Repair of a medial canthal defect

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The case

An 87-year-old man presented for treatment of a histology-proven basal cell carcinoma (BCC) involving the left medial canthus (Figure 1). The lesion was successfully resected with adequate margins under local anesthesia and resulted in a defect measuring 2x1.5 cm (Figure 2). How would you repair this defect?

Figure 1. Basal cell carcinoma of the left medial canthus.

Figure 2. Surgical defect.

Our choice

We decided to use a double rotation flap (O-Z plasty) to repair the surgical defect.

Comment

Reconstruction of the medial canthus challenges the dermatologic surgeon. Reconstructive options include secondary intention healing, direct closure, and grafts or free flaps. Wound healing by secondary intention can lead to excellent cosmetic results, especially in concave areas.[1] In this case, closure by second intention could have resulted in a scarring bridle, ectropion, and epiphora. A skin graft would have led to the risk of graft necrosis due to the difficulties linked to the anatomical region. Local flaps can overcome these difficulties, ensuring a better aesthetic and functional result. Options include bilateral rotation (O–Z) flaps,[2] glabellar transposition,[3] or rotation (hatchet) flaps.[4] We chose a bilateral double rotation flap that combines a superiorly based glabellar rotation flap with a cheek rotation flap inferiorly (Figure 3). Two curvilinear incisions were made from the defect following the glabellar wrinkles and the nasal-cheek junction. Each flap was elevated above the superficial musculoaponeurotic system (SMAS) and properly thinned (Figure 4). To achieve greater mobility, two tension-relieving Burow's triangles were fashioned on the nasal dorsum and the glabella. The flaps were then advanced to meet at the center of the defect, gaining optimal coverage. The concavity of the medial canthus was restored with tacking sutures anchoring

Figure 3. Preoperative design of the procedure.

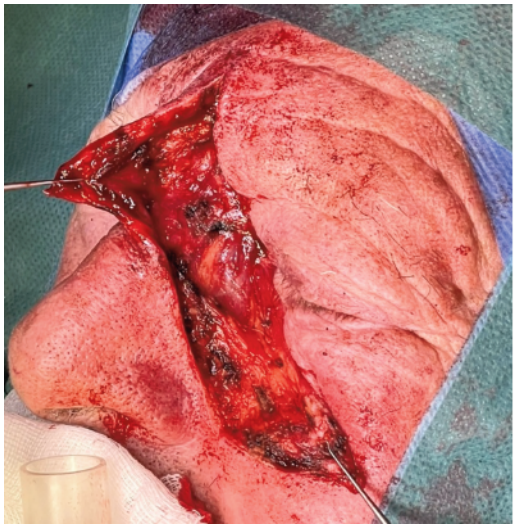

Figure 4. Flaps undermined and elevated.

Figure 5. Final result.

Figure 6. Result after 4 months.

the distal ends of the flaps to the periosteum, employing a 4-0 polyglactin-910 suture (Figure 5). At the 4-month follow-up, the patient displayed an optimal aesthetic outcome, with no functional alteration and barely perceptible scars (Figure 6).

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