Reflectance confocal microscopy for cutaneous infections and infestations.


ABSTRACT

Reflectance confocal microscopy (RCM) is a high-resolution emerging imaging technique that allows non-invasive diagnosis of several cutaneous disorders. A systematic review of the literature on the use of RCM for the study of infections and infestations has been performed to evaluate the current use of this technique and its possible future applications in this field. RCM is particularly suitable for the identification of Sarcoptes scabies, Demodex folliculorum, Ixodes, Dermatophytes and Candida species in the clinical practice and for the follow-up after treatment. The cytopathic effect of herpes simplex virus, varicella zoster virus and molluscipoxvirus is also detectable by this imaging technique even in a pre-vesicular stage. In addition, thanks to its non-invasiveness, RCM allows pathophysiological studies. © 2015 European Academy of Dermatology and Venereology.