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Plastic Surgery

Basal Cell Carcinoma of the Proximal Nasal Dorsum Treated with Glabellar Flap Reconstruction

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Abstract **Case Report**

Basal cell carcinoma (BCC) is the most common cutaneous malignancy and frequently involves the nose due to chronic sun exposure. Surgical excision with histologically clear margins is the treatment of choice. Reconstruction of nasal defects requires careful planning to restore contour and function. We present a case of proximal nasal dorsal BCC in a 58-year-old man, successfully managed with wide local excision and glabellar advancement flap reconstruction, achieving excellent aesthetic and functional outcomes.

Keywords: Basal cell carcinoma, nasal dorsum, glabellar flap, reconstruction, skin cancer surgery.

INTRODUCTION

Basal cell carcinoma (BCC) constitutes 70–80% of all non-melanoma skin cancers and commonly occurs in sun-exposed regions such as the nose. The proximal nasal dorsum presents a reconstructive challenge due to limited skin laxity, prominent aesthetic significance, and central facial position. Among local flap options, the glabellar flap offers excellent color, texture, and thickness match, making it well-suited for reconstruction.

CASE PRESENTATION

A 58-year-male farmer patient referred to us with biopsy proven Basal Cell Carcinoma scar lesion over the proximal nasal dorsum for one year. The lesion measured 1.5 × 1.4 cm. There was no regional lymphadenopathy.

Figure 1: Post-biopsy scar lesion over the proximal nasal dorsum.

SURGICAL MANAGEMENT (METHODS)

Wide local excision with 5 mm margins was performed under local anesthesia, resulting in a 2 × 2 cm defect over the proximal nasal dorsum without exposure of the underlying cartilage.

For reconstruction, a glabellar advancement flap was planned. The flap base was designed to match the exact width of the defect to ensure reliable vascularity from the supratrochlear arterial branches. The flap length was marked approximately 20% greater than the defect length to allow adequate reach and tension-free inset. The flap was elevated and advanced inferiorly, and the donor site was closed primarily.

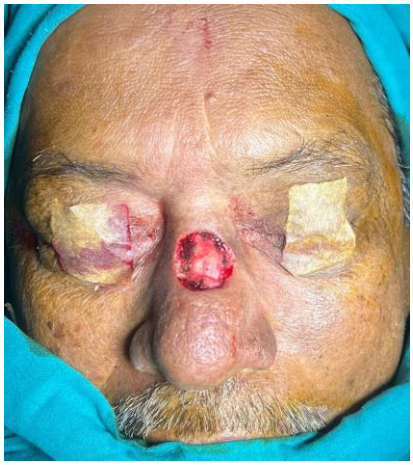

Figure 2: Wide local excision with 5 mm margins

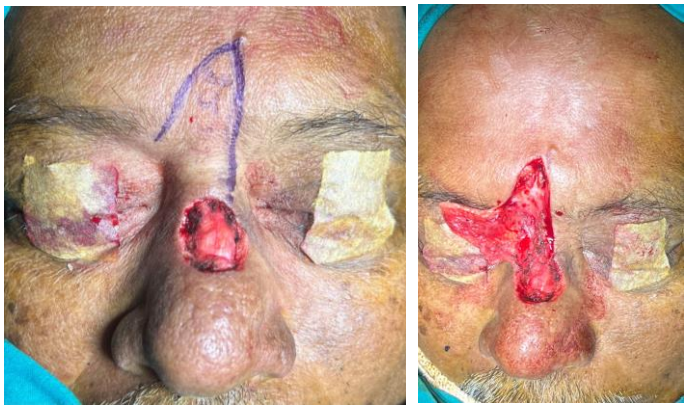

Figure 3: Planning of the glabellar flap

Postoperative Course

The immediate postoperative period was uneventful. The flap demonstrated good vascularity, integration, and contour.

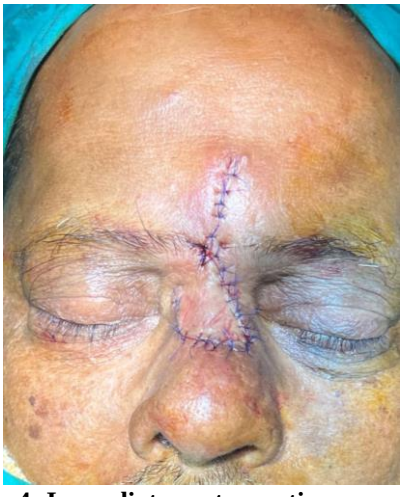

Figure 4: Immediate postoperative appearance

Sutures were removed on postoperative day 7. Histopathologic evaluation confirmed complete tumor excision with clear margins. At 3-month follow-up, the flap had settled well with satisfactory color match and contour. No recurrence was noted.

DISCUSSION

Nasal BCC requires complete surgical excision with appropriate margins to prevent recurrence. Reconstruction in the proximal nasal dorsum must consider skin characteristics, vascular anatomy, and aesthetic outcome. The glabellar flap offers excellent color match, robust vascular supply, and minimal donor-site morbidity.

Anatomical Basis of the Glabellar Flap

The glabellar flap is primarily supplied by the supratrochlear artery, which ascends from the medial orbital rim and gives multiple perforators to the glabellar skin. This dependable axial blood supply allows safe flap elevation and tension-free advancement.

Limitations

Potential disadvantages include glabellar bulk and a midline forehead scar. These can be minimized with flap thinning and careful planning with hidden incision in glabellar folds.

CONCLUSION

Glabellar flap reconstruction is a simple, reliable, and aesthetically favorable technique for small to moderate proximal nasal dorsal defects following BCC excision.

Declarations

Conflict of Interest: None declared.

Funding: None.

Author Contribution: Dr. Pushkar Deshpande performed the surgery and prepared the manuscript.

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