Ex vivo confocal microscopy: an emerging technique in dermatology.


ABSTRACT
This review aims to give an overview of the current available applications of ex vivo confocal microscopy (EVCM) in dermatology. EVCM is a relatively new imaging technique that allows microscopic examination of freshly excised unfixed tissue. It enables a rapid examination of the skin sample directly in the surgery room and thus represents an alternative to the intraoperative micrographic control of the surgical margins of cutaneous tumors by standard microscopic examination on cryopreserved sections during Mohs surgery. Although this technique has mainly been developed for the margin's control of basal cell carcinoma, many other skin tumors have been studied, including melanoma. Use of EVCM is continuing to evolve, and many possible applications are under investigation, such as the study of nails and hair diseases and the diagnosis of skin infections. KEYWORDS: confocal microscopy; dermatology; ex vivo; fluorescence; reflectance; skin PMID: 29785327 PMCID: PMC5955077 DOI: 10.5826/dpc.0802a08