Case Report

Frontal basal cell carcinoma with eyebrow involvement: surgical treatment with bilateral advancement flap

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ABSTRACT

We report the case of a patient presenting with a 3-cm diameter ulcerated nodular basal cell carcinoma in the frontal left region, reaching the medial half of the eyebrow. The lesion was excised, and the reconstruction was realized with advancement flaps in H; the left region included the rest of the eyebrow, and it was larger than the contralateral region. Thus, the harmony and symmetry of the superciliary and glabellar regions were preserved. The scars were barely visible as they were positioned in wrinkles rows. The patient remains without injuries after two years of monitoring.

Keywords: basal cell carcinoma, cutaneous oncology, dermatologic surgery.

INTRODUCTION

The basal cell carcinoma is a malignant tumor that most often affects humans, especially people with fair skin. The most common affected site is the face, particularly the nose. In most cases, it has slow growth and low metastasizing potential but if treatment is neglected it can reach large dimensions and cause serious deformities, especially when ulcerated. Whenever possible, reconstruction should be done with the most inconspicuous scars after excision.[1] We present a case of a patient with frontal and superciliary lesions who underwent excision and reconstruction with favorable aesthetic results.

METHOD

A 72 year old male patient, Caucasian, retired businessman, sought dermatologic care with complaints of ulcerated nodule in the frontal region, which extended to the eyebrow and bled from minimal trauma. After dermatological examination the presence of ulcerated tumor pearls was detected with well defined external limits and approximately 3 cm in diameter, located in the front left. The lower 1/3 of the lesion was affecting the medial half of the eyebrow (Figure 1).

Histopathological examination of the biopsy specimen by punch showed it was a nodular basal cell carcinoma. The lesion was excised in the outpatient service with intraoperative margin control, under local anesthesia. Due to the size of the resulting defect (diameter = 4 cm) and its location, the best option for reconstruction was the use of a flap. A simple advancement flap was chosen initially, with the left pedicle, which would rebuild the removed superciliary portion. However, this procedure was not sufficient for the closure, and a second flap of contralateral advance was made so that no important asymmetry would ocurr in the glabellar region. For this reason, the new flap was smaller than the first one (Figure 2). The incisions were placed in the wrinkles lines, keeping the blade parallel to the hair follicles and preventing their transection.

RESULT

The suture was removed after seven days, and no complications were observed in the postoperative period. The patient returned for the following six months after surgery, when good aesthetic result was observed with maintenance of the eyebrow position and symmetry

(We declare no conflict of interest).

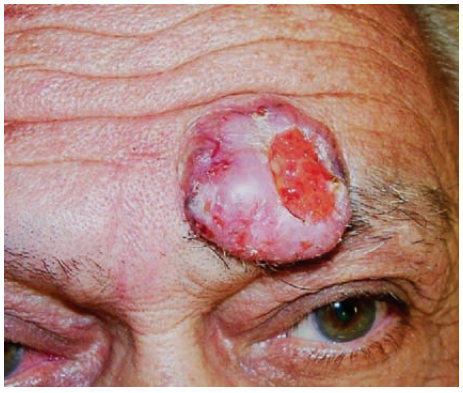

Figure 1. Frontal basal cell carcinoma in the merdial half of the eyebrow.

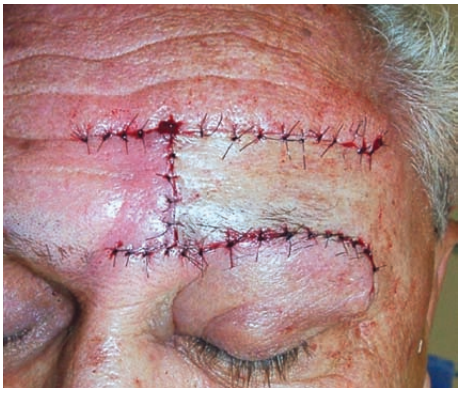

Figure 2. Post-operatory.

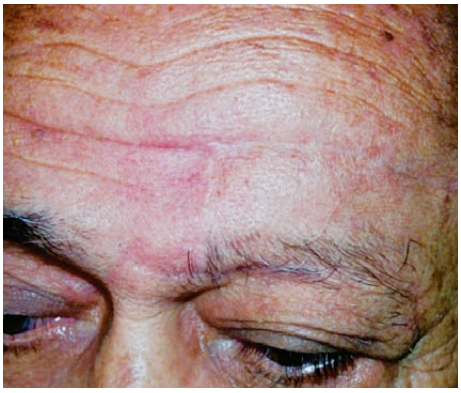

Figure 3. 6 months after surgery.

(Figure 3). He has been monitored every six months, and after two years no recurrent lesion was observed.

DISCUSSION

Eyebrows are important anatomical and aesthetic structures of the face. They protect the eyelids and the eyeball from mechanical injuries. They also have different characteristics in females and males, being characterized by rectilinear format and low position with superior orbital rim leve[1] in males. Its partial loss may lead to important aesthetic changes of the face. When skin lesions (particularly malignancies) affect this area, the reconstructive procedure is delicate, requiring not only the excision of the entire thickness of skin and subcutaneous tissue but also the maintenance of eyebrows symmetry and uniformity in position.[2] The direct suture is impracticable in cases of large losses, and the use of free grafts in this area does not preserve the natural aspect of the eyebrow; so the use of flaps is the best option. The following possibilities may be considered: the supraorbital island flap,[3] the periglabellar flap,[4] and the unilateral or bilateral[5] advancement flap. The last one was chosen in this case due to the fact that, when the whole left eyebrow was included in the flap, it could be moved forward and placed in the excised area, keeping the color and texture of the skin, as well as the direction and aspect of the hair in the area. The second contralateral flap has allowed an approximation of the edges without tension, with no distortion in the glabellar region. An additional advantage of this type of reconstruction is that the incisions are placed in the wrinkles rows, thus making them less evident.[6]

CONCLUSIONS

Despite the large size, the location and the clinical appearance of the tumor, it was possible to excise the entire lesion by using two advancement flaps in H, with an adequate safety margin, and to provide an aesthetic reconstruction of the eyebrow and glabella. S&CD

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