

Free Scip Flap Reconstruction for Basosquamous Cell Carcinoma Over Forehead

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ABSTRACT

Worldwide basal cell carcinoma (BCC) is the most common skin cancer. Basosquamous carcinoma (BSC); a type of basal cell carcinoma is more aggressive and has a high potential for local recurrence and metastasis and thus cause a challenge for complete excision and reconstruction. Free-flap surgery and skin grafting can be used to reconstruct large facial defects seen after skin cancer removal but these two methods post surgically may produce low patient satisfaction with aesthetics, and may be troublesome for the majority of elderly skin cancer patients. The superficial circumflex iliac artery perforator (SCIP) flap, is the most recent advance in free flap surgery. We present a case report of a 76-year-old woman who underwent wide local excision surgery and reconstruction of the left forehead with free SCIP flap, and outcome of the patient showed excellent functional and aesthetic results on follow up after 1 year

Keywords: Basal cell carcinoma, Basosquamous carcinoma, SCIP flap

INTRODUCTION

Basal cell carcinoma (BCC) is the most common while Basosquamous carcinoma (BSC) is a rare, aggressive non-melanoma skin cancer [1]. The incidence of basosquamous carcinoma varies from 1.2% to 2.7%. while recurrence rates are 12% to 51% for surgical excision and 4% after Mohs micrographic surgery. The incidence of metastasis is 5%. [2]. Free flap surgery and skin grafting methods may produce low postsurgical patient satisfaction with aesthetics in elderly, and as free flap transplant is lengthy operation [3]. Here we discuss the management of BSCs of left forehead in A 76-year-old woman with surgical excision and reconstruction using new advances SCIP flap as single modality treatment with excellent functional and aesthetic results.

The superficial circumflex iliac artery perforator (SCIP) flap is supplied by only a perforator of the superficial circumflex iliac system and has a short segment (3 to 4 cm in length) [4].

CASE

Our case is 76-year-old woman with, skin phototype 4, who presented with a lesion affecting the left temporal region since 2-3 years. Clinical and dermoscopy exams were suggestive of basal cell carcinoma which progressed to squamous cell carcinoma over the edges (**Figures 1 & 2**).

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Figure 1. Preoperative Photo.



Figure 2. Preoperative photo of lesion.

On assessment, she had no significant co-morbidities and the lesion did not invade the underlying bones. Other examination was within normal limits. The patient was placed in a supine position with a head ring to stabilize the head and shoulder roll to extend the neck. Patient had a wide local excision plus reconstruction under general anesthesia. Microscopic examination revealed nodular basal cell carcinoma and poorly differentiated squamous cell

carcinoma areas, significantly compromising the resection's deep margin. The next phase obtained free margins, with an intense inflammatory infiltrate. Again a revised margin was done and all the deep as well as the circular boundary became free of tumor cells and inflammatory infiltrate (Figure 3). A local cervicofacial advancement and rotation flap could not be done. Finally decision was made to go ahead with reconstruction using SCIP flap (Figure 4).

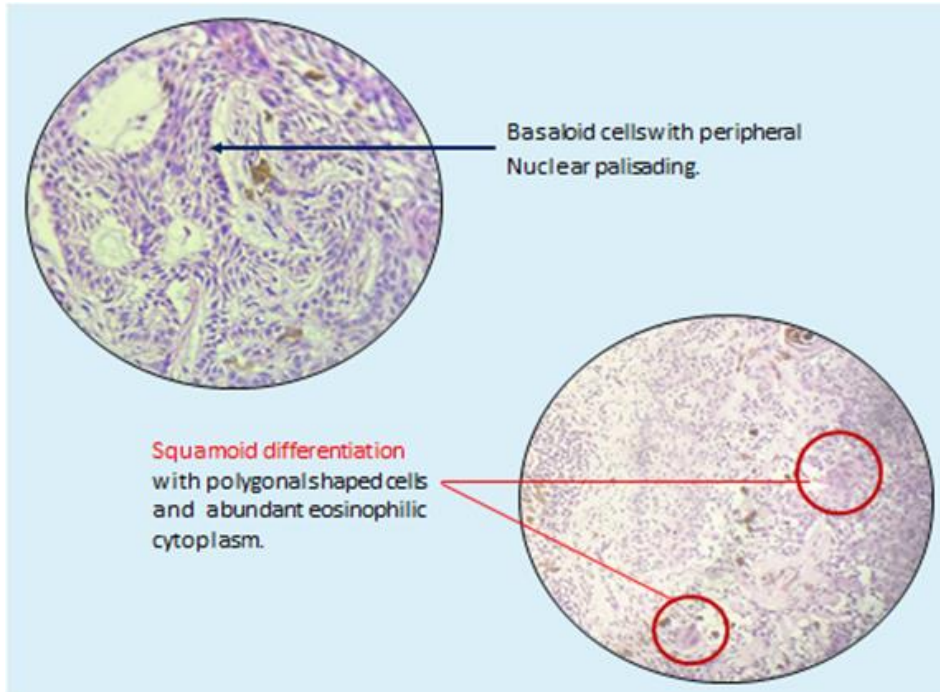


Figure 3. Histopathological photo.



Figure 4. Intraoperative photo after excision.

And it gave a good pliable cover, contour and skin match (**Figure 5**). The flaps were closed in single layer with sutured with 3-0 nylon (**Figure 6**).



Figure 5. Photo of SCIP flap.



Figure 6. Immediate post-operative photo.

The recipient vessel used for the flap was eternal carotid with end to side anastomosis and the vein was facial vein.

The patient had an excellent aesthetic and functional result on the reconstructed temporal skin, with no complications.

The patient is undergoing dermatological follow up postoperatively for period of 1 year (Figures 7a & 7b).



Figure 7a. Post-Operative photo after 2 months.



Figure 7b. Post-Operative photo after 2 months.

Patient was satisfied with the cosmetic outcome with no flap necrosis, complications, complaints or tumor recurrence. She

has been advised flap debulking procedure to enhance outcome.

DISCUSSION

BSC is a rare, aggressive non-melanoma skin cancer with no clarity existing around the classification, pathogenesis, histologic morphology, biologic behavior, prognosis and management of this tumor [5]. Rotational flap is one of the best approaches for reconstruction of facial defects and gives good cosmetic result [6]. Free flaps require expertise and do not provide color and texture match. Modified cervicofacial flaps provide an excellent color and texture match and reduce operative time and surgical complications and can be performed under local anesthesia with less donor site morbidity [7]. The SCIP flap is widely used since it was first described in 2004 by Koshima [4]. Later Lita and his colleagues demonstrated success of the SCIP flap in reconstructive of head and neck defects [8].

Although rare, BSC has diagnostic challenges and metastatic ability. While there are many approaches to reconstructing midfacial defects, none of them are fully satisfactory. The literature is also limited. Our case report shows that the SCIP flap plays an important role due to its outstanding esthetic and functional merits and does not need deeper and longer dissection for the pedicle vessel, a shorter flap elevation time, possible thinning of the flap, a hidden donor site, less donor-site morbidity, and the availability of a large cutaneous vein as a venous drainage system.

CONCLUSION

The main aim of surgery is to surgically remove the tumor with wide marginal excision and reconstruct the deformity with minimal scarring to achieve a better cosmetic result and using SCIP flap can be seen as one of the best approaches and gives good aesthetic results.

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