Comment on "Comparison of surgical margins for lentigo maligna versus melanoma in situ"

To the Editor: We read with interest the Kunishige et al[1] article recently published comparing the surgical margins required to clear 829 melanoma in situ (MIS) and 1506 lentigo maligna (LM) excised with Mohs micrographic surgery (MMS). The authors report both MIS and LM required 9-mm margins to clear 95% and 15-mm margins to clear 99%. We agree it is well established that melanoma margins can be unpredictable, particularly in a background of chronically sun-damaged skin of the head and neck. In this setting, modified surgical techniques (staged excision techniques and other variants) are recommended to clear subclinical extension before complex reconstruction.[2,3] However, the authors' conclusion that standard excision of all MIS subtypes should include at least 9 mm of normal-appearing skin when MMS is not utilized appears problematic on several fronts.

First, the authors claim to separate LM from MIS (of presumed non-LM type), relying solely on review of pathology reports; this method does not factor that many pathologists do not subtype MIS lesions. Many lesions reported as MIS in this study might have been LM. Further, patients referred for MMS likely represent an inherent referral bias with larger and more ill-defined lesions; in fact, ~85% of the lesions in this study were ≥1 (range 1 to >3) cm. In addition, their method for assessing positive margins during MMS frozen sections varied (HMB-45 during 1982-2002 and MART-1 during 2003-2016). What is the histologic relevance of microscopically involved margins detected with immunostains if the criteria were not consistent throughout the study? Could it be that wider margins were inadvertently excised?

Last, the authors disregard compelling empirical evidence that for the majority of patients with MIS of non-LM type, a 5-mm clinical margin provides sufficient clearance to render the risk for local recurrence negligible. Randomized prospective studies with long-term follow-up are needed to better understand MIS biology and progression and to define surgical margins, the true clinical relevance of focal microscopic and immunostain-positive margins, and the impact on morbidity and cost of increasing surgical margins. The MelMART trial is investigating the role of universal 1-cm margins for all invasive melanomas (NCT02385214). Early analysis demonstrates reduced need for complex closures and fewer wound complications, potentially improving patient outcomes and reducing cost. It seems inconceivable to recommend a wider (>1 cm) or nearly equivalent (9-mm) margin for all MIS in the absence of robust prospective data.

Certainly, one size does not fit all when dealing with MIS, particularly arising in chronic sun-damaged skin. The National Comprehensive Cancer Network and American Academy of Dermatology melanoma guidelines[4] also recognized the variability and complexity of MIS and updated margin recommendations from 5 mm to a 5–10-mm range, highlighting that >5 mm might be required for MIS, LM type. Emerging noninvasive imaging tools, such as reflectance confocal microscopy, might aid in the prediction of subclinical extension and guide melanoma margins.[5] An individualized approach might be helpful in MIS of the LM subtype to preoperatively anticipate surgical defect size and reconstruction, set more realistic patient expectations, and reduce patient anxiety.

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