



Treatment of lentigo maligna with Mohs Micrographic Surgery and micrographically controlled staged excision: a two-center experience

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Background

The surgical management of Lentigo Maligna (LM) can be challenging due to the subclinical extension of atypical junctional melanocytic hyperplasia, which may extend beyond the visible margins. The last version of NCCN guidelines on melanoma indicates that permanent sections are the gold standard for histologic assessment of excised melanoma. Although Mohs micrographic surgery (MMS) and other surgical methods, such as staged excision (SE), can be considered selectively for in situ or minimally invasive (pT1a) melanomas in selected anatomic areas: face, scalp, ears and acral sites. Based on the scientific literature, MMS or SE with or without immunohistochemical staining have high local control rates in LM.

Method

We performed a retrospective analysis of all MMS and staged excision performed for LM at the Dermatology Unit Santo Stefano Hospital, Prato and San Jacopo Hospital, Pistoia, Italy, between 1st September 2021 and 1st January 2023.

Results

During the investigation period, 12 patients with LM underwent MMS or SE. All patients had a histologically confirmed primary LM, and dermoscopy was used to demarcate margins clinically before surgery. Permanent histologic section were obtained for each patients after extemporaneous histology analysis. All patients were seen for follow-up after six months. Seven of them (58%) were from the Dermatology of Prato, and the others (42%) from the Dermatology of Pistoia. Of the 12 patients with lentigo maligna, all were male. The mean age at the diagnosis was 75 years old. The most common anatomic site was the face (66%), followed by the scalp (22%) and the external ear (22%). The mean size of the LM at diagnosis was almost 11 mm (range 5-30). Six patients underwent MMS with the Tubingen torte variant (Figure 1), and the others had the excision with SE (Figure 2). In all cases, peripheral and deep en-face margin assessment was performed. A first margin of 3 mm was chosen. After the first incision, 83 % of surgeries had clear margins, 17% needed a second round, and of these 8,5% a third re-excision. No upstaging was found in the histologic permanent sections. There were no severe adverse events or complications related to the surgical procedures. After a mean follow-up of 8 months, no patients had a recurrence. No significant differences between MMS and SE were observed.



Figure 1



Figure 2

Analyzing our casistics, we found that both MMS Tubingen torte variant and SE are suitable for treating LM without any significant differences. Moreover, we found no upstaging of LM, while in the literature is estimated to be almost 8,1% after examination of the specimens. Limitations of our study are the low number of cases and the small diameter of the primary tumour. Further investigation is needed to assess the best excision method for LM considering MMS, SE and also conventional wide excision.

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