Reflectance confocal microscopy accurately discriminates between benign and malignant melanocytic lesions exhibiting a 'dermoscopic island'


ABSTRACT

**Background**: The 'dermoscopic island' is a term that was recently proposed to design an area of a pigmented lesion with a uniform dermoscopic pattern different from the remainder of the lesion. The positive predictive value of this sign for the diagnosis of melanoma is about 50%.

**Objective**: The purpose of our study was to see if reflectance confocal microscopy (RCM) permitted to accurately distinguish between nevi and melanoma in such lesions.

**Methods**: Five lesions of five consecutive unselected patients, with a dermoscopic island but no feasible clear cut diagnosis on the basis of dermoscopy alone were examined by RCM before excision for histopathological evaluation.

**Results**: Two lesions corresponded to nevi, and three lesions were early melanomas arising on a benign naevus in one case, and on a dysplastic naevus in two cases. In all five cases, RCM permitted to make the correct diagnosis, with a very good correlation with conventional histopathology.

**Conclusion**: Reflectance confocal microscopy appears as a promising tool not only to enhance the early diagnosis of melanoma but also to avoid unnecessary excisions of lesions with a dermoscopic island.