Reflectance confocal microscopy identification of subclinical basal cell carcinomas during and after vismodegib treatment.


ABSTRACT

BACKGROUND: Recently, it has been shown that reflectance confocal microscopy (RCM) could identify subclinical basal cell carcinoma (BCC) during vismodegib treatment of locally advanced BCC.

OBJECTIVES: To evaluate specificity and sensitivity of clinical, dermoscopic and RCM examination for BCC in patients with multiple BCCs treated by vismodegib.

METHODS: Ninety four BCCs had 710 clinical, dermoscopic and RCM examinations during 72 weeks of vismodegib treatment. Thirty-eight were biopsied at the end of the treatment. Sensitivity and specificity for these 38 lesions were calculated. BCC diagnoses of clinical, dermoscopic and RCM examination on all the 710 investigations were compared using chi-square test.

RESULTS: Reflectance confocal microscopy was extremely more sensitive than dermoscopy and clinical examination and slightly less specific (sensitivity of 95%, 35% and 33% and specificity of 81%, 88% and 86% for RCM, dermoscopy and clinical examination, respectively) for the identification of residual BCC in the 38 biopsied cases. Considering all the 710 observations, RCM correctly diagnosed more BCCs than dermoscopy and clinical examination.

CONCLUSION: Reflectance confocal microscopy is a non-invasive technique that can detect subclinical residual BCC during and after vismodegib treatment helping the clinician to identify incomplete tumour regression. © 2017 European Academy of Dermatology and Venereology. PMID: 29055164 DOI: 10.1111/jdv.14650