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11 | In vivo characterization of pustules in Malassezia Folliculitis by reflectance confocal microscopy and optical coherence tomography. A case series study.

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ABSTRACT

BACKGROUND AND OBJECTIVE:Malassezia Folliculitis (MaF) is an inflammatory condition of hair follicles caused by Malassezia yeast. Optical coherence tomography (OCT) and reflectance confocal microscopy (RCM) are imaging technologies enabling in vivo visualization of superficial skin layers. This study explores morphology of pustules in MaF imaged by OCT and RCM. METHODS:Patients with microscopically verified MaF were included in this case series. Morphology was evaluated qualitatively with RCM and OCT, focusing on shape, border and content of selected pustules. RESULTS:Nine patients with MaF were included. Clinically, six patients presented monomorphic MaF with multiple superficial pustules, while three patients showed more polymorph MaF appearance. In total 13 pustules were investigated by RCM and OCT. In RCM images, pustules varied from having a well-defined border with homogenous content to ill-defined borders with heterogeneous content. A distinct black halo was occasionally observed around pustules as were dilated vessels. In OCT images, pustules appeared polymorphic, showing both well- and ill-defined structures with oval or irregular shape and more or less homogenous content. Malassezia fungi were not discernible by either RCM or OCT. Specific morphological image features in RCM and OCT did not reflect different clinical manifestations of MaF. CONCLUSION:RCM and OCT images identify morphological aspects of MaF pustules, and confirm that MaF is a folliculitis with clinical as well as morphological variance. © 2018 John Wiley & Sons A/S. Published by John Wiley & Sons Ltd. KEYWORDS:OCT; RCM; diagnostic imaging; fungus; pityrosporum
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