Videodermoscopy compared to reflectance confocal microscopy for the diagnosis of scabies.


ABSTRACT

INTRODUCTION: Reflectance confocal microscopy (RCM) and dermoscopy have recently been suggested for non-invasive diagnosis of scabies. However, there are large studies on diagnostic accuracy for scabies only with dermoscopy at low (10×) and high (100-1000×) magnification. OBJECTIVE: Our study evaluated the diagnostic accuracy, for the diagnosis of scabies, of RCM and videodermoscopy at intermediate (20× and 70×) magnification, which is usually found in commercially available videodermoscopes. METHODS: Patients with a presumptive diagnosis of scabies were prospectively enrolled during 20 months and examined by RCM and videodermoscopy at intermediate magnification. The specificity of RCM was considered 100% because RCM can identify the anatomical details of the parasites. RESULTS: A total of 148 patients were enrolled. Videodermoscopy showed a higher sensitivity for scabies than RCM (95% vs. 92%) and a specificity of 97%. CONCLUSIONS: Videodermoscopy at intermediate magnification, and RCM are both highly accurate for the diagnosis of scabies. If the two devices are available, it would be better to perform videodermoscopy first, that is more sensitive, and then RCM to confirm the diagnosis. © 2016 European Academy of Dermatology and Venereology. PMID:27168425