Application of Handheld Confocal Microscopy for Skin Cancer Diagnosis: Advantages and Limitations Compared with the Wide-Probe Confocal.


ABSTRACT
The clinical diagnosis of tumors on the curved surfaces of the face, around the eyes, and on the mucosal surfaces can be difficult, while biopsies and excisions can have functional and aesthetic consequences. To avoid unnecessary surgery, clinicians have been aiming to attain accurate noninvasive diagnosis of lesions at these sites. However, acquisition of high-quality images with dermoscopy and with traditional wide-probe reflectance confocal microscopy (WP-RCM) have been hampered with technical difficulties. This article discusses the technical parameters of the handheld reflectance confocal microscope and discusses its advantages and limitations compared with the WP-RCM. Copyright © 2016 Elsevier Inc. All rights reserved. KEYWORDS: Eyes; Face; Handheld reflectance confocal microscopy; Melanoma; Mucosa; Nonmelanoma skin cancer; Wide-probe reflectance confocal microscopy PMID:27692452 DOI:10.1016/j.det.2016.05.009