

Innovative One Step Melanoma Surgical Approach (OSMS): Not a Myth-It's a Reality! Case Related Analysis of a Patient with a Perfect Clinical Outcome Reported from the Bulgarian Society for Dermatologic Surgery (BULSDS)!

Georgi Tchernev^{1,2*}, Svetoslav Chernin³, Ilija Lozev³, Torello Lotti⁴, Konstantin Stavrov³, Ivanka Temelkova³, Ivan Pidakev⁵

¹Medical Institute of Ministry of Interior (MVR-Sofia), Department of Dermatology, Venereology and Dermatologic Surgery, General Skobelev Nr 79, Sofia 1606 Bulgaria; ²Onkoderma - Polyclinic for Dermatology and Dermatologic Surgery, General Skobelev 26, Sofia 1407, Bulgaria; ³Medical Institute of Ministry of Interior, Department of Common, Vascular and Abdominal Surgery, General Skobelev 79, 1606 Sofia, Bulgaria; ⁴University of Rome G. Marconi, Institute of Dermatology, Rome 00186, Italy; ⁵Medical Institute of Ministry of Interior, Department of Common, Vascular and Abdominal Surgery, General Skobelev 79, 1606 Sofia, Bulgaria

Abstract

Citation: Tchernev G, Chernin S, Mangarov H, Maximov G, Pidakev I. Innovative One Step Melanoma Surgical Approach (OSMS): Not a Myth-It's a Reality! Case Related Analysis of a Patient with a Perfect Clinical Outcome Reported from the Bulgarian Society for Dermatologic Surgery! Open Access Maced J Med Sci. <https://doi.org/10.3889/oamjms.2018.194>

Keywords: melanoma surgery; innovations; treatment options; survival; surgical approach

***Correspondence:** Georgi Tchernev, Medical Institute of Ministry of Interior (MVR-Sofia), Department of Dermatology, Venereology and Dermatologic Surgery General Skobelev Nr 79, Sofia 1606 Bulgaria; Onkoderma - Polyclinic for Dermatology and Dermatologic Surgery General Skobelev 26, Sofia 1606, Bulgaria. E-mail: georgi_tchernev@yahoo.de

Received: 09-Mar-2018; **Revised:** 06-Apr-2018; **Accepted:** 08-Apr-2018; **Online first:** 14-Apr-2018

Copyright: © 2018 Georgi Tchernev, Svetoslav Chernin, Ilija Lozev, Torello Lotti, Konstantin Stavrov, Ivanka Temelkova, Ivan Pidakev. This is an open-access article distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (CC BY-NC 4.0)

Funding: This research did not receive any financial support

Competing Interests: The authors have declared that no competing interests exist

BACKGROUND: With the newly described one step melanoma surgical approach, some patient groups could be successfully treated within one surgical session. Depending on the tumour thickness (measured preoperatively) at a later stage (also depending on the ultrasound findings of the locoregional lymph nodes) the respective surgical intervention is planned with the respective field of surgical safety (one-stage melanoma surgery with or without removal of lymph nodes). The innovations could make to some extent some of the already existing algorithms more difficult (due to the introduction of a high-frequency ultrasound to determine the tumor thickness preoperatively as an absolute prerequisite for dermosurgical centres), but it would also lead with absolute certainty to better or least optimal results regarding the prognosis, the side effects and the financial factor also.

CASE REPORT: We present a patient from the Department of Dermatology, Venereology and Dermatologic Surgery at the Medical Institute-Ministry of Interior (MVR-Sofia), treated with the one-step melanoma surgery method with perfect final results. The preoperative tumour thickness determined via ultrasound and the postoperatively measured histological tumour thickness was identical: between 0.98 and 1 mm, which allowed removal of the melanoma lesion with a field of surgical security of 1 cm in all directions and did not require additional removal of a draining lymph node or excisions.

CONCLUSION: Thanks to this new approach, some patients could avoid one surgical intervention, which could be interpreted as a significant advantage or probably also survival benefit. This methodology and its successful application were first officialised by the representatives of the Bulgarian Society for Dermatologic Surgery (BULSDS), and the purpose of this action, in general, is to fully improve clinical management of patients suffering from cutaneous melanoma in terms of compactness by 1) reducing the number of unnecessary surgeries or the number of surgical interventions in general; 2) reducing side effects occurring in surgeries and 3) introducing a serious optimization in terms of financial resources needed or used in the second hospitalization of patients. The question remains open whether the accepted or the current recommendations for surgical treatment of melanoma will be transformed or adapted for the matching patient groups.

Introduction

We are informing the dermatosurgical society about newly introduced therapeutic approaches that are different from the standard guidelines for treatment of melanoma in the international society. With the new described approach, the patients are successfully treated within one surgical session and are not subjected to the recommendations of the

European and American guidelines for treatment of cutaneous melanoma. This is made possible by the careful measurement of the tumour thickness (preoperatively), as a mandatory initial condition is that the clinical and dermatoscopic characteristics of the lesion speak explicitly in favour of cutaneous melanoma.

The case is indicative of the new approach that is being presented and could be one of the possible major innovations in the field of melanoma

surgery today [1] [2] [3].

Case Report

We are reporting for a 72-years-old patient who was admitted to the Department of Dermatology, Venereology and Dermatologic Surgery at the Medical Institute of Ministry of Interior, (MVR-Sofia) because of a new lesion, which is localised in the head region – right parietal region. The complaints are from around 2 years. Reason for the hospitalisation - increase in the lesion size and the pigmentation intensity over the last 2 months. During the clinical and dermatoscopic examination were established the typical features of a malignant melanocytic lesion, namely: heterogeneous lesion regarding the colour gamut: light brown to black in places, appearing dark grey; comparatively clearly demarcated from the healthy tissue; with areas of elevation (with central localization); with diameter of 3.3 cm to 2.7 cm; mostly plaque-like or rather endophytically growing; with irregular shape, uneven distribution of the pigment; with areas of regression.



Figure 1: 1a) Patient with cutaneous melanoma; 1b) Surgical margins with 1 cm surgical safety filed, preoperative conditions; 1c) Intraoperative status; 1d) Postoperative clinical status

The measured with a high frequency ultrasound (15 MHz) (in an external institution) tumor thickness was established that this is most probably a malignant melanocytic lesion with tumor thickness less than 1 mm (0.98 to 1 mm). The histologically established postoperative tumor thickness was 1 mm, with no ulcerations, no signs of angiolymphatic invasion, no increased number of mitoses.

Arterial hypertension as co-morbidity was noticed. Systemic medication of Amlodipine 5 mg (0/0/1), Moxonidine 0.2 mg (0/0/1), Irbesartan 0.3 g (300 mg) (1/0/0) was prescribed. There is no anamnestic evidence of allergies to food and medications. Mildly enlarged several lymph nodes above the right common carotid artery established via ultrasound, without definitive evidence of metastatic involvement. Performed was a surgical treatment with field of surgical security of 1 cm in all directions, the defect was initially closed with expandable flap, as intraoperatively (because of the inability to fully adapt the wound edges) a decision was made to perform additional progressive (advancement) flap, the skin flap was mobilized from the proximal part of the skin of the skull and translocated in distal direction (Fig. 1a-1d). The defect was closed in the form of the letter Y (Y-plastic). The postoperative course was without complications. In order to monitor the enlarged lymph nodes, ambulatory antibiotic therapy was planned with clarithromycin 500 mg for a period of 10 days and repeated ultrasound control.

Discussion

Until now it was recommended to remove any melanocytic lesion with a field of surgical security of 0.4 to 0.5 cm, and subsequently to perform re-excisions with or without parallel drainage lymph node (depending on the established postoperative tumor thickness) [1]. Thanks to this new approach, some patients could avoid one (or the secondary re-excision) surgical intervention, which could be interpreted as a significant advantage or probably also survival benefit [1] [2] [3].

References

1. Tchernev G, Chokoeva AA. New Safety Margins for Melanoma Surgery: Nice Possibility for Drinking of "Just That Cup of Coffee"? Open Access Maced J Med Sci. 2017; 5(3):352-358. <https://doi.org/10.3889/oamjms.2017.068> PMID:28698757 PMCID: PMC5503737
2. Tchernev G. One Step Surgery for Cutaneous Melanoma: "We Cannot Solve Our Problems with the Same Thinking We Used When We Created Them?" Open Access Maced J Med Sci. 2017; 5(6):774-776. <https://doi.org/10.3889/oamjms.2017.168> PMID:29531606 PMCID:PMC5839450
3. Tchernev G. Novel Surgical Approach in Cutaneous Melanoma Patients: "Daring Ideas Are Like Chessmen Moved Forward. They May Be Beaten, But they May Start a Winning Game!?" Open Access Maced J Med Sci. 2017; 5(6):810-812. <https://doi.org/10.3889/oamjms.2017.199> PMID:29104697 PMCID:PMC5661726