Dermoscopy as a supportive tool in differential diagnosis of psoriatic arthritis: another reason to include such a technique in the rheumatology fellow curriculum

Sirs,

We read with deep interest the paper by Hatzis *et al*. on the relevance of imaging tools in detecting proximal nailfold vascular changes in the rheumatology fellow curriculum (1). To date, most of published articles on such a topic dealt with the use of capillaroscopy as a main imaging technique to highlight capillaroscopic abnormalities of systemic sclerosis (SSc). However, a growing number of studies have displayed that dermoscopy has a similar accuracy as capillaroscopy in revealing typical SSc features of the proximal nailfold, with the advantages of being much less expensive, more portable and more likely to be performed in routine clinical practice (2). In their study, Hatzis *et al*. also showed the potential role of dermoscopy in increasing diagnostic ability of briefly-trained fellows in identifying SSc-specific nailfold capillary changes (*i.e*. neoangiogenesis), thereby bearing the usefulness of including dermoscopic teaching in rheumatologists training.

In this field, we have recently demonstrated, in a cohort of 25 patients suffering from early seropositive rheumatoid arthritis (RA) and 25 early psoriatic arthritis (PsA) patients, that also PsA may display a peculiar proximal nailfold vascular pattern on dermoscopy, which is significantly different from that of healthy subjects and RA patients (3). Specifically, PsA turned out to display dotted vessels over a reddish background (Fig. 1A), independently of the presence of nail psoriatic involvement. Additionally, we have also observed that such a dermoscopic pattern is often visible in absence of any type of dermatological psoriatic lesions as well (PsA sine psoriasis) (4).

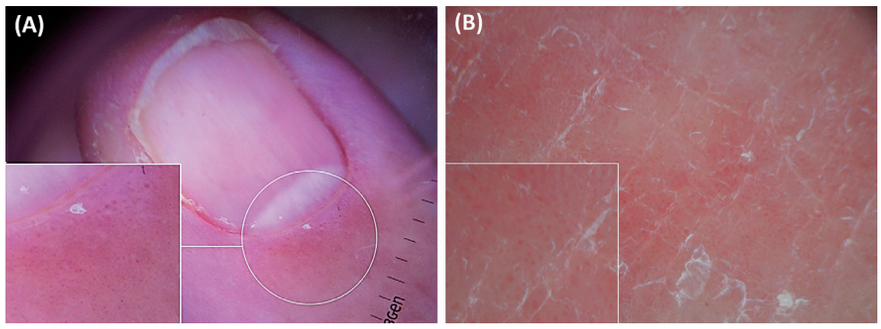

Fig. 1. Dermoscopic examination (polarised-light device; x 10 magnification) of proximal nailfold of a patient suffering from psoriatic arthritis displays dotted vessels over a reddish background (magnification in the box) (**A**); psoriatic plaque shows the same dermoscopic vascular pattern, with diffusely distributed dotted vessels over a reddish background (**B**).

Dotted vessels (Fig. 1B) are the dermoscopic hallmark of cutaneous psoriatic lesions and hystologically correspond to the vessels dilatation in the dermal papillae, which is the main histological characteristic of psoriasis. Vascular changes of proximal nailfold and cutaneous lesions in psoriatic patients could be the consequence of a remodelling of blood vasculature due to increase expression of vascular endothelial growth factor and other vascular mediators, which might be responsible for dilatation, proliferation and morphological functional alterations of cutaneous vessels.

In conclusion, we believe that, together with SSC, dermoscopy might be useful also to assist the differential diagnosis of psoriatic arthritis, thus supporting the potential role of such imaging technique in the rheumatology fellow curriculum, as underlined by Hatzis *et al*.

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References

1. HATZIS C, LERNER D, PAGET S *et al*.: Integration of capillary microscopy and dermoscopy into the rheumatology fellow curriculum. *Clin Exp Rheumatol* 2017; 35: 850-2.
2. HUGHES M, MOORE T, O'LEARY N *et al*.: A study comparing videocapillaroscopy and dermoscopy in the assessment of nailfold capillaries in patients with systemic sclerosis-spectrum disorders. *Rheumatology* (Oxford) 2015; 54: 1435-42.
3. ZABOTTI A, ERRICHETTI E, ZULIANI F *et al*.: Early psoriatic arthritis versus early seronegative rheumatoid arthritis: role of dermoscopy combined with ultrasonography for differential diagnosis. *J Rheumatol* 2018 (accepted).
4. ERRICHETTI E, ZABOTTI A, STINCO G *et al*.: Dermoscopy of nail fold and elbow in the differential diagnosis of early psoriatic arthritis sine psoriasis and early rheumatoid arthritis. *J Dermatol* 2016; 43: 1217-20.