Systematic review and proposal of an in vivo reflectance confocal microscopy assessment tool for cutaneous lymphoma.


ABSTRACT

BACKGROUND: Reflectance confocal microscopy (RCM) is a non-invasive imaging technique that provides dynamic information and allows in vivo monitoring, with excellent histologic correlation. In the last decade, the use of RCM for cutaneous T-cell lymphomas (CTCL) has been reported. CTCL may require multiple biopsies for diagnosis due to its equivocal clinical presentation. RCM was described as a possible tool to help determine the best site for skin biopsy. This study aims to systematically review all RCM features reported in literature for CTCL. METHOD: A systematic literature search concerning CTCL evaluated by RCM was performed in eight electronic databases until May 2019 following PRISMA-DTA quality assessment. RESULTS: Eighteen RCM features were described in patients with CTCL. The most frequent were: interface dermatitis (89%), epidermal lymphocytes (82%), epidermal architectural disarray (81%), and vesicle-like structure (Pautrier microabscess) (51%). CONCLUSION: In order to establish comparable parameters among the studies identified, we proposed descriptors for CTCL features and a grading system to quantify them. This will facilitate to define the role of RCM in the diagnosis and monitoring of CTCL patients. © 2019 John Wiley & Sons A/S. Published by John Wiley & Sons Ltd. KEYWORDS: CTCL; RCM score; cutaneous lymphoma; mycosis fungoides; reflectance confocal microscopy PMID: 31618473 DOI: 10.1111/cup.13598