Preliminary evaluation of in vivo reflectance confocal microscopy features of Discoid lupus erythematosus.


ABSTRACT

BACKGROUND: Discoid lupus erythematosus (DLE) can simulate other inflammatory diseases both clinically and histologically. In vivo reflectance confocal microscopy (RCM) is a noninvasive, reproducible imaging technique already reported to be useful in the evaluation of several inflammatory skin conditions such as contact dermatitis, psoriasis and Darier disease.

OBJECTIVES: The aims of our study were to define RCM features of DLE and to evaluate its feasibility in biopsy site selection.

METHODS: Discoid lesions were selected for RCM evaluation from 10 patients with an established diagnosis of DLE. Subsequently, a 4-mm punch biopsy of the same areas evaluated with RCM was rendered for histopathological examination.

RESULTS: A series of RCM features of DLE was identified and shown to correlate well with histopathological evaluation. Interface changes, as well as epidermal, dermal and adnexal inflammatory cell infiltration, were identified with RCM in a high percentage of the lesions. A limitation of RCM examination besides imaging depth was the inability to distinguish lymphocytes from other white blood cells.

CONCLUSIONS: The utility of RCM as a diagnostic tool for DLE awaits further evaluation, although it appears to be promising for biopsy site selection.