Overview

Confocal laser scanning microscopy. [Article in German]


ABSTRACT

Reflectance confocal microscopy (RCM) allows the in vivo evaluation of melanocytic and nonmelanocytic skin tumours with high sensitivity and specificity. RCM represents an optical imaging technique, which enables us to examine the skin at high resolution. Today, RCM represents not only an interesting tool for dermatologic research but has also been introduced as a diagnostic tool in every day clinical practice. As such, RCM is applied for improvement of skin cancer diagnosis adjunct to clinical and dermatoscopic examination. In combination with dermatoscopy RCM has shown an increased specificity with similar sensitivity. In this regard RCM helps to decrease the rate of unnecessary biopsies of benign lesions. Despite its use in dermatoncology RCM may also be used for diagnosis and monitoring of inflammatory diseases. Future developments include technical improvements, teledermatology solutions and the application of ex vivo RCM in Moh's micrographic surgery. PMID:25917282 DOI:10.1007/s00105-015-3632-y