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Reflectance confocal microscopy may be included as part of the diagnostic algorithm of early-stage mycosis fungoides.

Zhu M, Yu W, Wang P, Liu J, Li Z, Dai H, Xu AE. *Skin Res Technol*. 2020 Jan 16. doi: 10.1111/srt.12840.

ABSTRACT

INTRODUCTION: Reflectance confocal microscopy (RCM), a noninvasive, real-time technique of computed tomography, has been widely used for pigmentary, inflammatory, and tumor diseases of the skin.

AIM: Our main purpose was to analyze the consistency between pathological and RCM characteristics of early-stage mycosis fungoides (MF) and the utility of RCM in the diagnosis of early-stage MF.

METHODS: According to the RCM features of MF in the early stage, the biopsy sites of 40 cases of suspected MF and 20 cases of chronic inflammatory skin diseases clinically were preliminarily located. Histopathologic and immunohistochemical examinations were performed to make a diagnosis based on the diagnostic algorithm proposed by the International Society for Cutaneous Lymphomas.

RESULTS: Among the 60 patients observed, there were 12 confirming cases of MF, 14 suspecting cases, 6 not completely excluding cases, and 28 eliminating cases according to the diagnostic algorithm, as well as characteristics of RCM were typical in 8 cases, suspected in 16 cases, not excluded in 3 cases, and excluded in 33 cases. The kappa value was 0.769 ($P < .01$), which means there is a strong consistency between the classification by RCM and the diagnosis algorithm. MF in patch stage and plaque stage (IA to IIB) has typical characteristics of RCM, respectively. **CONCLUSIONS:** RCM can be used as an objective and convenient auxiliary means to diagnose early-stage MF and may be included as part of the diagnostic algorithm of early-stage MF. © 2020 John Wiley & Sons A/S. Published by John Wiley & Sons Ltd. **KEYWORDS:** diagnose; diagnostic algorithm; histopathology; mycosis fungoides; reflectance confocal microscopy PMID: 31950528 DOI: 10.1111/srt.12840