



Modified Tripier flap in reconstruction of the lower eyelid*

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Abstract: We describe the use of modified Tripier flap for reconstruction of a surgical defect in the lower eyelid region, after excision of nodular basal cell carcinoma.

Keywords: Ambulatory care facilities; Ambulatory surgical procedures; Carcinoma, basal cell; Eyelid diseases; Neoplasms, basal cell; Surgical procedures, operative

INTRODUCTION

Basal-cell carcinoma (BCC) is considered the most frequently diagnosed malignant cutaneous tumor in the dermatological practice. In spite of potential lateral invasion being greater than radial, metastasis cases have already been described in the literature.^{1,2,3}

The treatment to be recommended depends on the hemodynamic state of the patients, histopathological subtypes, location and size of the tumor. Cryosurgery, photodynamic therapy and surgical exeresis are some of the existing tools.

CASE REPORT

Male patient, 51 years old, of mixed race, with a tumor measuring⁴ centimeters in diameter, well delimited, asymptomatic, located in the left infra-palpebral region, with two years of evolution (Figure 1). He presented himself in good general health without palpable adenomegalies.

Histological analysis of incisional biopsy sample revealed basaloid cell proliferation, with hyperchromatic nucleus and poorly defined cytoplasm forming nests in the dermis creating the aspect of peripheral palisade, typical of a solid nodular basal-cell carcinoma.

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FIGURE 1: Basal-cell carcinoma. Nodular basal-cell carcinoma

During the intraoperative antisepsis and asepsis procedures were performed with degerming solution povidone-iodine (polyvinylpyrrolidone) and administration of 01g of intravenous cefazolin. Local anesthesia was achieved with infiltration of a solution containing 15ml of 0.9% saline, 5 ml of 2% lidocaine, 0.2 ml of epinephrine and 2 ml of 8.4% sodium bicarbonate.

Complete tumoral excision was planned with a safety margin of 5mm and the removed material marked with nylon thread at 12 hours and submitted to histopathological study by intraoperative freezing, obtaining analysis with neoplasm-free margins.

The surgical defect measured 5.0 x 1.5 centimeters, affecting all the lower left eyelid and upper left malar region. There was no involvement of mucosa and ipsilateral tarsal.

For the reconstruction of the defect it was recommended to perform a modified Tripier flap. The patient presented an excess of skin in the upper left palpebral region, enabling myocutaneous transposition of a local lobe to the surgical defect. The single pedicle, randomized and lateral, was drawn with a relatively wide base, avoiding involvement of the distal flap nutrition (Figure 2). Simple interrupted sutures were performed with mononylon 4.0 and 5.0 to position the flap without border tension and mononylon 6.0 for upper eyelid.

In the postoperative a local dressing was prescribed with ophthalmological eye ointment containing chloramphenicol, methionine, retinol acetate and aminoacids. Stitch removal occurred on the 7th and 14th subsequent days. In the ninth month of ambulatorial follow-up patient remains with no relapses and with functional and esthetic palpebral outcome satisfactory (Figure 3).

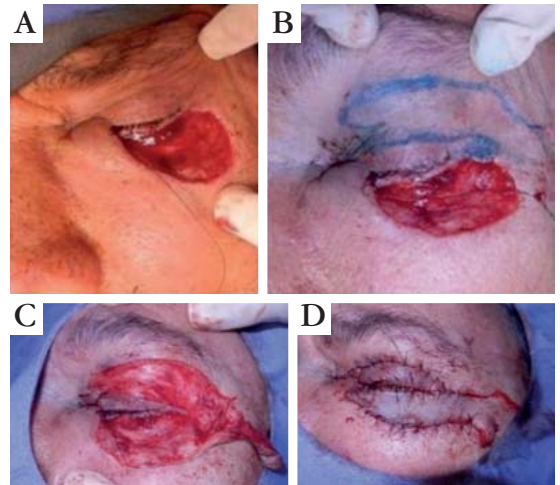


FIGURE 2: Intraoperative stages. A. Surgical defect after total excision of tumor. B. Demarcation of myocutaneous flap of upper eyelid. C. Observation of flap to be transposed and areas of primary and secondary defect. D. Flap positioned with lateral pedicle and direct closure of upper palpebral region



FIGURE 3: Postoperative. 9th month of ambulatorial follow-up. Palpebral function and esthetics preserved, without complaints or ophthalmologic changes

DISCUSSION

Tripier flap is considered a myocutaneous, bipedicular flap, originating from the upper eyelid and recommended for the reconstruction of defects located in the lower eyelid.^{4,5} It is a technique that requires a second surgical stage, usually after two

weeks, for sectioning of lateral pedicles. Its modification consists in planning a single pedicle, lateral, randomized, which provides reconstruction, including the lateral portion of lower eyelid, without the need for a second surgical stage.^{4,5,6} The lobe to be transposed from upper eyelid to lower eyelid follows the proportion of 1:3 width x length ratio, ensuring an adequate vascular support, avoiding necrosis, deformities and ectropion.

We must not mistake the modified Tripiet flap for the Fricke flap. The latter is characterized as a purely cutaneous flap for transposition, monopediculated, from supraorbital region of frontal region to palpebral region.^{7,8}

In cases of small surgical defects located in the palpebral region, vertical primary closure is preferred. Cicatrization by secondary intention, grafts and flaps are also options for the planning phase.^{5,6}

The whole set of good surgical planning, anatomical knowledge and adequate reconstruction technique indication make complications such as ectropion, epiphora, eyelid edema, hemorrhage and lagophthalmos infrequent.

This report aims at demonstrating an option of lower eyelid reconstruction, simple and versatile, as well as illustrating its steps regarding surgical planning. □

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