

One step melanoma surgery (OSMS) for thin melanomas and melanoma in situ: Undoubtedly the perfect and most adequate therapeutic Approach!

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We present a 43-year-old female with congenital melanocytic lesion in the area of the left thigh [Figure 1a]. Within the last 1 year, the patient observed a change in the color of the formation and an increase in its size. Within the dermatological examination on the lateral side of the left thigh, the presence of a pigment asymmetric lesion with a size of 1,5/2 cm, clear distortion from healthy tissue at the periphery, loss of pigmentation between 9:00-11:00 hours, irregular diameter and significant elevation in the upper two-thirds of the lesion, was observed [Figures 1a-b]. Clinically and dermatoscopically (loss of pigment network and presence of pale pink and gray regression areas) data were indicative for melanoma of less than 1 mm or melanoma

in situ [Fig. 1a]. Preoperative ultrasound examination of tumor thickness was not performed. The screening was without data for dissemination of the process. An operation was performed by the of One step melanoma surgery (OSMS) method, and the lesion was removed by elliptical excision with a direct surgical field of 1 cm in all directions [Figure 1c-d]. The resulting surgical defect was closed by single interrupted sutures [Figure 1e]. The post-operative histological examination confirmed the initial (clinical/ dermatoscopic) diagnosis, namely that it is melanoma in situ, with clear resection lines. A smooth post-operative period without complications was observed.



Fig. 1a: Clinical view: pigment lesion with uneven edges and uneven distribution of the pigment with a central lightening zone on the lateral part of the left thigh.

Fig. 1b: Preoperative outlining of the surgical margins with 1 cm in all directions.

Fig. 1c-d: Intraoperative finding: elliptical excision of the lesion.

Fig. 1e: Postoperative view: surgical defect closed by single interrupted sutures.

According to current guidelines for the management of primary cutaneous melanoma by AJCC for melanoma in situ (MIS), variable surgical margins of 0.5 cm to 1 cm are recommended [1]. They are based on the postoperatively established histological thickness after primary excision of the lesion by 0.5 cm in all directions, i.e. we are talking about melanoma treatment within two surgical sessions [1]. At the same time certain authors' collectives reject the decision for treatment with only 5mm and determine the need for a safety margin of at least 0.9cm in all directions in the surgical management of melanoma in situ [2]. Practically, the treatment is within two surgical sessions [1].

Moreover, available literature suggests that treating patients with melanoma and choosing surgical margins not only in MIS cases is mainly based on arbitrary choices, which in our opinion undoubtedly leads to controversy and often to difficulty in

choosing the most optimal treatment method for the patient. A new approach for the management of melanoma in situ, as well as thin melanomas (which are dermatoscopically/ clinically definitely indicative), is presented through one step melanoma surgery, which ensures successful treatment of the above mentioned lesions by conducting a single surgical session [3, 4].

The case presented demonstrates the possibility for correction of the designated according to some authors as controversy primary excision with 5mm surgical margin in the treatment of melanoma in situ by creating new guidelines based on clear clinical and dermatoscopic data for melanoma with tumor thickness below 1 mm [2,3]. Through a brief comparative analysis, we again demonstrate the benefits of OSMS over AJCC's recommendations [Table I, Table II].

Breslow thickness	Recommended surgical margins/AJCC
Melanoma in situ	0.5 cm (primary excision with 0,5 cm in all directions, followed by secondary excision)
<1mm	0.5 cm primary excision (followed by secondary excision with 0,5 cm in all directions)
1.01 - 2.0mm	0.5 cm primary excision (followed by secondary excision with 0,5 cm- 1,5 cm/ with SLND)
2mm- 4mm	0.5 cm primary excision (followed by secondary excision with 1,5 cm in all directions/with SLND)
> 4mm	0.5 cm primary excision (followed by secondary excision with 1,5 cm in all directions/ without SLND if nodes not enlarged)

Breslow thickness	Recommended surgical margins/ Tchernev et al.
Melanoma in situ	1.0 cm (clinical/ dermatoscopical evaluation obligate/ if possibility for echographical examination -from benefit)
<1mm	1.0 cm (clinical /dermatoscopical evaluation obligate / if possibility for echographical examination -from benefit)
1.01 - 2.0mm	1.0 cm (with SLND), (echographical tumour thickness measurement preoperatively)
2mm- 4mm	2.0 cm (with SLND) echographical tumour thickness measurement preoperatively
> 4mm	2.0 cm a) no enlarged lymph nodes- 2cm resection is sufficient, b) In the presence of enlarged lymph nodes- to be removed together with the reexcision of the primary tumourous tissue!

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