

# Karapandzic flap as a reconstructive option for the approach to mucosal melanoma in the lower lip.

## A case report

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Case Report

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### Background

Mucosal melanoma is a rare but aggressive cancer arising in melanocytes within ectodermal mucosa. It represents less than 1% of all malignant melanomas. Despite its rarity, mucosal melanomas are of great interest due to their aggressive behavior and less favorable prognosis compared to cutaneous melanomas. Surgical excision is the treatment of choice for localized disease. When affecting about 3/4 from the lower lip, according to a number of authors, Karapandzic flap is preferable. We present a case report of a lower lip lesion reconstructed with a Karapandzic flap. One of the great advantages of this technique is the preservation of the labial sphincter, its sensitivity and vascularization<sup>4</sup>. The Karapandzic technique has the inconvenient that usually causes asymmetry of the lip corner, but it disappears within time<sup>7</sup>. In this case, we made a Karapandzic flap due to the simplicity of the surgery, and compared to other procedures, it only needs one stage and has very acceptable aesthetic and functional results when it does not involve the lip commissure.

**Keywords:** Melanoma, Karapandzic flap, facial flap, head and neck reconstruction.

Mucosal melanoma is a rare but aggressive cancer arising in melanocytes within ectodermal mucosa. It represents less than 1% of all malignant melanomas. Risk factors for mucosal melanoma have not been identified given their rare incidence<sup>1</sup>. Despite its rarity, mucosal melanomas are of great interest due to their aggressive behavior and less favorable prognosis compared to cutaneous melanomas. This could be because of late diagnosis, patients' delay and/or the obscured anatomic site of origin. It may also be related to the rich lymphatic and vascular supply of the mucosa<sup>2</sup>. Surgical excision is the treatment of choice for localized disease<sup>3</sup>. Reconstruction of the lower lip in patients with epithelial skin tumors, but not only, is a serious challenge and often requires a multidisciplinary approach. In cases where about 2/3 of the lower lip is affected, the defects could be corrected by a limited number of plastics such as: Karapandzic, Abbe or Estlander flaps. When affecting about 3/4 from the lower lip, according to a number of authors, Karapandzic flap is preferable<sup>4</sup>. We present a case report of a lower lip lesion reconstructed with a Karapandzic flap.

### Case report

A 64-year-old male presented to the hospital referring a 2-year history of an hyper-pigmented spot in the internal face of the right lower lip. The patient was addicted to smoking 10 tobacco cigarettes a day for the last 50 years. Punch biopsy of the lesion revealed a mucosal melanoma Breslow 1 mm. We decided to perform a Karapandzic flap to reconstruct the area after the lesion removal.

### Discussion

Mucosal melanoma is a rare melanoma subtype that differs from the cutaneous form of the tumor in its biology, clinical manifestations, and management. Diagnosis is usually late due to a lack of early or specific signs and the location of lesions in areas that are difficult to access on physical examination<sup>3</sup>. Reconstruction of the lower lip in patients with epithelial skin tumors, but not only, is a serious challenge. The lip area is of particular importance for each individual, as its role is multifunctional and is considered key in terms of the

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**Figure 1.** Upper: Hiperpigmented lesion in lower lip, anterior vision . Lower: Lateral vision.

formation of speech, sound, food intake, but also the lips are perceived as a symbol of sexuality and sensuality<sup>4</sup>. In case of localized disease at the moment of diagnosis the management must be guided to locoregional control through surgery and/or radiotherapy<sup>3</sup>. Radical tumour excision with disease-free surgical margins should be the first goal of surgery in head and neck mucosal melanoma<sup>5</sup>. When affecting about 3/4 from the lower lip, according to a number of authors, Karapandzic flap is preferable,



**Figure 2.** Immediate postoperative result



**Figure 3.** Upper. One-month follow up. Lowe. Seven-month follow up.

although a slight difficulty in food and fluid intake may occur due to the risk of postoperative microstomia. One of the great advantages of this technique is the preservation of the labial sphincter, its sensitivity and vascularization<sup>4</sup>. Other flaps for reconstructing large lip defects are Abbe, Estlander, and the Gilles fan flap. However, these techniques often involve a two-stage procedure and resection of the healthy lip tissue<sup>6</sup>. The Karapandzic technique has the inconvenient that usually causes asymmetry of the lip corner, but it disappears within time<sup>7</sup>. The major disadvantage of this technique is microstomia, but this can be easily corrected with secondary commissuroplasty<sup>8</sup>. Various modifications of the Karapandzic flap have been tried for the extended involvement of the lower lip by different authors, showing good functional and cosmetic results with various degrees of microstomia<sup>9</sup>.

### Conclusion

The mucosal melanoma is a rare but important type of cancer due to its poor prognosis. It can be treated effectively when the diagnosis is made in nearly stages of the disease. Surgery is always the treatment of choice in this stages. When it affects the lip, we can use a variety of techniques for the removal of the lesion and the reconstruction of the area. In this case, me made a Karapandzic flap due to the

simplicity of the surgery, and compared to other procedures, it only needs one stage and has very acceptable aesthetic and functional results when it does not involve the lip commissure. This technique gives us a simple and effective way to treat this kind of lesions in the lips, as it has satisfactory results in our patient and no complications at the moment.

### Conflicts of interests

The authors have no conflicts of interest to declare.

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