

## Case Report

# Basal cell carcinoma involving tip and alar area of nose in a patient of hills of Uttarakhand: report of a rare case and review of literature

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### ABSTRACT

Basal cell carcinoma (BCC) account for the vast majority of non-melanoma skin cancers (75%) and well over 25 percent of all cancers diagnosed each year. BCC has a predilection for fair-skinned individuals but can occur in Latin American and African American patients. Treatment of this tumour revolves around surgical excision or radiation therapy. Surgical excision can be accomplished using a variety of techniques including curettage and electrodesiccation, Mohs' surgery and wide surgical excision. A case of BCC occurring in a lady of hilly areas of Uttarakhand, India and was treated with wide surgical excision and repaired with nasolabial flap has been described here.

**Keywords:** Basal cell carcinoma, BCC, Nasolabial flap

### INTRODUCTION

Basal cell carcinoma (BCC) is locally malignant tumour of the basal layer of the epidermis occurring probably due to the prolonged exposure to sun.<sup>1</sup> This tumour generally involve persons of fair complexion, making dark coloured individuals somewhat immune to this disease. The incidence rates of this tumour in Indian population are very less. Treatment of this tumour is usually done by wide local excision. Recurrence rates, even after complete cure, are high, so the patient has to remain in long term follow-up.

### CASE REPORT

A 62 years old female came to Outdoor of ENT department of Veer Chandra Singh Garhwali Government Medical Sciences and Research Institute and associated H. N. B. Base hospital with complaints of a single non-

healing painless pigmented ulcer over tip of the nose for two years. There was a history of nevus at same site since childhood.

On examination; a single about 2x2cm, black pigmented ulcerated lesion, involving tip and left alae of nose was present. Its surface was irregular and margins were ill defined. The ulcer had non-indurated edges [Figure 1]. There was mild tenderness without rise of local temperature. Area around the ulcer was normal. On anterior rhinoscopy, interior of nose was found to be normal. No clinically significant lymph nodes were found in neck. A probable clinical diagnosis of a non-healing ulcer was made.

Patient was advised biopsy from the lesion. A small biopsy specimen was taken from the margin of the ulcer and its adjoining area. Biopsy report showed the diagnosis of basal cell carcinoma.

Patient was advised excision of ulcer with reconstruction under general anaesthesia. After obtaining informed consent from the patient, pre-anaesthetic workup was done.



**Figure 1: Front view of patient showing single, 2x2cm, black pigmented ulcerated lesion, involving tip and left alae of nose. Note the irregular surface and ill-defined margins.**



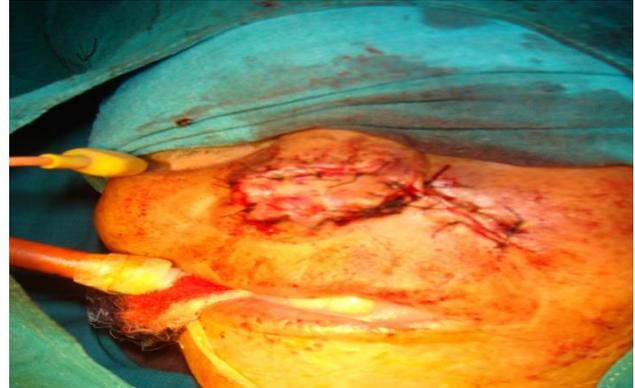
**Figure 2: Bed of the lesion post-excision.**



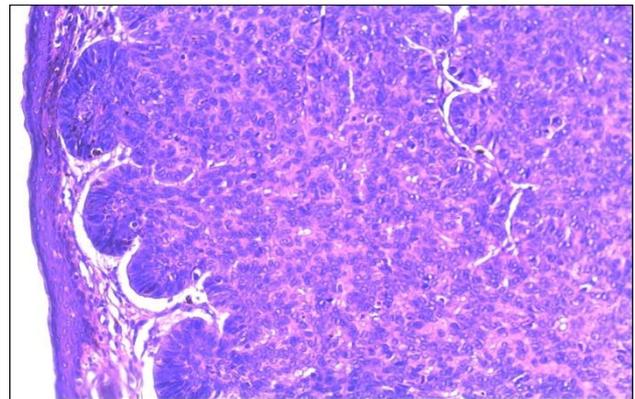
**Figure 3: Harvesting of nasolabial flap.**

After induction of general anaesthesia with endotracheal intubation, the lesion was excised with about three mm of healthy margins in all dimensions [Figure 2]. Base of the ulcer i.e. tip and alar area of nose was found to be free from disease. The excised tissue was sent for histopathological examination.

After excision, a superior based nasolabial was harvested [Figure 3]. The flap was rotated to repair the defect. The defect on nasolabial fold, which appeared after harvesting of flap was also closed [Figure 4]. The patient recovered uneventfully from general anaesthesia. She did well in post-operative period and was discharged after one week.



**Figure 4: After final reconstruction with nasolabial flap.**



**Figure 5: Photomicrograph of excised specimen showing nests and islands of uniform basaloid cells within the dermis. H&E, 100X.**



**Figure 6: Final result- front view.**



**Figure 7: Final result- side view.**

The histopathological report of the excised specimen confirmed the diagnosis of basal cell carcinoma [Figure 5]. The final result at three weeks was satisfactory [Figure 6 & 7]. There was minimal deformity of nose with no morbidity to the patient. Patient was followed up for recurrence for the next six months. There was no evidence of recurrence in the follow up period.

## DISCUSSION

Across the globe, Basal cell carcinoma (BCC) is most common malignant neoplasm involving the skin. It most commonly involve fair skinned population (35-40%) than dark coloured population such as Asians (2-4%) and Africans (1-2%).<sup>2</sup> The existing literature on BCC in India is very little.<sup>3,4</sup> There are far less reports of cases of BCC in hilly areas of uttarakhand.<sup>5</sup>

Most of the lesions occur on sun-exposed areas of head and neck. Sometimes it occurs at non-exposed area; most common among these are thigh, vulva and trunk.<sup>6</sup> The nasal tip is the most common site followed by other areas of the face, scalp and neck. A causative association with chronic ultraviolet radiation exposure has been established.<sup>7</sup> This tumour usually occurs in individuals in their fourth to eighth decades of life with a slight male predominance. These lesions generally display a locally infiltrative behaviour pattern but can occasionally metastasize to regional lymph nodes and distant sites.

Five clinical histopathologic subtypes of basal cell carcinoma have been described of which nodular ulcerative is most common, followed by pigmented, superficial, morphea-like, and fibroepithelioma. The superficial and sclerosing types of basal cell carcinomas have higher rates of recurrence as compared to other types. Size of initial lesion also has an impact on final result. Size greater than 2 cm increased the recurrence rate from 13 percent to 46 percent in one series of 1,620 cases of basal cell carcinoma.<sup>8</sup>

The rate of recurrence increases with the margin status, with a recurrence rate of 1.2 percent in absence of tumor at the margin, 12 percent when the tumor is within one

high power field, and 33 percent, when gross tumor is present at the margin.

Surgical margins of 2 to 3 mm are adequate with 85 percent of cases adequately treated in this manner based on results from Mohs' surgical excision. Larger lesions require larger margins up to 1 cm.<sup>9</sup>

BCC involving tip or alar area of nose are best reconstructed using nasolabial flap. The nasolabial flap has a wide description and application for use in reconstruction of lateral nasal wall, nasal tip, ala, columella.<sup>10</sup> It is a good flap for reconstruction of nose and is well tolerated by the patient. This flap has got very little donor site morbidity.<sup>11</sup> The width to length ratio can be as much as 1:5 in selected circumstances. This can be either based inferiorly or superiorly.

Recurrence of BCC is quite common even after complete cure. Patients are usually advised to avoid excessive exposure to sun to reduce the chances of recurrence.

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