Reconstrução do Lábio Inferior com Retalho Miocutâneo - Platisma

Reconstruction of the Lower Lip With a Platysma Myocutaneous Flap

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Resumo: Relata-se um caso de reconstrução total do lábio inferior utilizando-se o retalho miocutâneo de platisma. Trata-se de um carcinoma epidermóide com metástase cervical. Os autores demonstram que a técnica utilizada de reconstrução produz um resultado estético e funcional satisfatório, sem comprometimento do procedimento oncológico radical.

The surgical treatment of malignant neoplasms of the lip requires its reconstruction with preservation of function and esthetical appearance in addition to total resection of the lesion and possible regional metastases.

Lip tumors in their initial stages are easily treated by a simple V- or W-shaped resection and primary closure. However, advanced tumors that involve the entire lower lip and infiltrate the floor of the mouth, mandible and lip commissures are difficult to reconstruct. According to Luce[8], in these cases the rater of relapse are high (55 to 70%) and functional and esthetical sequelae are a usual shortcoming of the reconstructive techniques described thus far.

Futrell[6] devised a platysma myocutaneous flap (PMF) for intraoral reconstruction in 1978, whose peculiarities, such as tissue thickness, color, proximity to the lip and availability of a generous amount of tissue, make it also useful for total lip reconstruction, as herein described.

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Case Report

G.F.P., a 56-year old white female, was admitted to the University Hospital of Ribeirão Preto with an intensely bleeding tumor of the lower lip.

Local examination revealed a exophytic lesion occupying the entire lower lip including the labial comissures and extending from the gingival-labial sulcus to the corresponding skin on the outer surface, without infiltrating the mandible

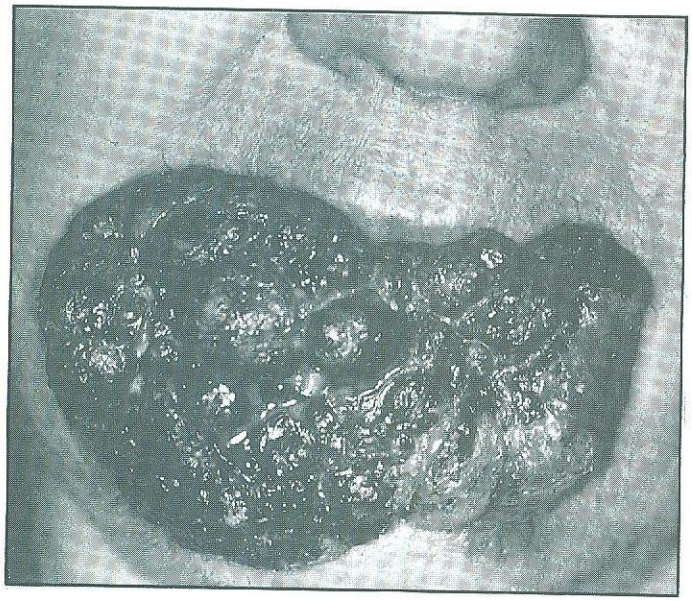

Fig. 1 - Close-up frontal view of the lesion.

(Fig. 1). Neck palpation did not reveal any clinically suspect nodules. The lesion was staged as $T_3N_oM_o$.

Under general anesthesia, the entire lesion was resected with e safety margin of 1,5 cm. After bilateral suprahyoid neck dissection, lower lip reconstruction with a PMF from the right cervical side was performed. A tube drain under continuous aspiration was left in place for 24 hours and prophylactic antibiotic treatment was administered. There was no postoperative complications.

Pathological examination showed an epidermoid carcinoma removed with a good margins. A single metastatic in the right lymphonode submandibular chain was present. The patient was discharged on postoperative day 5.

Surgical Technique

A skin area surrounding the lesion of the lip with a 1,5 cm margin was marked with methylene blue. The longest axes of this area were measured and these dimensions were utilized to draw a skin ellipse in the selected right supraclavicular region.

The platysma muscle flap was in the lower border of the ellipse.

The skin above the upper incision was removed from the platysma muscle up to the body of the mandible by blunt dissection. A plane close to the superficial cervical fascia was entered the lower border of the ellipse, also in the direction of the mandibular body, thus creating a platysma muscle layer with a pedicle in the mandible and an overlying skin island.

A necklace-shaped incision (Fig. 2) was then made in the cervical skin 2 cm below the mandibular body for bilateral suprahyoid neck dissection. Special care was taken to dissect out the facial artery. The marked peritumoral area was finally incised and the lesion removed "a block".

The myocutaneous flap was then rotated 180° and sutured to the borders of the defect. The neck was repoused primarily.

Discussion

Full lip reconstruction after tumor resection frequently requires reconstructive procedures to provide an adequate funcional result. Replacement of the entire lip with autologous tissues that could provide an adequate sphincter for mastication, swallowing, and speech, in addition to a good cosmetic result is difficult to obtain. Although the entire lower lip can be reconstructed with Zsymanowski-type regional flaps alone, or their combination with the Bernard triangle, there are limitations to the use of these regional flaps. Frequently it results in incompetent lips, microstomy or extensive facial scars.

Distant flaps have been used such as the frontal flap (McGregor[12]). More recently, distant flaps[15] have been devised either pediculated or revascularized providing more satisfactory results.

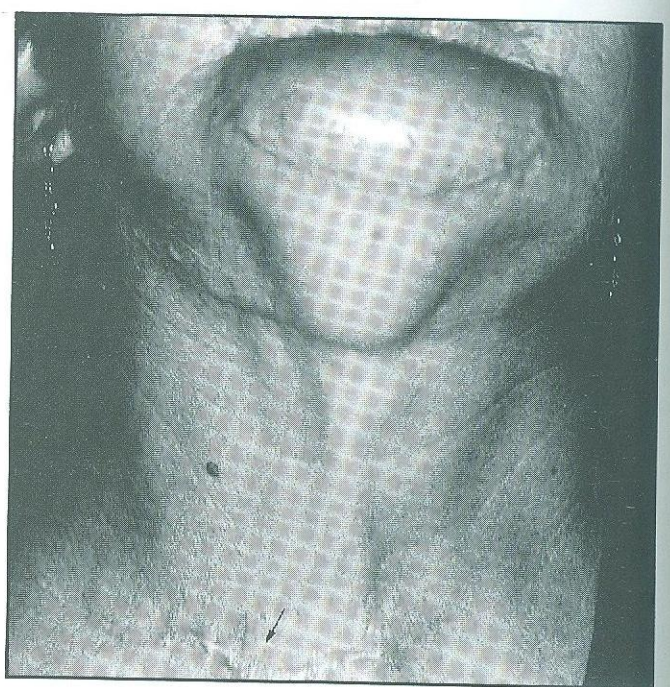

Fig. 2. Late (6 months) postoperative frontal view showing the scar of the cervical necklace-shaped incision and the scar of the PMF donor area (arrow).

Myocutaneous flaps, carry certain additional advantages such as that they can ben performed as a single operation, they are well-vascularized tissue (to an often scarcely vascularized region), utilization of neoplasm-free distant tissue, and the supply of generous amount of skin, as well as muscle and bone. However, these flaps, are usually bulky and their skin is quite different from facial skin. In the present case, the PMF proved to attain the advantages of myocutaneous flaps with appropriate thickness for lip reconstruction.

Several reports have been published on the irrigation and anatomy of the PMF[9-10]. According to the classification of Matheus and Nahai[10], this is a type II flap with a dominant pedicle and smaller secondary pedicles. The dominant pedicle originates from the facial artery which its two branches into the submandibular region close to the mandibular angle. The first is descending and directly irrigates the platysma along its longer axis, and the second (submental branch) runs throughout the extention of the muscle parallel to the mandibular body, sending out descending ramifications.

The surgeon must know this irrigation anatomy in detail in order to properly dissect this flap. The damage to the facial artery leads to flap necrosis. We used a submandibular necklace-like neck incision (Fig. 2) cautiously remove the submental, submandibular and high jugular lymphonodes with preservation of the facial artery and its submental branch.

Manni and Bruaset[9] used a PMF for floor of the mouth reconstruction in 10 patients, all were also submitted to uni- or bilateral neck dissection. They were successful in 6 cases, but skin necrosis occurred in 4, probably due to the lesion of the facial artery.

Many clinical applications exist for the PMF, such as reconstruction of the floor of the mouths[2-9], oropharynx[3-11-15], lip[3], and ear[1]. Our experience with the PMF in the laboratory is based on the reconstruction of the cervical trachea of dogs which included the preparation of PMF of different dimensions for the reconstruction of different size tracheal segments[13].

Many investigators[3-5-9-13-14-15] attribute good malleability to the platysma because of its reduced thickness. We share this opinion and consider coaptation of the flap borders over the wound is to be quite easy, leading to very good a esthetical results. Others[2-15] have already stressed the large amount of tissue supplied by the PMF without causing any significant sequelae to the donor area. In the present case, although a generous PMF was used to cover the area from the floor of the mouth to the chin, the cervical closure could be performed without tension (Fig. 3).

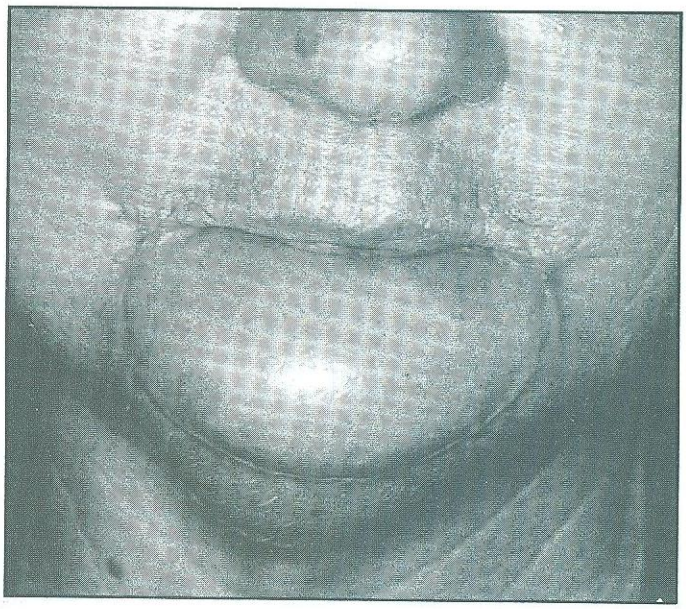

Fig. 3 - Late (6 months) postoperative close-up front view showing the good aesthetic lower lip reconstruction and adequate oral sphincter.

On the basis of the experience acquired with the use of PMF in experimental tracheal reconstructions[13] and in the present case, we think that the PMF should be considered more often for head and neck reconstructive surgery in general and in lower lip reconstruction, when a large amount of autologous tissue is necessary.

Summary

This is a report of an epidermoid carcinoma with cervical metastasis undergoing resection followed by lower lip reconstruction using a plathysma myocutaneos flap. The autors showed that the proposed reconstrution technique provides satisfactory funcional and esthetic results, with no compromise of the radical oncological procedure.

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