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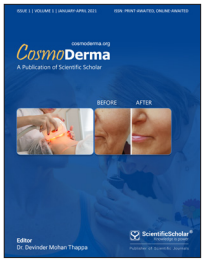

Letter to the Editor

Rosettes in plaque psoriasis

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Quick Response Code:

Dear Sir,

A 36-year-old male presented with eight months' history of multiple asymptomatic, reddish, elevated lesions all over the body. Cutaneous examination showed multiple well-defined erythematous scaly plaques over the upper and lower extremities and trunk [Figure 1]. Dermoscopy (Dermlite DL4, ×10 magnification) under polarized light revealed regularly arranged dotted vessels over a pink background, a white network-like area, and diffusely distributed whitish scales. In addition, we noticed multiple rosettes in most of the lesions [Figure 2a and b]. Histology from the area that showed rosette demonstrated compact hyperkeratosis with parakeratosis, regular acanthosis, broad and elongated rete ridges, thinned out papillary dermis along with dilated, and tortuous vessels consistent with psoriasis.

Dermoscopy of plaque psoriasis typically shows white scales and symmetrically and regularly distributed dotted vessels on a red background. Golinska *et al.* did a systematic review of dermoscopic features and found red dots/globules usually distributed regularly to be the most common vascular feature in psoriasis of skin. Psoriatic plaques are usually covered with white scales, less frequently with white-yellowish, yellowish, or blue-gray scales and most commonly distributed in a diffuse manner. The background of the psoriatic papule took various shades of pink and red.[1] Rosette is one of the shiny white structures observed only under polarized mode, besides shiny white lines, and structureless area. Initially, rosettes were thought to be specific for actinic keratosis and squamous cell carcinoma. Later, it was observed in various inflammatory, infective, and proliferative conditions.[2] Two types of rosettes have been described in the literature, smaller rosette (0.1–0.2 mm) and larger rosette (0.3–0.5 mm).[2] In our case, most of the lesions showed the presence of smaller rosettes both in the non-follicular and perifollicular areas. There is considerable debate about the histopathological correlation of rosette. Various postulations include an optical phenomenon associated with keratin-filled dilated follicles or keratin-filled ostial opening (adnexal opening or epithelial crater). Another postulation is that the periosteal lamellar hyperkeratosis demonstrates an optical anisotropy leading to the formation of rosette.[2] In the index case, the rosettes possibly correlate to the perifollicular and peri-eccrine hyperkeratosis. Rosettes per dermoscopic image have been used to classify them as either focally distributed or generalized rosettes (more than three).[2] In the index case, more than three rosettes were present in many lesions, thus forming a generalized pattern rather than being a focal finding. Another interesting finding that we observed was the presence of whitish network-like areas, a feature commonly observed but not reported in the literature. The holes of the white network-like area were occupied by the dotted vessels, and the lines correspond to the elongated rete ridges.

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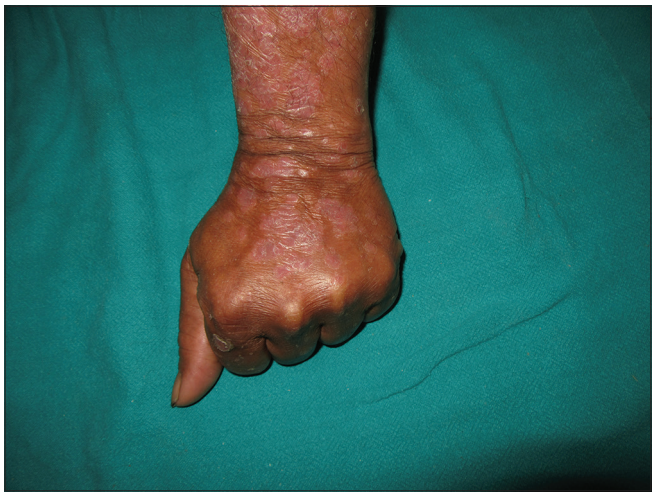

Figure 1: Erythematous plaque with whitish scales over the extensor aspect of the left hand and forearm.

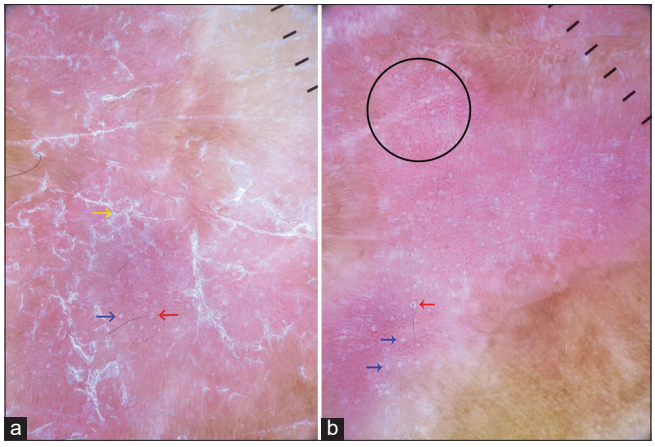

Figure 2: Dermoscopy (DermLite, DL4, ×10 magnification) under polarized mode showing (a) whitish scales (yellow arrow), small white rosette (blue arrow), and perifollicular rosette (red arrow). (b) Small white rosette (blue arrow), perifollicular rosette (red arrow), and white network-like area with dotted vessels occupying the holes of the same (black circle).

In conclusion, we are reporting dermoscopic features, rosettes, and whitish network-like areas in a case of psoriasis. Its significance in psoriasis needs to be evaluated by a larger case series.

Ethical approval

The Institutional Review Board approval is not required.

Declaration of patient consent

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

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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.

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