ABSTRACT
BACKGROUND: Acral lentiginous melanoma (ALM) can be difficult to differentiate from acral nevus. Reflectance confocal microscopy (RCM) is widely used for the diagnosis of melanocytic tumours, but the RCM features of ALM and acral nevus have not been described yet. OBJECTIVE: To determine the RCM features of ALM and acral nevus, and their correlation with clinical and histological characteristics. METHODS: Retrospective study of 17 cases of ALM and 26 acral nevi. RESULTS: Pagetoid cells were present in all ALMs with a visible epidermis and in three nevi. A proliferation of atypical melanocytes at the dermal-epidermal junction (DEJ) and/or in the dermis was visible in nine ALMs but not in nevi. The histopathological examination of initial skin biopsies was unable to diagnose ALM in four cases, differing from RCM that could identify malignant tumour cells by exploring the whole lesions. CONCLUSION: Reflectance confocal microscopy can help in the differentiation of ALM and acral nevus, and to guide the biopsy. © 2015 European Academy of Dermatology and Venereology.