Reflectance confocal microscopy for scarring and non-scarring alopecia real-time assessment.


ABSTRACT
Clinical management of alopecia represents one of the major issues in dermatology. Scalp biopsies are not easily accepted because of the high bleeding and sensitive anatomical area. Trichoscopy is routinely used for diagnosis of alopecia, but in several cases lack to provide sufficient information on the status of the disease. Recently, reflectance confocal microscopy demonstrated its usefulness for the evaluation of several inflammatory skin condition and preliminary reports about alopecia have been proposed in the literature. The aim was to identify the confocal features characterizing scarring and non-scarring alopecia. Reflectance confocal microscopy from 86 patients affected by scarring (28 lichen planopilaris and 9 lupus erythematosus) and non-scarring alopecia (30 androgenic alopecia and 19 alopecia areata), were retrospectively, blindly evaluated. Good concordance between different readers on the confocal criteria has been assessed. Statistical significant features, specific for scarring alopecia and non-scarring alopecia have been identified. In this study, data on reflectance confocal microscopy features useful for the differential diagnosis between scarring and non-scarring alopecia have been identified. Further studies focusing on the use of this non-invasive technique in the therapeutic follow-up and distinction of sub-entities of alopecia are still required. KEYWORDS: Alopecia; Diagnosis; Differential diagnosis; Non-scarring alopecia; Reflectance confocal microscopy; Scarring alopecia PMID:27225248