Incompletely excised lentigo maligna melanoma is associated with unpredictable residual disease: clinical features and the emerging role of reflectance confocal microscopy.


ABSTRACT
BACKGROUND: Lentigo maligna/lentigo maligna melanoma (LM/LMM) poses a treatment and surgical challenge given unpredictable subclinical extension resulting in incomplete excision. OBJECTIVES: To describe the demographic, clinical, and pathologic characteristics of incompletely excised LM/LMM. To evaluate the potential role of reflectance confocal microscopy (RCM). PATIENTS AND METHODS: A retrospective review of a melanoma database at a tertiary cancer center for patients referred with 'incompletely excised LM/LMM' or 'incompletely excised melanoma' between October 2006 and July 2017. We recorded clinical and pathological data and surgical margins needed to clear the residual LM/LMM. The second part consisted of a prospective cohort of patients in which RCM was performed when presenting with incompletely excised LM/LMM. RESULTS: We included a total of 67 patients (retrospective + prospective cohort); mean age was 64.9 (SD 11.3) years and 52.2% were males. For the retrospective cohort (n=53), the mean scar size was 3.4 cm. The average initial margins excised prior to presentation were 4.8 mm (range 3 - 7 mm). The average additional margin needed to clear the residual, incompletely excised LM/LMM was 7.8 mm. For the prospective cohort (n=14) there were no differences in age, gender, or size when compared to the retrospective cohort. RCM had a diagnostic accuracy of 78.6%, a sensitivity of 90.9%, a specificity of 33.3% and a positive predictive value of 83.3% for the detection of incompletely excised LM/LMM. CONCLUSIONS: Incompletely excised LM/LMM is a poorly characterized clinical-pathological scenario that may require considerable extra margins for microscopic clearance. RCM may emerge as a valuable tool for the evaluation of patients with incompletely excised LM/LMM. This article is protected by copyright. All rights reserved.
KEYWORDS: Mohs micrographic surgery; biopsy; dermatologic surgery; incompletely excised; melanoma; reflectance confocal microscopy; residual diagnosis; staged excision
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