ABSTRACT

BACKGROUND: Seborrheic keratoses (SebK) with atypical dermoscopy presentation are increasingly reported. These lesions do not exhibit typical dermoscopy features of SebK and sometimes mimic melanoma, thus complicating the differential diagnosis. Reflectance confocal microscopy (RCM) is a non-invasive tool, which allows an in vivo imaging of the skin. The study objectives were to evaluate the agreement between RCM classification and histological diagnoses, and the reliability of well-known RCM criteria for SebK in the identification of SebK with atypical dermoscopy presentation.

MATERIALS AND METHODS: We retrospectively analysed at RCM excised lesions presenting in dermoscopy ≥1 score at revisited 7-point checklist. The study population consisted of cases showing no melanocytic RCM findings. Lesions were investigated for distinct non-melanocytic RCM features, blinded from histopathology diagnoses. Histopathology matching was then performed before statistical analysis.

RESULTS: The study consisted of 117 cases, classified at RCM as SebK (71 cases), dermatofibroma (18 cases), basal cell carcinoma (13 cases), squamous cell carcinoma (2 cases), and "non-specific" (13 cases). Overall K strength of agreement at histopathology matching proved 0.76. Of the 71 cases classified at RCM with SebK, agreement was achieved in 97%. CONCLUSION: Reflectance confocal microscopy classification proved high agreement with histopathology for SebK with atypical dermoscopy presentations, allowing an early differential diagnosis. RCM features in this group of lesions were similar to those described for typical cases of SebK, and may assist clinician therapy decision making, whilst avoiding unnecessary excisions. © 2018 John Wiley & Sons A/S. Published by John Wiley & Sons Ltd.

KEYWORDS: dermoscopy; melanoma; non-invasive diagnosis; reflectance confocal microscopy; seborrheic keratosis

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