

Medical > In Vivo > Inflammatory Disease Research

34

Multicenter study on inflammatory skin diseases from The International Confocal Working Group (ICWG): specific confocal microscopy features and an algorithmic method of diagnosis.

Ardigo M, Longo C, Gonzalez S. Br J Dermatol. 2016 Mar 7. doi: 10.1111/bjd.14516.

ABSTRACT

BACKGROUND: The real value of Reflectance confocal microscopy (RCM) for the evaluation of inflammatory skin conditions remains unclear. A project on RCM for inflammatory skin disease involving international centers was designed by a coordinating center and executed under the supervision of the International Confocal working Group (ICG). **OBJECTIVE:** To identify specific confocal features useful for the distinction between the 3 main groups of superficial inflammatory skin diseases. **METHODS:** 19 different RCM features have been evaluated on RCM in a total of 155 lesions diagnosed as spongiotic (45), interface (52) or psoriasiform (58) dermatitis collected by a consortium of 19 different centers. **RESULTS:** Univariate and multivariate analysis identified RCM descriptors for the 3 main superficial inflammatory diseases groups. Later, a multivariate method was employed to define a scoring system to be applied on an algorithmic method of analysis for clinical fast application of the method. **CONCLUSIONS:** Our preliminary evaluation supports the use of RCM for the identification of confocal patterns consistent with the major features of the diagnostic groups of inflammatory skin diseases. Moreover, an efficient multivariate method for clinical in vivo RCM diagnosis using a tree decision diagram has been established. This article is protected by copyright. All rights reserved. This article is protected by copyright. All rights reserved. **KEYWORDS:** Multicentric study; diagnosis; differential diagnosis; inflammatory skin diseases; interface dermatitis; psoriasiform dermatitis; reflectance confocal microscopy; spongiotic dermatitis PMID:26948927