Reflectance confocal microscopy of skin in vivo: From bench to bedside.


ABSTRACT
Following more than two decades of effort, reflectance confocal microscopy (RCM) imaging of skin was granted codes for reimbursement by the US Centers for Medicare and Medicaid Services. Dermatologists in the USA have started billing and receiving reimbursement for the imaging procedure and for the reading and interpretation of images. RCM imaging combined with dermoscopic examination is guiding the triage of lesions into those that appear benign, which are being spared from biopsy, against those that appear suspicious, which are then biopsied. Thus far, a few thousand patients have been spared from biopsy of benign lesions. The journey of RCM imaging from bench to bedside is certainly a success story, but still much more work lies ahead toward wider dissemination, acceptance, and adoption. We present a brief review of RCM imaging and highlight key challenges and opportunities. The success of RCM imaging paves the way for other emerging optical technologies, as well-and our bet for the future is on multimodal approaches. Lasers Surg. Med. © 2016 Wiley Periodicals, Inc. KEYWORDS: melanoma; non-melanoma; reflectance confocal microscopy; reimbursement codes; skin; skin cancer PMID:27785781 DOI:10.1002/lsm.22600