Frontiers in Health Informatics ISSN-Online:2676-7104
www.healthinformaticsjournal.com
2024; Vol 13: Issue 3
Open Access

Versitality Of Bilobed Flap In Treating Nasal Basal Cell Carcinoma

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Cite this paper as: Keerthana Basavendra, Manimaran R,.Kanchana Koppolu, S.Balakrishna (2024) Versitality Of Bilobed Flap In Treating Nasal Basal Cell Carcinoma. *Frontiers in Health Informatics, 13* (3),8993-9001

Abstract:

Basal cell carcinoma (BCC) is the most common form of skin cancer, typically arising in areas Exposed to sunlight. This case report presents the clinical, pathological, and therapeutic aspects of A confirmed BCC diagnosis in a 72-year-old male patient. The patient sought medical attention Due to the appearance of a non-healing, slowly growing lesion on the tip of his nose. Detailed clinical examination revealed a raised, pearly nodule with central ulceration and pigmentation of The lesion showing classical presentation of a pigmented BCC. Histopathological analysis of a biopsy specimen obtained from the lesion confirmed the diagnosis of BCC, demonstrating Characteristic features of basaloid proliferation and palisading nuclei.

Subsequently, the lesion was classified as a pigmented subtype of BCC, known for its relatively low aggressive potential. Since The lesion was on tip of nose a bilobed flap reconstruction was made after wide local excision for Better cosmetic results and a one year follow up was done to look for any reoccurrences, results proved a minimal to no scar cosmetic result with no signs of reoccurrence.

Introduction

Basal cell carcinoma accounting for the most common type of skin carcinoma, covering upto 70-80 % of skin malignancies, due to the low metastasing rate, the number of cases shown in the Cancer registries are comparatively low, also more predominantly found in Western population compared to the Asians as the melanin proportion is low in Western population. Also bcc are more commonly found in men compared to women. Off late the incidence in women are more likely due to the exposure to UV rays artificial sources for tanning or other reagents. Australian population are more affected with and have higher incidence of non melanotic skin carcinoma.

A. M. Feintisch, et al. in his study there are many variants of BCC that is infiltrative type, superficial type, modular, morpheaform [1]. (sclerosing desmoplastic)Pigmented, naveiod, nodulocystic, cystic and fibroepithelial type. Basal cell carcinoma also known as rodent ulcer due to its locally invasive characteristic feature. J. R. Boyette, et al. indentiies, Basal cell carcinoma most common non melonoma skin cancer and originates from stratum basale of epidermis and pilosebaceous follicle units [2].

This case report aims in early diagnosis, and treatment approach which prevents local invasion and any

reoccurrence or metastasis if present, also a cosmetic result, as these lesions are, more common in the face. The clinical examination following a biopsy and histopathological examination help in diagnosis of carcinoma.

Case Presentation

A 72- year old male came with complaints of slow growing hyperpigmented lesion over the nose since past one year was the size of a mole gradually progressive to a size of 1.5*1.5cm. with history of itching over the lesion, and on scratching bloody discharge was present. There was no history of weight loss or any other pigmented lesion elsewhere in the body. Patient was a known case of systemic hypertension and was on regular treatment.

On examination a solitary hyperpigmented lesion (fig-1) was present on the tip of the nose size 1.5*1.5cm with rolled out beaded edges. Well defined margins base rests upon underlying subcutaneous tissue, no local rise in temperature, non tender, fixed to underlying tissue, no active discharge and no palpable lymph nodes. No other pigmented lesions elsewhere

Punch biopsy was taken which revealed basal cell carcinoma, base line investigations were done, found no derangements, and hence was planned for procedure after PAC.

Patient underwent wide local excision of the lesion (fig-2) along with BILOBED FLAP PLACEMENT as in (fig-3) . under general anaesthesia. The wide local tissue excised was sent for frozen section confirming there was adequate margins excised of 10mm clearance, as shown in (fig-2). A linear incision with two arcs was made over ala of nose, was made including base of the circular excised tissue, a lesser arc and a greater arc, point of the dissecting arc are used to raise a flap and a bilobed curvilinear closure was done after haemostasis was achieved.

Post operative period (fig-2) was uneventful, treated symptomatically, and biopsy confirmed tumour confined to dermis with 3mm of base resection with features of pigmented ulcerative basal cell carcinoma, with free margins which were confirmed by intraoperative frozen section. Histopathological examination later showed pallisading patterns with pigmentation in between confirming features of basal cell carcinoma (fig4).

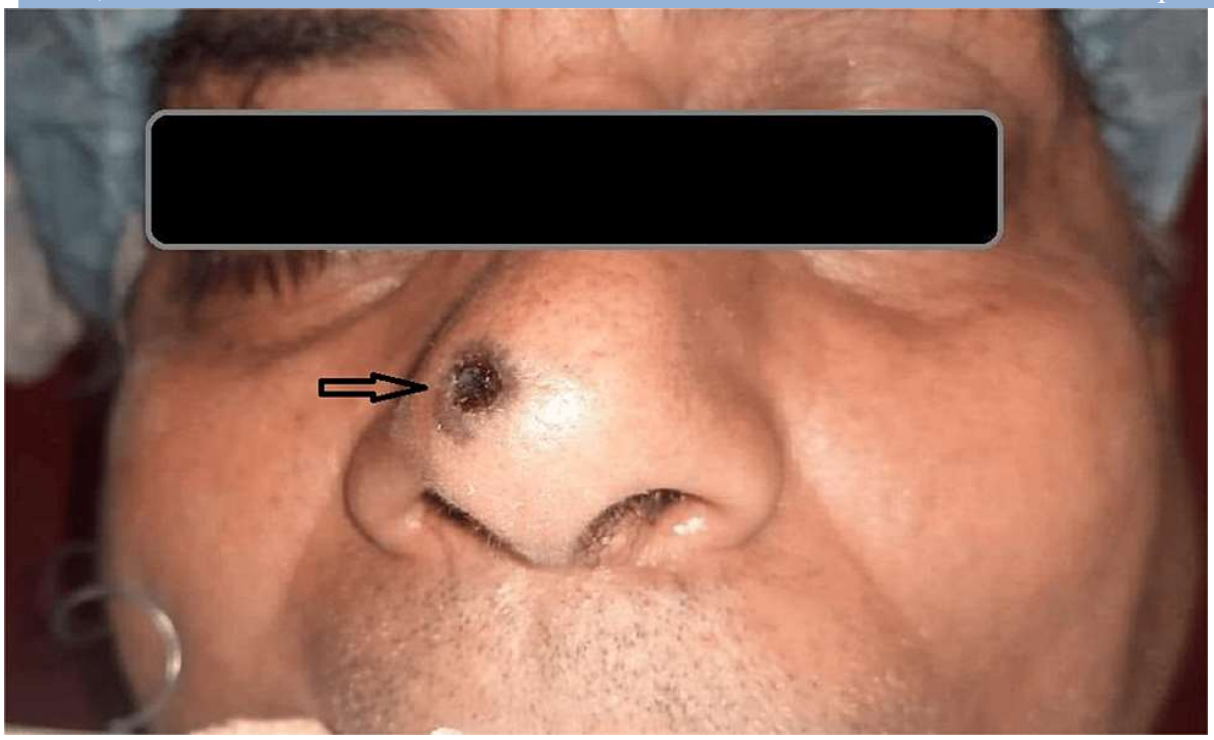

Figure 1: pre operative picture of lesion
pre operative picture showing pigmented circular lesion of 1.5cm greatest in diameter,

Figure 2: intraoperative lesion with defect

intraoperative picture with defect along with resected 10mm marginal clearance

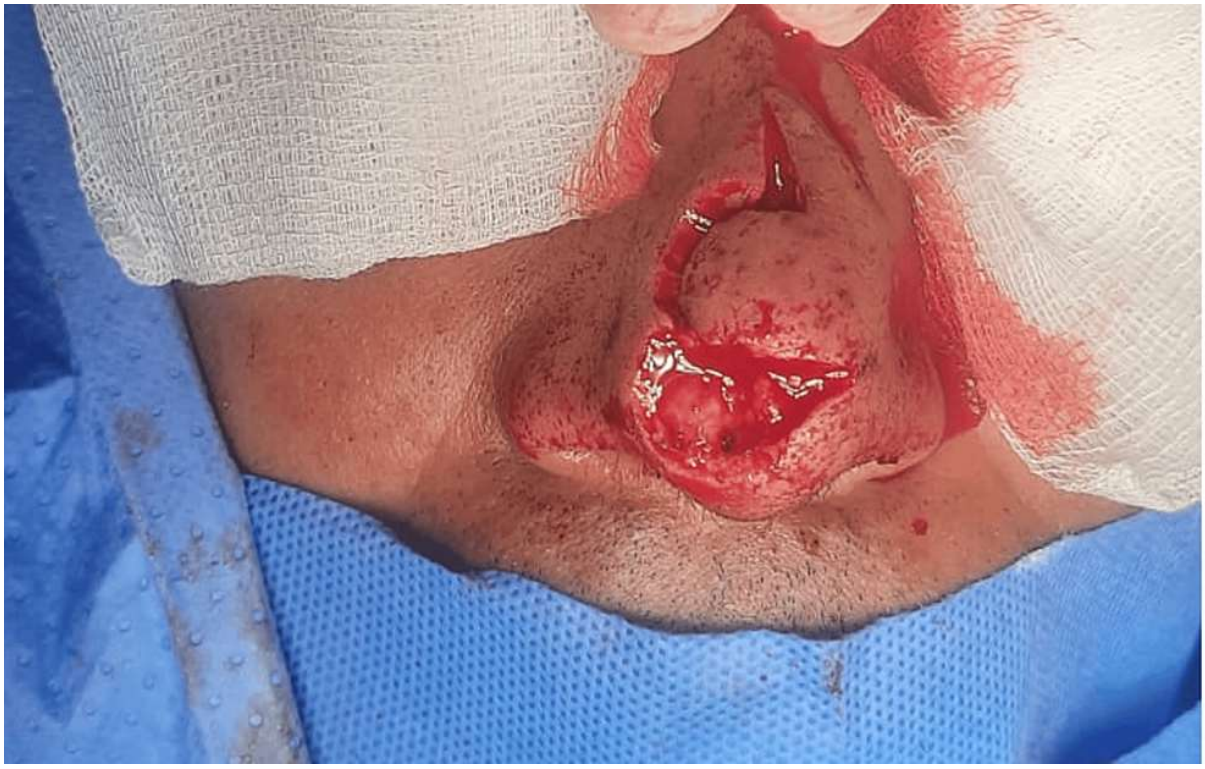

Figure 3: intraoperative picture showing bilobed flap placement

intra operative picture showing bilobed flap reconstruction over the defect

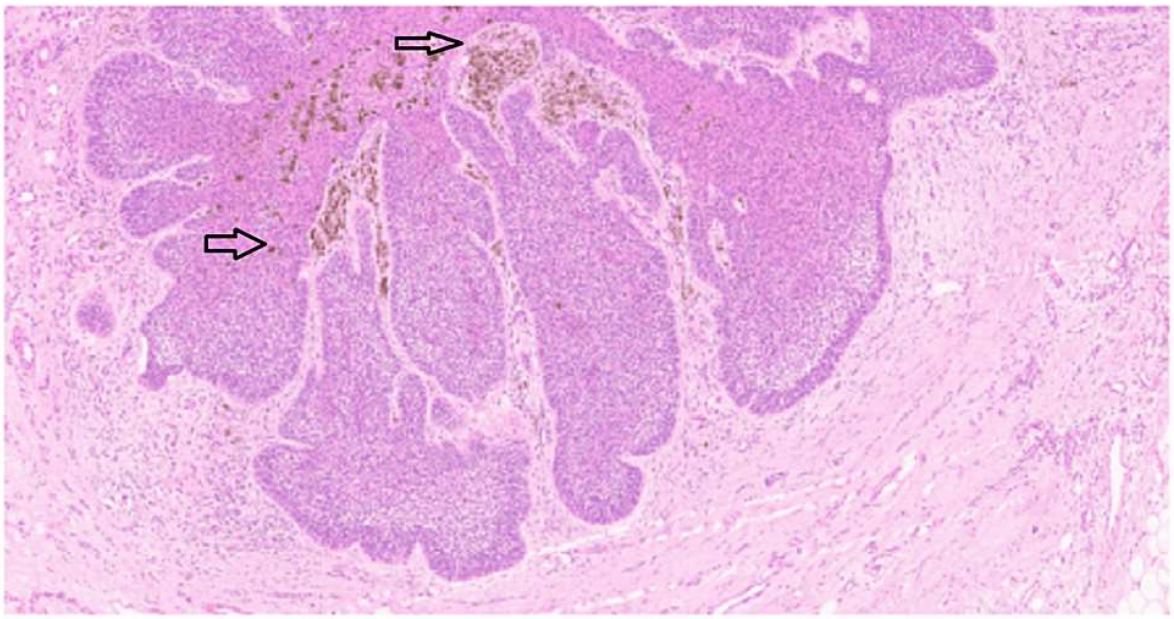

Figure 4: histopathological slide showing pigmentation

histopathological picture showing pallisading nuclei with pigmentation

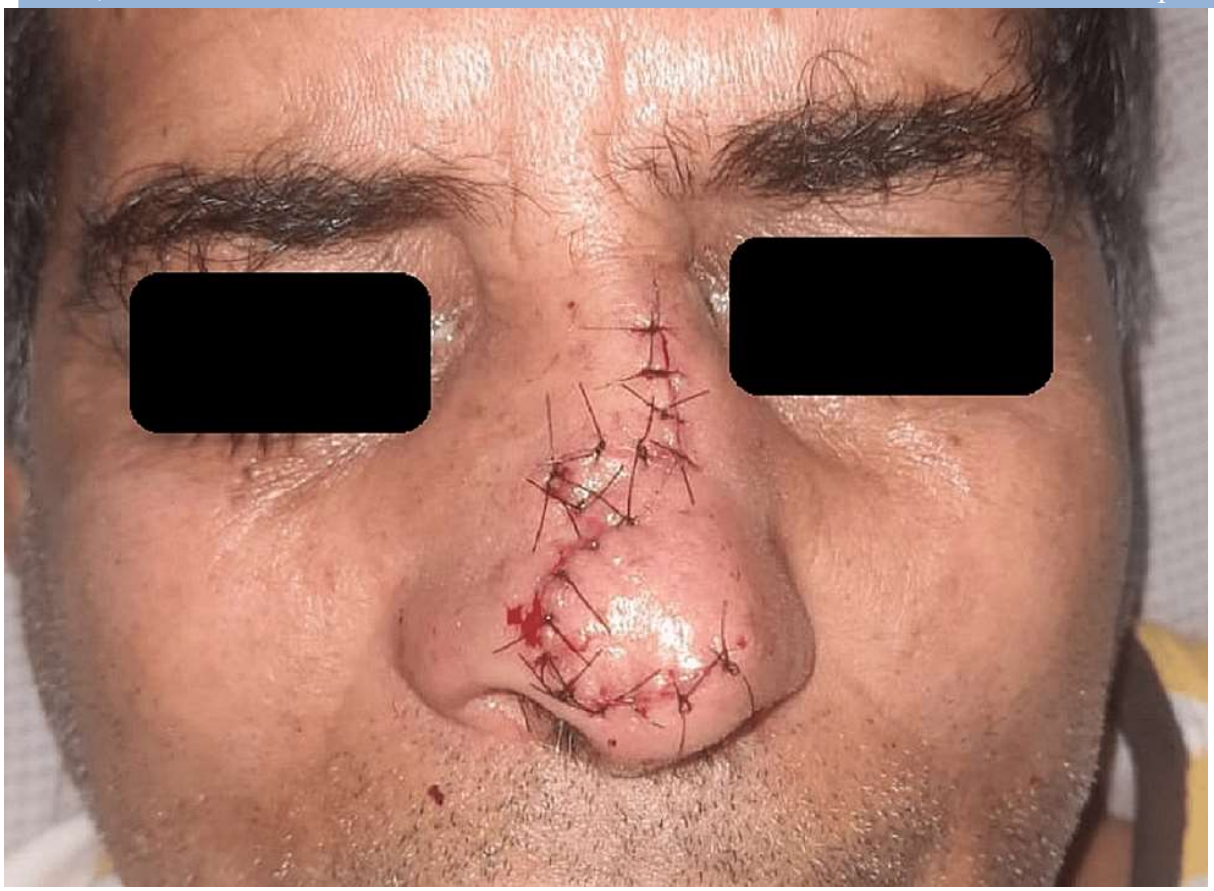

Figure 5: post operative picture on day -2
post operative picture of day 2 showing good uptake of flap

Figure 6: post operative picture after 6 months
post operative picture after 6 months showing good cosmetic results

Discussion

Basal cell carcinoma is a slow-growing, locally invasive tumour that rarely metastasizes. The primary risk factor for BCC is cumulative sun exposure, especially in individuals with fair skin. Asper R. M. Colla,r et al.,and J. L. Cook, et al., Early diagnosis and prompt treatment are crucial to prevent morbidity and disfigurement associated with advanced lesions [3,4].

Surgical excision with clear margins remains the gold standard for localized BCC treatment. P. J. Gruber, et al., study says Other therapeutic modalities such as cryotherapy, topical chemotherapy, Mohs micrographic

surgery, [5]. and radiation therapy may be considered based on the size, location, and histopathological subtype of the lesion.

Review from J. D. Steiger, et al., S. R. Baker, et al.,R. Goleman, et al., says that, It is only locally malignant. It does not spread through lymphatics nor through the blood. But it erodes deeply Into local tissues including cartilages, bones causing extensive local destruction. Hence the name “rodent Ulcer. Various types of BCC are Nodular Cystic/nodulocystic, Ulcerative, Multiple, often associated with syndromes and other malignancies. Pigmented BCC-mimics melanoma. Basi-squamous. BCC which has not been treated for long time can turn into Basi-squamous carcinoma.Clinicopathological Types include Superficial type, morpheic type and fibroepithelioma type., [6-8].

Basal cell carcinoma is also called tear cancer as it is seen commonly over face where tears roll down, is onghren’s line. The BCC again can be of two types low risk and High risk. Although various treatments are available, in this particular case wide local excision with bilobed flap reconstruction was done.S. R. Baker, et al., [7-11].

In this case we encountered a pigmented type of basal cell carcinoma for which we planned wide local excision bilobed flap reconstruction as the tumor was at the tip of nose, and although a number of flaps and other techniques were present like v-y Island pedicle advancement or primary flap placement the most suitable reconstruction was a bilobed flap since there was a defect of 1.5cm due to marginal clearance , and midline defects heal best with a bilobed flap. The cosmetic recovery of the patient was unremarkable with primary scar management almost no scar seen over the operated site over a period of 6 months.

Conclusions

In conclusion, basal cell carcinoma (BCC) is a prevalent, slow-growing, and locally invasive skin cancer, predominantly affecting individuals with fair skin due to cumulative sun exposure. Although BCC rarely metastasizes, its potential for significant local tissue destruction underscores the importance of early diagnosis and treatment. Surgical excision with clear margins remains the gold standard for treatment, while other modalities such as cryotherapy, topical chemotherapy, Mohs micrographic surgery, and radiation therapy are considered based on the specific characteristics of the lesion.

This case report highlights the successful management of a pigmented BCC at the tip of the nose using wide local excision followed by bilobed flap reconstruction. The chosen method provided an good cosmetic outcome, with almost no visible scarring observed over a six-month period. Early intervention and appropriate surgical techniques are critical in preventing morbidity and ensuring satisfactory cosmetic results, especially for lesions located on the face. This case underscores the importance of tailored surgical approaches to achieve optimal outcomes in BCC treatment.

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