DOI: http://dx.doi.org/10.3315/jdcr.2013.1131

Journal of Dermatological Case Reports

PHOTOLETTER TO THE EDITOR

Dermoscopy for discriminating between pityriasis rubra pilaris and psoriasis

Aimilios Lallas, Zoe Apalla, Anatoli Karteridou, Ioanna Lefaki

State Clinic of Dermatology, Hospital of Skin and Venereal Diseases, Thessaloniki, Greece.

Corresponding author:
Aimilios Lallas, MD, State Clinic of Dermatology, Hospital of Venereal and Skin Diseases, Thessaloniki, Greece Delfon 124, 54643 Thessaloniki, Greece. E-mail: *emlallas@gmail.com*

Abstract

Pityriasis rubra pilaris (PRP) is a relatively uncommon entity that often has to be clinically differentiated from other erythematosquamous skin diseases, such as psoriasis. Dermoscopy has already been shown to enhance clinical evaluation of inflammatory skin conditions and dermoscopic patterns of various diseases, including psoriasis, have been documented. In the current manuscript we present the dermoscopic findings observed in two patients suffering from PRP and psoriasis, respectively. The dermoscopic pattern of PRP consisted of round/oval yellowish areas surrounded by vessels of mixed morphology. The latter findings are clearly distinct from the dermoscopic features of psoriasis, which have been extensively investigated previously and are presented also in the psoriatic patient herein. This observation represents an initial indication that dermoscopy could be of value in differentiating between the two entities. (*J Dermatol Case Rep*. 2013; 7(1): 20-22)

Key words:

blood vessels, dermatoscopy, dermoscopy, pityriasis rubra pilaris, psoriasis

Pityriasis rubra pilaris (PRP) is a relatively uncommon skin disease, clinically characterized by follicular keratotic plugs, red to orange plaques and palmoplantar hyperkeratosis.[1] Diagnosis of PRP is usually established clinically, based on the presence of these typical features. However, in cases with atypical clinical presentation,

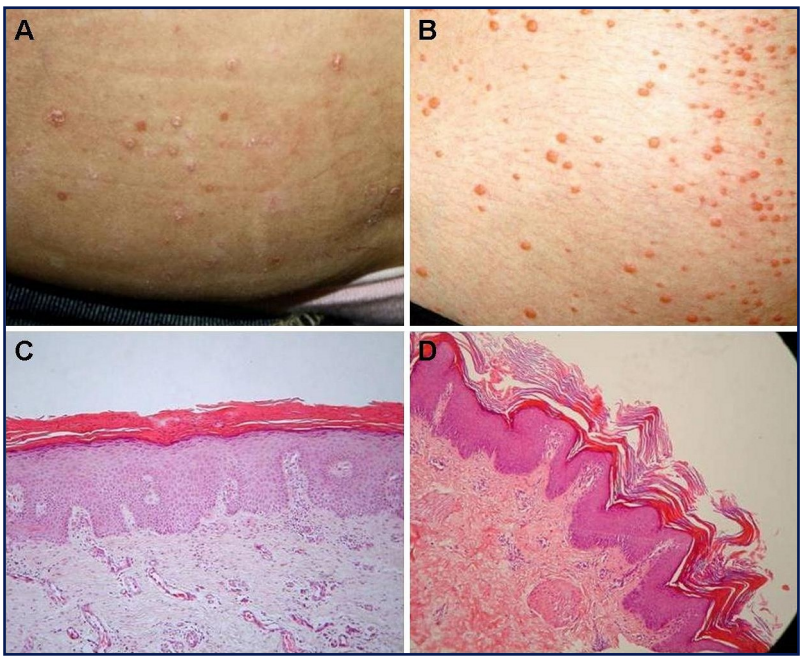

Figure 1

Red scaly papules located on the abdomen of a 34-year-old woman (A) and similar eruption of the anterior trunk of a 25-year-old woman (B). Histopathology of the first lesion showed parakeratosis and psoriasiform hyperplasia of the epidermis, establishing the diagnosis of psoriasis (Haematoxylin-Eosin, original magnification x20) (C). The second lesion was histopathologically characterized by irregular acanthosis and alternating orthokeratosis and parakeratosis in both the vertical and horizontal directions. These findings were compatible with the diagnosis of pityriasis rubra pilaris (Haematoxylin-Eosin, original magnification x20) (D), respectively.

PRP has to be discriminated from other erythematosquamous dermatoses. Psoriasis represents the most common differential diagnosis.[1] Dermoscopy is considered an irreplaceable tool in evaluation of skin tumors. However, nowadays its applicability continuously expands in other fields of dermatology.[2] Specific dermoscopic patterns have been recently described for several inflammatory skin conditions, including psoriasis.[3,4] Up to date, dermoscopic features observed in PRP have not been reported in the literature.

A 34-year-old woman and a 25-year-old woman presented with lesions shown on Figure 1A and 1B respectively. Both eruptions consisted of red scaly papules, and similar lesions were detected at the extremities. The lesions had appeared before one and two months, respectively. Before that time, personal history of both patients was free of dermatologic skin disease. Clinical differential diagnosis included a number of erythematosquamous skin diseases, including PRP and psoriasis. Dermoscopic examination revealed two distinct patterns. Lesions of the first patient exhibited dermoscopic features typical for psoriasis, namely regularly distributed dotted vessels on a light red background (Fig. 2A). Dermoscopy in the second patient revealed a clearly different pattern, consisting of round/oval yellowish areas surrounded by vessels of mixed morphology (i.e. linear and dotted) (Fig. 2B). Histopathology showed parakeratosis and psoriasiform hyperplasia of the epidermis in the first case, and irregular acanthosis and alternating orthokeratosis and parakeratosis in both the vertical and horizontal directions in the second case, confirming the diagnosis of psoriasis and PRP, respectively (Fig. 1C,D).

Dermoscopy has been mainly employed for evaluation of skin tumors. However, given that it enables the visualization of morphologic structures, vascular and color variegations invisible to the naked eye, the technique continuously gains appreciation in other fields of dermatology.[2] Several inflammatory skin diseases have been shown to exhibit characteristic and repetitive dermoscopic patterns.[3-5] A recent study[3] investigated the diagnostic accuracy of certain dermoscopic criteria of psoriasis, providing evidence that the method may significantly enhance the clinical differentiation from dermatitis, pityriasis rosea and lichen planus. The dermoscopic pattern of psoriatic plaques of the patient presented herein is in agreement to the findings of the latter study. On the contrary, the PRP lesions shown in the current manuscript are characterized by a clearly different dermoscopic pattern, consisting of round/oval yellowish areas surrounded by vessels of mixed morphology. Of note, yellowish background color has been shown to represent as an important negative prognostic predictor for the diagnosis of psoriasis.[3] Although the single case presented herein is inadequate to establish dermoscopic criteria for PRP, it represents an initial indication that dermoscopy might be of value in excluding psoriasis, which is the most common differential diagnosis. Further studies, investigating the dermoscopic features of PRP will determine whether dermoscopy could be used as an additional tool to enhance accurate clinical evaluation.

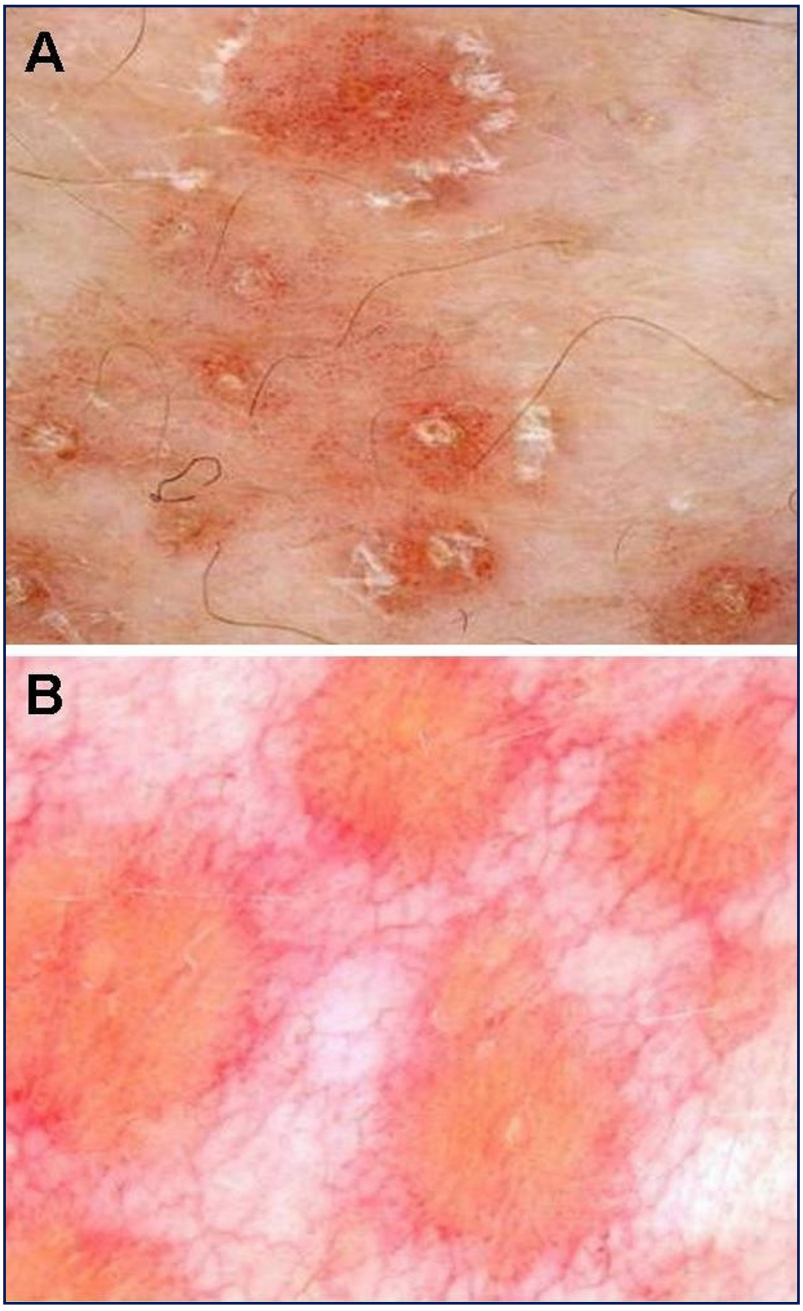

Figure 2

Dermoscopy of the papules of the first patient showed regularly arranged dotted vessels and white scales, favoring the diagnosis of psoriasis (A). Dermoscopy in the second patient revealed a clearly different pattern, consisting of round/oval yellowish areas surrounded by linear and dotted vessels (B).

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