COMMENTARY

Commentary: Atypical melanocytic skin lesions – does the anatomical location have an impact on their clinical and dermoscopic appearance?

The clinical and dermoscopic differentiation between early melanomas and atypical naevi remains challenging, especially in patients with multiple pigmented lesions and in lesions with worrisome clinical and/or dermoscopic features. Several (site-related) melanoma-specific criteria and standardized algorithms are described and increased early melanoma recognition remarkably. However, none of these approaches considered the lesion's location and the amount of sun exposure as important factors on their clinical and dermoscopic appearance.[1,2]

The work of Tognetti *et al.*[3] in this issue of the Journal investigated for the first time whether the anatomical location of atypical pigmented lesions influences the first diagnosis of dermatologists of different levels of expertise and to what extent distinct algorithms (iDScore, 7-point checklist, ABCDE-rule) can assist in differentiating early melanomas from atypical naevi dermoscopically. The authors therefore collected 980 dermoscopic images of atypical melanocytic lesions and allocated them to four body areas with regard to their expectable sun exposure during lifetime (chronically, frequently, seldom, rarely).

The highest amount of 'false-positive' diagnoses for atypical naevi and of 'false-negative' diagnoses for early melanomas was found in rarely sun-exposed areas as indicated by the lowest diagnostic accuracy independent from experience level (59% in young and 61% in experienced dermoscopists). According to the present work, this phenomenon is due to the often worrisome dermoscopic features in atypical naevi in these areas, which were therefore overdiagnosed as early melanomas. On the other hand, early melanomas at this body site were commonly stated as 'featureless' according to well-known dermoscopic patterns. This might account for the high rate of 'false negative' diagnoses as no classical features of melanomas were evident.

Using an integrated clinical-dermoscopic risk scoring system (iDScore), which was designed by the authors in 2018,[4] the diagnostic accuracy increased at all body sites (about 14% in young and about 12% in experts averagely). Notably, the highest benefit of the iDScore was observed in lesions on rarely photo-exposed areas indicated by a significant increased diagnostic accuracy in both groups (+20% in young and +21% in experts).

The findings of Tognetti *et al.*[3] are of considerable importance for several reasons:

Knowing the problem of over- or underestimation of atypical melanocytic lesions depending on their localization, their findings may lead to a rethinking as these lesions are not always correctly diagnosed by using the classical dermoscopic features and/or clinical-dermoscopic scores (e.g. ABCDE-rule).

Using the iDScore, especially in sun-protected areas, can increase significantly diagnostic accuracy and provide more confidence in evaluating atypical melanocytic lesions.

Conflicts of interest

None to declare.

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3 Tognetti L, Cartocci A, Cinotti E *et al.* The impact of anatomical location and sun exposure on the dermoscopic recognition of atypical nevi and early melanomas: usefulness of an integrated clinical-dermoscopic method (iDScore). *J Eur Acad Dermatol Venereol* 2021; **35**: 650–657.

4 Tognetti L, Cevenini G, Moscarella E *et al.* An integrated clinical-dermoscopic risk scoring system for the differentiation between early melanoma and atypical nevi: the IDScore. *J Eur Acad Dermatol Venereol* 2018; **32**: 2162–2170.

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