Medical > In Vivo > Melanoma & Pigmented Lesion Research

Early stages of melanoma on the limbs of high-risk patients: clinical, dermoscopic, reflectance confocal microscopy and histopathological characterization for improved recognition.


ABSTRACT
Early stages of 36 melanomas on limbs were morphologically characterised. Most occurred in high-risk patients (multiple and/or familial melanoma) attending a referral unit for melanoma and pigmented lesions. None of the tumours was clinically suspicious for melanoma (mean diameter of 4.3 mm). The tumours were classified into four dermoscopic groups: (i) prominent network (n = 16); (ii) delicate network (n = 5); (iii) hypo-pigmentation with dotted vessels (n = 10); and (iv) diffuse light pigmentation with perifollicular pigmentation (n = 5). Confocal microscopy performed in 12 cases allowed the identification of atypical, single cells within epidermal layers. Histopathology showed marked large atypical cells in a pagetoid spreading pattern in most cases. Significant associations were detected between the third dermoscopic group and naevoid histological appearance and delay in detection, and between the fourth group and lentigo-maligna-like features. Dermoscopy allowed an increase in the suspicious threshold in these difficult melanomas in high-risk patients and enabled the subclassification of early melanomas on the limbs, with a correct confocal and histopathological correlation. Although the biological behaviour of these incipient tumours remains uncertain, the most appropriate treatment seems to be recognition and proper excision.