Folliculotropism in pigmented facial macules: Differential diagnosis with reflectance confocal microscopy.


ABSTRACT

Pigmented facial macules are common on sun damage skin. The diagnosis of early stage lentigo maligna (LM) and lentigo maligna melanoma (LMM) is challenging. Reflectance confocal microscopy (RCM) has been proven to increase diagnostic accuracy of facial lesions. A total of 154 pigmented facial macules, retrospectively collected, were evaluated for the presence of already-described RCM features and new parameters depicting aspects of the follicle. Melanocytic nests, roundish pagetoid cells, follicular infiltration, bulgings from the follicles and many bright dendrites and infiltration of the hair follicle (ie, folliculotropism) were found to be indicative of LM/LMM compared to non-melanocytic skin neoplasms (NMSNs), with an overall sensitivity of 96% and specificity of 83%. Concerning NMSNs, solar lentigo and lichen planus-like keratosis resulted better distinguishable from LM/LMM because usually lacking malignant features and presenting characteristic diagnostic parameters, such as epidermal cobblestone pattern and polycyclic papillary contours. On the other hand, distinction of pigmented actinic keratosis (PAK) resulted more difficult, and needing evaluation of hair follicle infiltration and bulging structures, due to the frequent observation of few bright dendrites in the epidermis, but predominantly not infiltrating the hair follicle (estimated specificity for PAK 53%). A detailed evaluation of the components of the folliculotropism may help to improve the diagnostic accuracy. The classification of the type, distribution and amount of cells, and the presence of bulging around the follicles seem to represent important tools for the differentiation between PAK and LM/LMM at RCM analysis. KEYWORDS:dendritic cells; hair follicle; lentigo maligna; pigmented actinic keratosis; solar lentigo

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