

Nose Reconstruction Using Bilobed Flap: A Case Report

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ABSTRACT

This document illustrates the formatting process for authors, who would be preparing their papers for publication in the International Journal of Scientific Advances (IJSCIA). It behooves the prospective authors the skillset, scientific or scholarly acumen and wherewithal to ensure that their manuscript contents are original and have never been submitted to other journals while under review in the IJSCIA. **Background:** Basal cell carcinoma (BCC) is a slow-growing, locally destructive malignant skin tumor. The nasal location is considered a high-risk feature of BCC because of its anatomical features and problems in identifying the tumor preoperatively. Surgery is the cornerstone of nasal BCC treatment and various techniques have been developed to combine full 3D tumor removal with good aesthetic and functional results. **Case Presentation:** We report a circular black discoloration of a 64-year-old male patient on the left side of the nose within 2 years. The patient was scheduled for surgical removal and reconstruction of the defect using a bilobed flap. The flap consists of two lobes with a common semicircular base marked around the transverse portion of the nasalis muscle and its aponeurosis. The flap then removes the skin from the triangular peninsula at the base of the defect. After removal, the flap is moved into the defect and placed with 5-0 Prolene with a simple suture. **Conclusion:** The bilobed flap has multipurpose in all ways. The main benefit of this flap include the similarity color and texture relative to the defect site, ease of reproducibility, low complication rates, and the ability to design it in different sizes and tissue compositions.

Keywords: bilobed flap; reconstruction

INTRODUCTION

Basal cell carcinoma (BCC) is a slow-growing, regionally damaging malignant skin tumor. It derives from nonkeratinizing cells originating within the basal layer of the epidermis and became first described by Jacob in 1824. Although basal cell carcinoma is a malignant neoplasm, it not often metastasizes. The occurrence of metastatic basal cell carcinoma is expected to be much less than 0.1% [1]. In European country regarding 115,000 new cases are seen every year. Incident has margin. about 80% of all BCCs occur on the face, of those tumours 25% to 30% are found within the nose. BCC is the commonest non-melanoma carcinoma in this region. The nose features a 2.5 times higher risk of BCC recurrence after surgical excision. Nasal localization is additionally thought of a risky feature of BCC because of its anatomic features and problems in pre-surgical tumor identification [2]

However, surgery is the cornerstone of treatment for nasal basal cell carcinoma and various techniques have been developed to combine complete 3D tumor removal with good cosmetic and functional outcomes [1]. Nasal function must be maintained by protecting the skeleton, cartilage and mucosa be obtained or replaced and without ever compromising an open airway. Skeletal reconstruction in nose reconstruction is critical to achieving form and function [3]. Because the ability to create these results can be somewhat limited, it is essential to become familiar with the various flaps.

The nasolabial flap, median forehead dorsal flap, glabellar flap, bilobed flap, cheek flap and craniofacial flap have been used for nasal reconstruction [1]. this paper reports our experience with the Bilobed flap.

CASE PRESENTATION

A 64-year-old male patient presented with complaints of a circular black discoloration on the left side of the nose, a discoloration that slowly progressed and reached its current status within 2 years. It is frail, bleeds easily and there is no associated pain for about 6 months. The patient was scheduled for surgical excision and reconstruction of the defect using a bilobed flap.

The patient is placed in the supine position under general anesthesia. The flap consists of two lobes with a common semicircular base marked around the transverse portion of the nasal muscle and its aponeurosis. The lobe closest to the defect (proximal lobe) is designed tangentially and the second lobe (distal lobe) is designed proximally at an angle of 60-90 degrees. The proximal lobe should be the same length as the defect, with a width 20 to 40% narrower than the defect, depending on local skin elasticity.

The distal lobe is designed to be the same length relative to the proximal, at 20 to 40% less width. A lateral bilobed flap is then marked and an incision is made in the nasal cartilage and nasal muscles.

The flap then removes the skin from the triangular peninsula at the base of the defect. The excised lesion was sent for histopathological examination. The result showed a basal cell carcinoma in the nasal sinistra. Extensive weakening of the submuscular level is performed at the perichondrium and periosteum. be raised to a level below the nasal muscles, with particular attention being paid to the preservation of the skin meshwork and subcutaneous adipose tissue. After excision, the flap is moved towards the defect. Fits snugly to the defect and no dog-ears are visible. The flap is inserted with 5-0 Prolene with a simple suture. Without complications. The patient tolerated the procedure well, was extubated and transferred to the ward in stable condition. Patients are routinely followed up.



FIGURE 1: The bilobed flap markings to excision the lesion



FIGURE 2: The complete reconstruction with the bilobed flap

DISCUSSION

Treatment principles for BCC include early detection, complete removal of the lesion, and careful follow-up of recurrences or new primary tumors. The choice of treatment should be based on the histological type of the lesion, its size and location, the patient's age and health status. Treatment of basal cell carcinoma can be surgical or non-surgical. Surgical techniques include excision, curettage and cauterization, cryosurgery, and Mohs micrographic surgery. Whenever possible, an excision margin of 4 mm around the tumor is recommended.

The main advantage of surgical excision is that the margins other excision can be examined histologically to verify tumor removal [4]. Among flaps, the local flap is the treatment of choice for reconstruction of nasal defects because it is smaller and has no cause many aesthetic problems. The timing of the reconstruction and the use of the flap are highly dependent on the reconstruction. The local flaps available for reconstruction of alar defects are the nasolabial flap and the bilobed flap [5].

The bilobed flap is one of the most useful flaps for nasal reconstruction. This is a simple double transposition flap and is designed to move more skin a greater distance without distortion than is possible with a single transposition flap in the same location. It is the repair of choice for defects located 0.5 to 1.5 cm from the distal and lateral aspects of the nose, particularly defects affecting the lateral tip, supratip, or tissue near the tip. In the lower third of the nose, where the skin moves less, the bilobed flap allows the surgical site to be filled in with nearby skin and matched by color and texture; it then allows repair of the secondary defect with another appropriate flap from a nearby donor site. The initial flap should be the same size as the defect, but the secondary flap can be slightly smaller to allow closure of the donor site with minimal distortion. The angle of transposition is approximately 45-50° for each lobe. The defect, flap, and donor site must be extensively damaged in the periosteal and perichondral planes to facilitate distortion-free nasal tissue transposition and reduce pin loading. Sufficient Burow's Triangle should be removed from the pivot point to avoid bunching and dog-ear. It can be designed with a medial or lateral base. Lateral-based flaps on the lateral nasal wall are more useful for repairing defects near the tip of the nose, while medial-based flaps are better for repairing alar defects [6].

Surgical defects near the tip of the nose and the nostrils are one of the most difficult sites to close with a one-stage flap. Bilobed flaps can be used very effectively to cover defects in this area. the Aesthetics will be compromised if a free skin graft is used, although it can cover the wound well but does not replace the defect. Next in the reconstructive phase is the use of local flaps, which are the treatment of choice for nasal alar defect reconstruction because defects are smaller and do not cause many cosmetic problems. The manner in which the flap is used and the timing of the reconstruction largely depends on the type of injury and the nature of the defect [7].

CONCLUSION

The bilobed flap has multipurpose in all ways. The main benefit of this flap includes the similarity color and texture relative to the defect site, ease of reproducibility, low complication rates, and the ability to design it in different sizes and tissue compositions.

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