Treatment of non-melanoma skin cancers with Mohs Micrographic Surgery and its variants: a single center experience

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Background

Mohs micrographic surgery (MMS) allows the real-time evaluation of 100% of the surgical margins during skin cancer excision. Moreover, MMS leads to the complete removal of the tumour, with a minimum loss of surrounding healthy cutaneous tissue. For these reasons, MMS represent the gold standard for treating high-risk non-melanoma skin cancers (NMSC) (1,2). Nevertheless, there are still no clear indications regarding MMS variants and their impact in the patients 'outcome.

Method

We performed a n observational retrospective and descriptive study of all MMS procedures performed for non-melanoma skin cancers (NMSC) at the Dermatology Unit of Santo Stefano Italy, between 1 September 2021 and 31 July 2022.

Results

During the investigated period, a total of 94 patients underwent MMS. In all cases dermoscopy was used for demarcation of surgical margins (3). All patients had a histologically confirmed NMSC. 68% were men, and the remaining 32% were women (Figure 1). In most cases, the initial diagnosis was basal cell carcinoma (Figure 2). The most common anatomic site was the face (56%), followed by the scalp (15%) (Table1). After the first incision, 75 % of surgeries had clear margins, and 25% needed a second-round re-excision (Table 2). There were 3 cases of cancer recurrence after a median 5 months of follow-up; all these latters were squamous cell carcinomas with perineural invasion. There were no severe adverse events or complications related to MMS procedure.

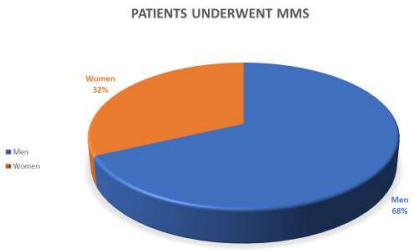

Figure 1

Conclusions

Analysing our MMS cases, we find that tumor histological type and location play an important role in determining the number of steps necessary to achieve negative surgical margins, defect size and closure type. In our study the type of MMS variant used didn't affect patients 'outcome.

Table 1

Tumour location	Number of patients (%)
Scalp	14 (15%)
Face: -Nose -Ear -Front -Eyelid -Lips	61 (65%)
Trunk	4 (4%)
Upper limbs	8 (8,5%)
Lower limbs	7 (7,5%)

Table 2

	Basal cell carcinoma	Squamous cell carcinoma	Total (%)
Maximum diameter (Median)	0,9 mm	12 mm	
First step clear margins	50	21	71 (75%)
Muffin tecnique	38	4	42 (45%)
Tubingen tecnique	23	29	52 (55%)
Progression after surgery	0	0	0 (0%)
Recurrences after MMS	0	3	3

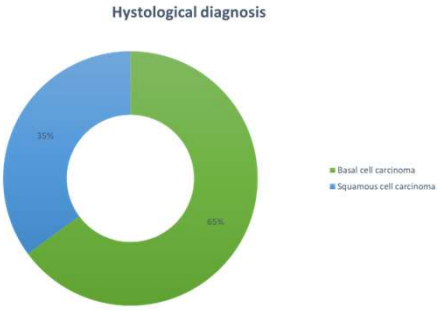

Figure 2

Bibliography

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