermoscopy of the papules and the plaque revealed ring-shaped scales (Fig. 4B).

DISCUSSION

Polymorphous light eruption is one of the most common photodermatoses affecting the sun-exposed areas. It has

a polymorphous presentation ranging from pruritic erythematous papules to hypopigmented plaques to rarely papulovesicles. ^{1,2} Dermoscopy of polymorphous light eruption showed an interesting finding in the form of white-colored circular scales. These white-colored circular scales were continuous, arranged in a ring-shaped manner with central clearing against a ochre to light brown background. These ring scales correspond clinically to circular papules resolving with desquamation. The ring scales on dermoscopy correspond to the scale crust seen atop the stratum corneum on histopathology of polymorphous light eruption.

The ring scales on dermoscopy of light eruption differ from the collarette scales on dermoscopy of pityriasis rosea. The scales in pityriasis rosea are also peripherally arranged; however, they are yellow in color and are seen against a yellowish background.³

Polymorphous light eruption in most cases is a clinical diagnosis. However, due to its varied clinical presentation, it may mimic pityriasis versicolor, guttate psoriasis, pityriasis lichenoides chronica, or even pityriasis rosea. In such cases, the dermoscopic finding of ring scale is of vital importance as ring scale is not seen in either of these conditions. Dermoscopy of guttate psoriasis exhibits whitish noncircular scales with dotted vessels.⁴ Interestingly, pityriasis lichenoides chronica on dermoscopy does not exhibit scales at all but orange yellow structureless areas, dotted and linear irregular vessels, whitish areas if there is postinflammatory hypopigmentation.⁵ Dermoscopy of pityriasis versicolor demonstrates white scales that are confined to the skin furrows against a pigmented, brown network, thus giving a reticulated appearance.⁶

This new dermoscopic finding in polymorphous light eruption helps to delineate it from similar clinical presentations. More cases need to be examined dermoscopically to further establish ring scales as diagnostic for polymorphous light eruption.

REFERENCES

- Lew R, Jacob J. Polymorphous light eruption: a common skin disease uncommonly recognized in the Hispanic population. Oxf Med Case Rep 2014 Nov;2014(8):145-147.
- Franken SM, Genders RE, de Gruijl FR, Rustemeyer T, Pavel S. Skin hardening effect in patients with polymorphic light eruption: comparison of UVB hardening in hospital with a novel home UV-hardening device. J Eur Acad Dermatol Venereol 2013 Jan;27(1):67-72.
- 3. Lallas A, Kyrgidis A, Tzellos TG, Apalla Z, Karakyriou E, Karatolias A, Lefaki I, Sotiriou E, Ioannides D, Argenziano G, et al. Accuracy of dermoscopic criteria for the diagnosis of psoriasis, dermatitis, lichen planus and pityriasis rosea. Br J Dermatol 2012 Jun;166(6):1198-1205.
- 4. Errichetti E, Stinco G. The practical usefulness of dermoscopy in general dermatology. G Ital Dermatol Venereol 2015 Oct;150(5):533-546.
- Errichetti E, Lacarrubba F, Micali G, Piccirillo A, Stinco G. Differentiation of pityriasis lichenoides chronica from guttate psoriasis by dermoscopy. Clin Exp Dermatol 2015 Oct;40(7):804-806.
- 6. Zhou H, Tang XH, De Han J, Chen MK. Dermoscopy as an ancillary tool for the diagnosis of pityriasis versicolor. J Am Acad Dermatol 2015 Dec;73(6):e205-e206.

