Reflectance confocal microscopy for the characterization of mycosis fungoides and correlation with histology: a pilot study.


**ABSTRACT**

**BACKGROUND:** Mycosis fungoides (MF) is cutaneous lymphoma of the T-cell lineage. MF is a diagnostic challenge. In vivo reflectance confocal microscopy (RCM) reproducible imaging technique already reported to be useful in the diagnosis of skin diseases. The aims of our study were to define RCM features of MF and to evaluate its feasibility in biopsy site selection.

**METHODS:** Each lesion was selected for RCM evaluation from 10 patients with an established diagnosis of MF. Subsequently, a biopsy of the same areas evaluated with RCM was rendered for histopathological examination.

**RESULTS:** A series of RCM features of MF was identified and shown to correlate well with histopathological evaluation. We could find hyperkeratosis in five patients (10: 50%); disarray of honeycomb of stratum spinosum in three patients (10: 30%). In 10 patients (10: 100%) of the MF, we could find that dermal papillary rings were weak reflected light; round to oval cells diffusely widespread throughout the epidermis and in the papillary dermis, infiltration of inflammatory cells in superficial dermis. Two (10: 20%) of them can find vesicle area opaca in plaque stage MF, filled with monomorphous weakly refractile oval to round cells.

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