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Case Report

Karapadnzic Flap

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Abstract

The Epidermoid arcinoma is the most frequent among malignant tumors of the lips, usually diagnosed in early stages, (1) a tumor that develops from the keratinocytes of the stratum spinosum of the epidermis, which is characterized by being aggressive, invasive, being the location of most frequent appearance the lower lip. The flap described by Karapandzic is suitable for the repair of defects of more than 60% of the lower lip surface. In addition, it serves for the restoration of the upper lip or comisura. It can be uni or bilateral, whose advantages are, the preservation of mobility and lip sensitivity, as well as labial competence and complete reconstruction in a single procedure since it respects the orbicularis muscle.

Clinical Case: The case of a 77-year-old female patient who attended the outpatient oncological surgery service of the Roosevelt Hospital, with a history of a lower lip mass of 1 year of evolution, is presented; On physical examination positive data, evidence mass of approximately 2.5 cm x 3.5 cm, located at the level of right lip commissure, incisional biopsy is performed and moderately differentiated squamous cell carcinoma is identified, it is scheduled to the operating room where complete carcinoma resection is performed plus radical neck dissection (lymphonodal levels I, II, III, IV), moreapproximation of flaps with Karapadnzic technique, patient with adequate evolution.

Keywords: Karapandzic Flap; Squamous Cell Carcinoma

Introduction

Among the malignant tumors of the lips, the most frequent is Squamous Cell Carcinoma, relatively frequent within tumors affecting the head and neck, which is usually diagnosed in early stages [1], a tumor that develops from the keratinocytes of the stratum spinosum of the epidermis, which is characterized by being aggressive, invasive and because it can metastasize, being the location of most frequent appearance the lower lip.

From a clinical point of view, there are basically two varieties:

Intradermal squamous cell carcinoma: also called carcinoma in situ, related to pre-existing lesions such as chronic inflammations, arsenical lesions, thermal burns, Bowen's disease, etc. They are characterized by a better prognosis.

Invasive squamous cell carcinoma: which is fast growing and unlimited. It can cause metastasis. This tumor has an accelerated growth in healthy skin and is also related to Queyrat's erythroplakia. 20 to 40% of these erythroplakias develop squamous cell carcinoma [2].

The lower lip is a structure that acquires great functional importance at the time of feeding and the articulation of the word itself and that must be taken into account at the time of surgical repair, as well as the aesthetic result [1]. Being a very visible area

inside the face, it is very important to perform a reconstruction that leaves an optimal aesthetic result. The problem arises when it comes to aesthetic repair, trying to preserve the functionality of the lower lip.

The flap described by Karapandzic is suitable for the repair of defects of more than 60% of the lower lip surface. In addition, it serves for the restoration of the upper lip or commissure. It can be uni or bilateral [1]. It is based on the mobilization of the skin and soft parts of the lower portion of the nasolabial region. These tissues are rotated towards the midline of the defect, so that the orbicularis muscle of the lips, innervated and neuromuscularly irrigated by the inferior labial artery and the nerve endings sectioned at the time of surgical ablation, thereby preserving the functionality and competence of the oral cavity [1].

The main advantages are, the preservation of mobility and lip sensitivity, as well as lip competence and complete reconstruction in a single procedure since it respects the orbicularis muscle of the lips and allows normal labial function in addition to the aesthetic results are excellent.

The main disadvantages are the appearance of microstomy that can limit the mouth opening and distortion of the oral commissure, which may require subsequent reconstructive comisosuroplasty [1].

Case Presentation

We present the case of a 77-year-old female patient who attended the outpatient oncological surgery service of the Roosevelt Hospital, with a history of a lower lip mass of 1 year of evolution; On physical examination, positive data showed a mass of approximately 2.5 cm x 3.5 cm, located at the level of the right lip commissure, which exposed mucosa, non-ulcerated, non-mobile, slightly painful on palpation (Figure 1A), in addition lymph node was identified at the level of posterior jugular chain (zone III), incisional biopsy was performed and sent to pathology to confirm diagnosis.

Subsequently, the patient received a biopsy result confirming moderately differentiated squamous cell carcinoma, however, for this time with gradual increase in size (Figure 1B) and is scheduled to operating room for resection plus neck exploration.

Figure 1: A: squamous cell carcinoma at the time of first consultation; B: squamous cell carcinoma operating room day (2 months after first consultation).

We proceed to delimit the resection area (Figure 2A), however, there is evidence of greater infiltration at the level of oral mucosa (Figure 2B), which is why the resection border area is widened.

Figure 2: A: lateral aspect squamous cell carcinoma, delimitation area of resection; B: Oral mucosal infiltration.

Complete resection of squamous cell carcinoma was performed, covering a greater percentage of the border, with significant involvement of the superficial orbicular muscle of the lips (Figure

3A), concomitant vascular structures were preserved, tongue exposure was evidenced on its lateral face, it was possible to expose but not compromise the deep orbicular muscle of the lips.

After total resection of the squamous cell carcinoma, radical neck dissection is performed, concomitant structures, sternocleidomastoid muscle and right jugular vein are released and exposed (Figure 3B), exposure of the right carotid artery is avoided, then proceeds to perform drainage of lymphonodal levels I, II, III, IV. Finally, Jackson Pratt drainage is left directed to the area of resection and primary closure with surgical staples (Figure 3C).

Figure 3: A: bloody area of approximately 5 cm x 8 cm with exposure lateral face tongue, deep orbicular muscle of the lips (red arrow); B: area of radical neck dissection posterior to release of lymphododical levels, sternocleidomastoid muscle (green arrow), right jugular vein (flechto blue); C: primary closure with surgical staples plus Jackson Pratt drainage placement.

With significant involvement of two thirds of the lower lip, it was decided to perform Karapanflap dzic, wound edges were regularized and areas for flap were delimited (Figure 4) in order to approximate wound, edges are released, preserving vascular structures, avoiding the total dissection of the remnant of the superficial orbicularis muscle of the lip (Figure 5).

Finally, coping is performed by planes of muscular remnant, flap edges are approached with Karapandzic technique, with non-absorbable thread. 48 hours later in the mediate postoperative period there is evidence of clean closure, without signs of localized infection, no data of dehiscence of the same. Subsequently, the patient was discharged from the service and was scheduled for follow-up a week later, showing a wound in the healing phase, with adequate evolution, despite reduced mouth circumference, patient at the moment without problems in the process of chewing and swallowing.

Figure 4: A, B, C: They regularize edges and delimit area for approximation of them.

Figure 5: A, B, C: Release of edges with preservation of concomitant structures, preservation of superficial orbicular muscle remnant of the lips.

Case Discussion

Squamous cell carcinoma is an aggressive, invasive tumor that can generate metastasis if not treated early and radically, given its location the treatment to choose will be based on the extension of it, within the options for the reconstruction of the lower lip, the flap with Karapandzic technique results in the appropriate option, preserving concomitant structures both vascular and the adjacent

Figure 6: A: Approximation of segments with Karapandzic technique; B: 48 hours after the procedure.

Figure 7: A, B: Wound closure with Karapandzic technique already in the healing phase.

muscle, despite the reduction of the circumference of the mouth this will try to avoid the resulting physiological repercussion, leaving the procedure in a single surgical time the prompt recovery is expected. Leaving the approach and exploration of lymphatic drainage to consideration whenever there is evidence or suspicion of infiltration of the same [3].

Conclusions

- Karapandzic flap is a good procedure for repairing defects in the lower lip and carcinoid tumors in a single time.
- Orthey have good aesthetic and functional results.
- The main problem of the procedure is the microstomy, for which a subsequent reconstructive commissuroplasty is practiced.

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