

**IMAGES**

## Synchronous reconstruction of both the upper and lower eyelids with a temporoparietal fascial flap

Ioannis G. Dalianoudis<sup>1,2</sup>, Maria G. Kalofonou<sup>1</sup>,  
Christos Farazi-Chongouki<sup>2,3</sup>, Kyriaki Apostolidou<sup>4</sup>,  
Pantelis Diamantopoulos<sup>2,5</sup>, Nektaria Tsilimpokou<sup>4</sup>,  
Dimitrios Filippou<sup>2</sup>, Nikolaos Minogiannis<sup>1</sup>,  
Panagiotis Skandalakis<sup>2</sup>

<sup>1</sup>Department of Plastic and Reconstructive Surgery, Latsio Burn Center, General Hospital of Eleusis "Thriasio", Magoula;

<sup>2</sup>Department of Anatomy and Surgical Anatomy, Medical School, National and Kapodistrian University of Athens, Athens;

<sup>3</sup>Department of Surgery, General Hospital of Eleusis "Thriasio", Magoula; <sup>4</sup>Ophthalmic Surgeon, Private Practice, Athens;

<sup>5</sup>Department of Plastic Surgery, Saint Savvas Anticancer Hospital, Athens, Greece

**Correspondence:** Ioannis G. Dalianoudis  
Department of Plastic and Reconstructive Surgery, Latsio Burn Center, G.H.E "Thriasio", Gennimata Avenue, Magoula 19018, Greece  
Tel: +30-2117200331, Fax: +30-2105551526  
E-mail: johndalas@gmail.com

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The simultaneous reconstruction of upper and lower eyelid defects, while preserving the seeing eye, presents a difficult task. Most cases involving such defects occur after burn injuries and tumor resections [1]. We present the case of a 55-year-old man, who provided consent and authorization for this report, with neglected basal cell carcinoma of both the upper and lower eyelids in the right eye and 10/10 visual acuity (Fig. 1). After oncological resection, defects were encountered in the total lower eyelid and half of the upper eyelid. A temporoparietal fascial flap (TPFF) was used to reconstruct both the upper and lower eyelids after an incision was made between the frontal and parietal branches of the temporal artery (Fig. 2). A composite graft from the nasal septum was sutured to the lower division of the TPFF and was used to reconstruct the posterior lamella, while the anterior lamella was reconstructed with a full-thickness skin graft (Fig. 3). During the 1-year follow-

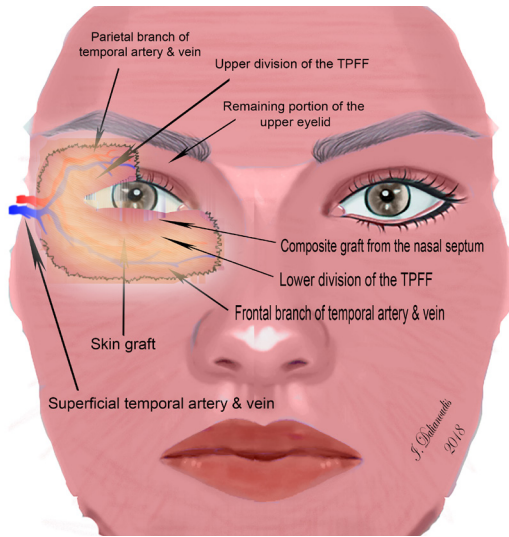


**Fig. 1.** Planned oncological resection. A 55-year-old man with basal cell carcinoma of both the upper and lower eyelids that had been neglected for 8 years, with a functional eye and 10/10 visual acuity at presentation. The oncological resection involved the entire lower eyelid and half of the upper eyelid.



**Fig. 2.** The temporoparietal fascial flap (TPFF) after elevation and division into an upper and lower part following the course of the frontal and parietal branches. The two parts were used for the reconstruction of the upper and lower eyelids, respectively.

up period, no complications were encountered, except reduced upper eyelid motion, and the patient's visual acuity was similar before and after reconstructive surgery (Fig. 4). The patient was satisfied with the postoperative aesthetic results and

**Fig. 3.**

Schematic representation of the surgical procedure. In the sketch, we can see the setting of the temporoparietal fascial flap (TPFF) and the basic components of the procedure. The placement of the composite graft (cartilage+mucous) is highlighted. The course of the superficial temporal artery with its respective branches and the positioning of the two parts of the TPF are simulated. Finally, the TPF was covered with a full-thickness skin graft.

**Fig. 4.**

Presentation of the case 1 year after reconstruction. Postoperative results after 1 year of follow-up. The patient was satisfied with the postoperative aesthetic results. He experienced reduced upper eyelid motion that partially obscured his vision, but refused any further refinements.

refused any further refinements. Even though the TPF is a well-known flap, as far as we know, such reconstructions are generally multistage [2]. To our knowledge, only one report has described functional reconstruction of both eyelids, the eyebrow, and the lacrimal drainage system in a single-stage procedure by pre-dividing a TPF into three divisions [3]. The described method offers an efficient, effective alternative for eyelid reconstruction in a single-stage procedure.

## Notes

### Conflict of interest

No potential conflict of interest relevant to this article was reported.

### Ethical approval

The study was performed in accordance with the principles of the Declaration of Helsinki. Written informed consent was obtained.

### Patient consent

The patient provided written informed consent for the publication and the use of his images.

## ORCID

Ioannis G. Dalianoudis

<https://orcid.org/0000-0003-3658-205X>

Maria G. Kalofonou

<https://orcid.org/0000-0001-9461-8386>

Christos Farazi-Chongouki

<https://orcid.org/0000-0001-7646-167X>

Kyriaki Apostolidou

<https://orcid.org/0000-0002-4491-159X>

Pantelis Diamantopoulos

<https://orcid.org/0000-0003-2823-5496>

Nektaria Tsilimpokou

<https://orcid.org/0000-0002-4566-9133>

Dimitrios Filippou

<https://orcid.org/0000-0001-5410-3046>

Nikolaos Minogiannis

<https://orcid.org/0000-0002-7760-8044>

Panagiotis Skandalakis

<https://orcid.org/0000-0002-9325-5533>

## References

- Bertrand B, Colson TR Jr, Baptista C, et al. Total upper and lower eyelid reconstruction: a rare procedure—a report of two cases. *Plast Reconstr Surg* 2015;136:855-9.

2. Mathijssen IM, van der Meulen JC. Guidelines for reconstruction of the eyelids and canthal regions. *J Plast Reconstr Aesthet Surg* 2010;63:1420-33.
3. Bozkurt M, Kulahci Y, Kapi E, et al. A new design for superficial temporal fascial flap for reconstruction of the eyebrow, upper and lower eyelids, and lacrimal system in one-stage procedure: medusa flap. *Ann Plast Surg* 2009;63:636-9.

## Squamous cell carcinoma identified in a thick-walled epidermal cyst with a recurrent ulcer

Jae-Won Kim, Chan-Su Kang, Jin Ho Lee, Kyu Jin Chung  
*Department of Plastic and Reconstructive Surgery, Yeungnam University College of Medicine, Daegu, Korea*

**Correspondence:** Kyu Jin Chung  
 Department of Plastic and Reconstructive Surgery, Yeungnam University College of Medicine, 170 Hyeonchung-ro, Nam-gu, Daegu 42415, Korea  
 Tel: +82-53-620-3484, Fax: +82-53-626-0705  
 E-mail: chungkj@ynu.ac.kr

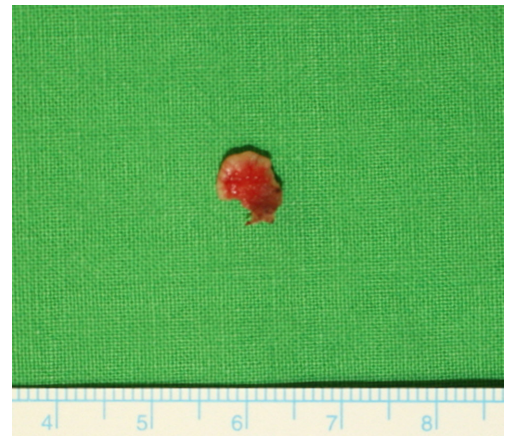
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recommended in the setting of plastic surgery [1]. We report a case of squamous cell carcinoma (SCC) confirmed in a residual wound after resection of a cutaneous cyst. A 46-year-old male patient underwent local resection of a cystic lesion in the left nasal alar region 3 weeks before at a local medical center without biopsy. He developed tenderness, fever, and erythema over the wound, and visited our hospital (Fig. 1A). While the planned excision was performed, a 0.8 × 0.9-cm-thick white capsule was observed (Fig. 2). Therefore, a biopsy including skin tissue was performed. A SCC was then diagnosed (Fig. 3), and additional resection with a 5-mm safety margin was performed. During the 18-month follow-up period, no recurrence was observed (Fig. 1B). Owing to the rarity of SCC arising from epidermal cysts, the nature and mechanism of this phenomenon remains uncertain. Malignant change of an epidermal



**Fig. 2.** A biopsy specimen. A 0.8 × 0.9-cm-thick white capsule was observed.

Epidermal cysts are common skin tumors. In order to achieve cost-effectiveness, routine biopsy is not



**Fig. 1.** (A) The patient at his first visit to our hospital. He had developed tenderness, febrile sensation, and erythema on the wound in the left nasal alar region. (B) Six-month postoperative follow-up. The patient shows a well-healed state in the nasal alar region without recurrence.