Medical > In Vivo > Melanoma & Pigmented Lesion Research

164 Improving Management and Patient Care in Lentigo Maligna by Mapping With In Vivo Confocal Microscopy.

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ABSTRACT

IMPORTANCE: Lentigo maligna (LM) is a clinical, pathologic, and therapeutic challenge with a higher risk of local recurrence than other types of melanoma correctly treated and also carries the cosmetically sensitive localization of head and neck. **OBJECTIVE:** To determine whether in vivo reflectance confocal microscopy (RCM) mapping of difficult LM cases might alter patient care and management. **DESIGN:** Analysis of LM and LM melanoma (LMM) in a series of patients with large facial lesions requiring complex reconstructive surgery and/or recurrent or poorly delineated lesions at any body sites were investigated. **SETTINGS:** Two tertiary referral melanoma centers in Sydney, Australia. **PARTICIPANTS:** Thirty-seven patients with LM (including 5 with LMM) were mapped with RCM. Fifteen patients had a recurrent LM, including 9 with multiple prior recurrences. The LM was classified amelanotic in 10 patients, lightly pigmented in 9, and partially pigmented in 18. **INTERVENTIONS:** The RCM images were obtained in 4 radial directions (allowing for anatomic barriers) for LM margin delineation using an RCM LM score previously described by our research team. **MAIN OUTCOME MEASURES:** Differences in the margin of LM as determined by RCM vs dermoscopy vs histopathologic analysis. **RESULTS:** Seventeen of 29 patients (59%) with dermoscopically visible lesions had subclinical (RCM-identified) disease evident more than 5 mm beyond the dermoscopy margin (ie, beyond the excision margin recommended in published guidelines). The RCM mapping changed the management in 27 patients (73%): 11 patients had a major change in their surgical procedure, and 16 were offered radiotherapy or imiquimod treatment as a consequence of the RCM findings. Treatment was surgical in 17 of 37 patients. Surgical excision margins (based on the RCM mapping) were histopathologically involved in only 2 patients, each of whom had an LM lesion larger than 6 cm. **CONCLUSIONS AND RELEVANCE:** In vivo RCM can provide valuable information facilitating optimal patient care management.