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CASE REPORT

Reconstructive Surgery of the Medial Zygomatic Region of the Cheek: Presentation of 5 Cases☆

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KEYWORDS
Cheek;
Surgical reconstruction;
Surgical flaps

Abstract The cheek is the largest anatomical subunit of the face. It is a bilateral structure and symmetry must therefore be preserved. Peripherally it is related to important natural orifices whose location must also be maintained during surgical reconstructions. This is particularly important in the medial zygomatic subunit, whose delicate junction with the lower eyelid means that care must be taken to avoid ectropion. We present 5 options for the reconstruction of surgical defects secondary to the excision of tumors in this region.

PALABRAS CLAVE
Mejilla;
Procedimientos quirúrgicos reconstructivos;
Colgajos quirúrgicos

Cirugía reconstructiva de la región cigomática-medial de la mejilla: Presentación de 5 casos

Resumen La mejilla es la subunidad anatómica mayor de la cara. Es una estructura bilateral, por lo que es necesario respetar la simetría. Por otra parte contacta periféricamente con importantes orificios naturales cuya localización debemos respetar en la reconstrucción quirúrgica. Esto es particularmente importante en la subunidad cigomático-medial, cuya delicada unión con el párpado inferior hace que tengamos que ser cuidadosos para evitar un ectropión. Presentamos 5 opciones reconstructivas de defectos quirúrgicos secundarios a la extirpación de otros tantos tumores en esta localización.

Introduction

The cheek is the largest cosmetic unit of the face. It has clear limits defined by the zygomatic arch and the infraorbital rim superiorly, the nasolabial and melolabial folds medially, the mandibular border inferiorly, and the preauricular region laterally. For educational purposes, it is classically divided into 4 cosmetic subunits: medial, zygomatic, buccal, and lateral.[1] Each of these subunits has specific characteristics that the surgeon must take into account during reconstruction procedures in order to achieve the best functional and cosmetic outcome. Ideally, incisions and borders of flaps should be situated within these subunits to best camouflage the resulting scars. We evaluate a number of reconstruction techniques in patients with tumors situated in the medial and zygomatic regions.[2]

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In the medial subunit we must take into account that the union of the cheek with the eyelid forms its own subunit, and we must also therefore respect the position and function of the lower eyelid, as well as the morphology of this subunit and the gradual change that occurs from the malar to the palpebral regions.[3]

The zygomatic ligament fixes the skin of the zygomatic subunit, and it must be remembered during surgery that the temporal branch of the facial nerve is in a very superficial plane in this region.

Reconstruction of the malar eminence must respect the fat pad, which creates the convexity of this area and gives it volume.[2]

The blood supply is derived from the facial artery and its branches, motor innervation is via the facial nerve, and the sensory supply is from the maxillary nerve, a branch of the fifth cranial nerve.[3]

Case Descriptions

Case 1

The patient was a 75-year-old woman with a lentigo maligna melanoma of 2.2×1.2 cm. After resection of the lesion, an advancement-rotation flap was designed above the zygomatic arch, extending to tragus. The inferior border of the defect was triangulated and a Z-plasty was used in the preauricular region to allow greater advancement of the flap. The subcutaneous tissue was sutured with Vicryl and the skin was closed with 4/0 silk (Fig. 1).

Case 2

A man aged 78 years presented a basal cell carcinoma of 1.6×0.8 cm on the lateral third of the upper left eyelid and a lentigo maligna melanoma of 3×4 cm on the left cheek. After excision of the cheek lesion, an advancement flap was designed in the temporal region. The superomedial border of the defect was triangulated, the inferior border was undermined, and the eyelid tumor was excised using a triangular incision, which served as a tension-releasing triangle for advancement of the flap. The skin was sutured with 4/0 silk (Fig. 2).

Case 3

This patient was a 72-year-old man who presented a solid sclerodermiform basal cell carcinoma of 1×0.8 cm in the malar region. After excision, an advancement-rotation flap was designed, respecting the tension lines of the cheek. The

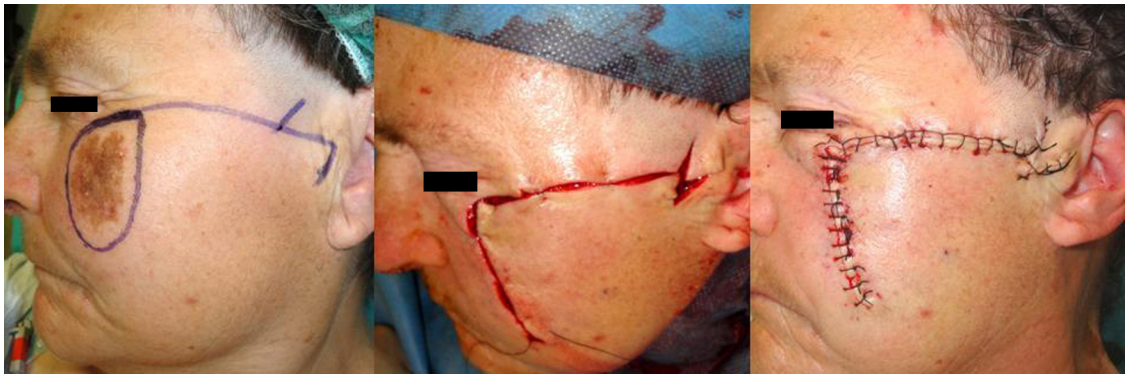

Figure 1 Advancement-rotation flap combined with a Z-plasty.

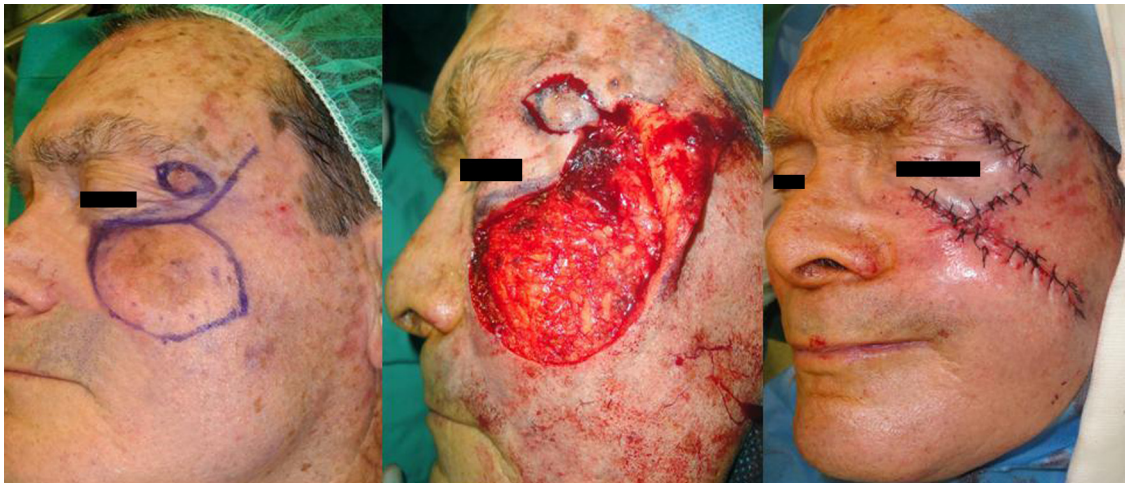

Figure 2 Advancement flap with a Burow triangle.