

Medical > In Vivo > Melanoma & Pigmented Lesion Research

139 Reflectance Confocal Microscopy correlates of dermoscopic patterns of facial lesions helps to discriminate lentigo maligna from pigmented non-melanocytic macules.

de Carvalho N, Farnetani F, Ciardo S, Ruini C, Witkowski AM, Longo C, Argenziano G, Pellacani G., *Br J Dermatol.* 2014 Nov 21. doi: 10.1111/bjd.13546.

ABSTRACT

BACKGROUND: The clinical recognition of lentigo maligna (LM) and lentigo maligna melanoma can be very challenging due to the overlapping features with other pigmented macules of the skin. Non-invasive diagnostic tools can assist in the differential diagnosis. **OBJECTIVES:** To identify Reflectance Confocal Microscopy (RCM) clues for LM through the identification of in vivo microscopic substrates of the main dermoscopic features seen in facial flat pigmented lesions. **METHODS:** Retrospective analysis of 60 pigmented lesions (LM, invasive melanoma, solar lentigo/flat seborrheic keratosis, lichen-planus-like keratosis, pigmented actinic keratosis). Main dermoscopic patterns and RCM features were described. A new method for correlating RCM and dermoscopic patterns was developed. **RESULTS:** Pseudonetwork (37) and annular granular structures (37) were the most frequent dermoscopic patterns, followed by pigmented blotches (27). Upon RCM examination, pseudonetwork and blotches differed in melanomas and other non-melanocytic lesions for the intraepidermal proliferation of atypical cells, predominantly dendritic-shaped, with adnexal tropism, and for the presence of meshwork pattern at the junction. Also annular granular structures showed dendritic cells almost exclusively in melanoma, with no difference between melanomas and non-melanocytic lesions for the junctional and upper dermal pattern, characterized by inflammation. Fingerprinting was mostly present in non-melanocytic lesions or corresponded to collision with solar lentigo in melanomas. **CONCLUSIONS:** RCM is useful for identifying the histologic substrate of dermoscopic features in pigmented lesions of the face, helping in a better definition of the lesion areas for an adequate diagnostic approach.