

7. Martínez-Escala ME, Rozas E, Pujol RM, Herrero-González JE. Mid-dermal elastolysis: another dermatological clue to autoimmunity? *Acta Derm Venereol.* 2012;92:434–5.
  8. Jeandel C, Leclech C, Pasquali JL, Heid E. Anétodermie maculeuse et syndrome de Gougerot-Sjögren primitif. *Presse Med.* 1988;17:343.
  9. Jubert C, Cosnes A, Clerici T, Gaulard P, André P, Revuz J, et al. Sjögren's syndrome and cutaneous B cell lymphoma revealed by anetoderma. *Arthritis Rheum.* 1993;36:133–4.
  10. Oikarinen AI, Palatsi R, Adomian GE, Oikarinen H, Clark JG, Uitto J. Anetoderma: biochemical and ultrastructural demonstration of an elastin defect in the skin of three patients. *J Am Acad Dermatol.* 1984;11:64–72.
  11. Braun RP, Borradori L, Chavaz P, Masouyé I, French L, Saurat JH. Treatment of primary anetoderma with colchicine. *J Am Acad Dermatol.* 1998;38:1002–3.
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## Combined Double Rotation Flap on the Cheek<sup>☆</sup>

### Doble colgajo combinado de rotación en la mejilla

To the Editor:

Basal cell carcinoma is the most common skin tumor in white individuals.<sup>1</sup> It arises mainly in sun-exposed areas and is usually a nonaggressive, slow-growing tumor. However, in the office it is not uncommon to see large tumors that require complex reconstruction techniques.

Reconstruction of the cheek is a particular challenge, as functionality must be preserved while minimizing the cosmetic impact of the resulting scar and without distorting the mandibular or nasal sulci or the palpebral fold.

We describe the case of an 83-year-old man with no past medical or surgical history of interest who was seen for a lesion that had been present for 3 years on the right side of the face, at the union of the superolateral border of the cheek with the area of the zygomatic arch.

The tumor had a sclerodermiform appearance, with well-defined pearly borders, and measured 2.5 cm in its largest diameter (Fig. 1). Telangiectasias were visible over most of the surface of the tumor and there were small ulcers with blood-stained crusts.

Based on a clinical suspicion of morpheaform basal cell carcinoma, the patient was scheduled for surgical excision of the tumor under local anesthesia.

After palpation of the lesion and of the surrounding donor site, we designed a rotation flap with its base oriented inferiorly and a Burow triangle positioned superiorly to reduce tension (Fig. 1). An M-plasty was designed in the skin inferior to the lesion to close the defect.

Local anesthesia was infiltrated around the lesion and in the area of the flap. However, after excision of the tumor with an adequate margin and incision of the flap, the tissue was found to be difficult to mobilize and it was decided to

create an additional preauricular rotation flap (Fig. 2). The Burow triangle shown in Fig. 1 was not excised.

Both flaps were dissected in a plane immediately superior to the superficial musculoaponeurotic system, making the procedure easier and less time-consuming as there is less bleeding. This technique also achieves better cosmetic and functional results as it does not affect the innervation of the area.<sup>2</sup>

The 2 flaps were sutured with interrupted 4-0 silk sutures (Fig. 2).

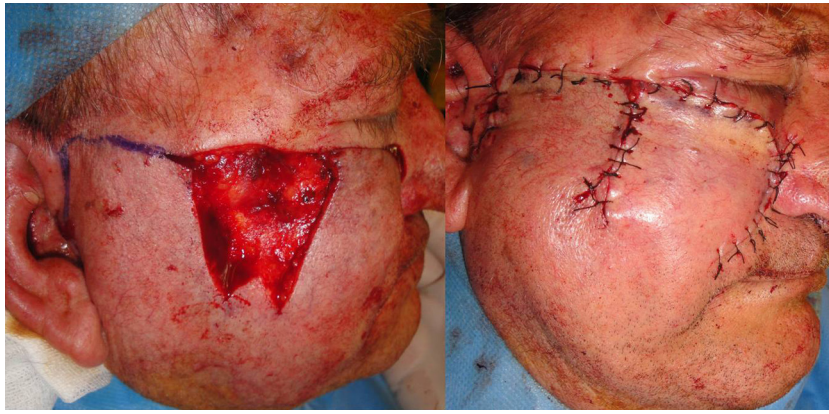
The immediate postoperative period was satisfactory, with no hematoma or infection of the surgical wound. At 24 months, the patient presented no signs of recurrence, and the functional and cosmetic results were excellent (Fig. 3).

This case demonstrates the difficulty of reconstructing large areas such as the cheek. Although there is usually sufficient donor tissue, large flaps may sometimes be required,



**Figure 1** Morpheaform basal cell carcinoma over the right zygomatic arch, with a largest diameter of 2.5 cm. Design of the original plasty: a rotation flap with an inferior M-plasty and a superolateral triangle to reduce tension.

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**Figure 2** Design of the preauricular rotation flap with its base oriented anteriorly. Suture with interrupted 4-0 silk sutures. Mild edema and a small hematoma in the immediate postoperative period.

and we must be aware of the existence of critical points due to the presence of nerves and blood vessels. The best possible cosmetic result must be sought while ensuring an adequate oncologic surgery.

Knowledge of the different surgical techniques is essential in order to rapidly resolve those cases in which the initially designed flap does not adequately close the defect. Such problems can often be avoided by detailed presurgical examination of the donor site, as was performed in our patient, but the distensibility of the skin and the mobility of the flap can only be definitively evaluated after the flap is created, especially in large defects. In our patient, the tumor type was an additional factor that led to greater tissue loss than was expected.

As in dermatologic surgery in other anatomical areas, during reconstruction of the cheek we must aim to obtain tissue with a similar color and texture. In the majority of

cases this is sufficient to achieve adequate symmetry and cosmetic results. However, it is not essential to follow the general principles applicable to the reconstruction of central structures (nose, eyes, lips, etc.) proposed by Burget and Menick,<sup>3</sup> who favor the reconstruction of complete units.

Given the large size of the final defect, one of the alternatives considered in this case was to combine the initial plasty with a graft. The majority of authors do not recommend this option because of its poor cosmetic result, although they may consider it in patients with comorbid conditions that contraindicate more complex flaps.<sup>4</sup>

Converting the reconstruction to a standard or modified Limberg flap would leave a more visible scar. Roth et al.<sup>5</sup> recommend avoiding incisions anterior to the Z-line unless they can be hidden in a natural fold. The Z-line is an imaginary vertical line that runs perpendicularly down from the lateral canthus of the eye to the mandibular border. Geometric plasties on the cheek do not usually achieve a fully satisfactory cosmetic result.

Another option in the zygomatic region and midcheek, where the defect was located in our patient, is the use of advancement-rotation flaps with a base that may be lateral or medial.

The complications that can arise in the reconstruction of the cheek include those specific to large flaps, such as flap necrosis or the trap-door effect due to incorrect fat removal from the donor tissue, and the possibility of ectropion or a change in the distribution of facial hair and of the line of implantation of the hair.<sup>6</sup>

A useful maneuver that is frequently employed to prevent ectropion is to anchor the flap to the periosteum of the inferior border of the orbit with a reabsorbable suture. This was not necessary in our patient as the design of a second flap provided sufficient tissue. Some authors believe this technique, though widely described in the literature,<sup>7,8</sup> can contribute to distal necrosis of the flap.<sup>4</sup>

We have presented an original combination of flaps performed in a single operation, with excellent functional and cosmetic results. This case also illustrates other possibilities of surgical reconstruction that avoid the need to use less suitable techniques, such as grafts or geometric flaps.



**Figure 3** Result 24 months after surgery.

In daily dermatologic surgery practice we must always be prepared for the great variability in the characteristics of the skin of each patient and of the lesions. We stress the need for adequate presurgical design and planning, as this will enable us to resolve situations that may arise during an intervention.

## References

1. Telfer NR, Colver GB, Morton CA, British Association of Dermatologists. Guidelines for the management of basal cell carcinoma. *Br J Dermatol.* 2008;159:35–48.
2. Samaniego E, Prada C, Rodríguez-Prieto MA. Planos quirúrgicos en cabeza y cuello. *Actas Dermosifiliogr.* 2011;102:167–74.
3. Burguet GC, Menick FJ. The subunit principle in nasal reconstruction. *Plast Reconstr Surg.* 1985;76:239–47.
4. Rapstine ED, Knaus WJIII, Thornton JF. Simplifying cheek reconstruction: a review of over 400 cases. *Plast Reconstr Surg.* 2012;129:1291–9.
5. Roth DA, Longaker MT, Zide BM. Cheek surface reconstruction: Best choices according to zones. *Operat Tech Plast Reconstr Surg.* 1998;5:26–36.
6. Menick FJ. Reconstruction of the cheek. *Plast Reconstr Surg.* 2001;108:496–504.
7. Harris GJ, Perez N. Anchored flaps in post-Mohs reconstruction of the lower eyelid, cheek and lateral canthus. *Ophthal Plast Reconstr Surg.* 2003;19:5–13.
8. Robinson JK. Suspension sutures in facial reconstruction. *Dermatol Surg.* 2003;29:386–93.

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