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153 Learning Reflectance Confocal Microscopy of Melanocytic Skin Lesions through Histopathologic Transversal Sections.

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ABSTRACT

Histopathologic interpretation of dermoscopic and reflectance confocal microscopy (RCM) features of cutaneous melanoma was timidly carried out using perpendicular histologic sections, which does not mimic the same plane of the image achieved at both techniques (horizontal plane). The aim of this study was to describe the transverse histologic sections research technique and correlate main dermoscopic features characteristic of cutaneous melanoma (atypical network, irregular globules and pseudopods) with RCM and histopathology in perpendicular and transverse sections in order to offer a more precise interpretation of in vivo detectable features. Four melanomas and 2 nevi with different dermoscopic clues have been studied. Lesion areas that showed characteristic dermoscopic features were imaged by dermoscopy and confocal microscopy and directly correlated with histopathology in perpendicular and transverse sections. We presented the possibility to perform transverse sections as a new approach to understand RCM features. Atypical network showed different aspects in the 2 melanomas: in one case it was characterized by pleomorphic malignant melanocytes with tendency to form aggregates, whereas in the other elongated dendritic cells crowded around dermal papillae, some of them forming bridges that resembled the mitochondrial aspect at confocal and histopathology transversal sections. Pigment globules in melanomas and nevi differed for the presence of large atypical cells in the former, and pseudopods showed up as elongated nests protruded toward the periphery of the lesion. Transverse histologic research sections have a consistent dermoscopic and confocal correlate, and it may represent an help in confocal feature interpretation and an advance in improving melanoma diagnosis and knowledge of the biology of melanocytic lesions.