

## Rare Case Report of Bilateral Pigmented Lesion on Alae of Nose

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**Abstract:** Basal cell carcinoma is most common skin cancer caused by prolonged exposure to ultraviolet rays. It is also called as rodent ulcer. It primarily affects individual with light eyes, hair and fair complexion but pigmented basal cell carcinoma has predilection for darker skinned population with dark brown eyes. Usually it presents as pigmented nodular mass over nose or malar region. It grows in slow and indolent fashion. Treatment of choice is surgical excision with 2mm of margin. Here we report a case of bilateral pigmented lesion on alae portion of nose.

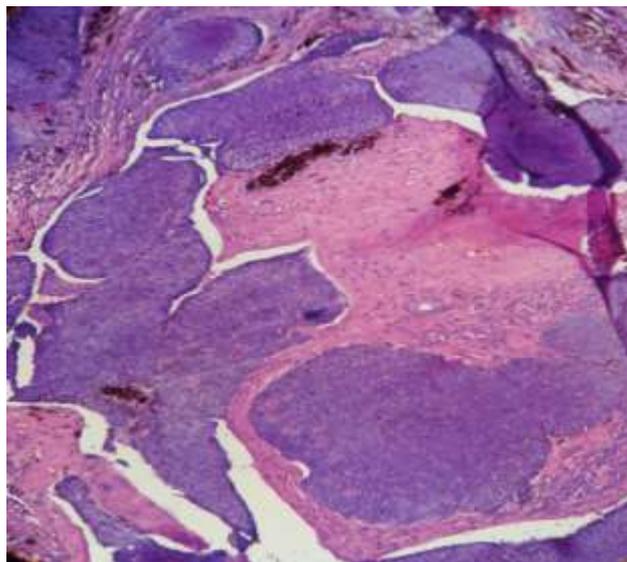
**Keywords:** Basal cell carcinoma, Pigmented basal cell carcinoma, Ultraviolet radiation

### I. Introduction

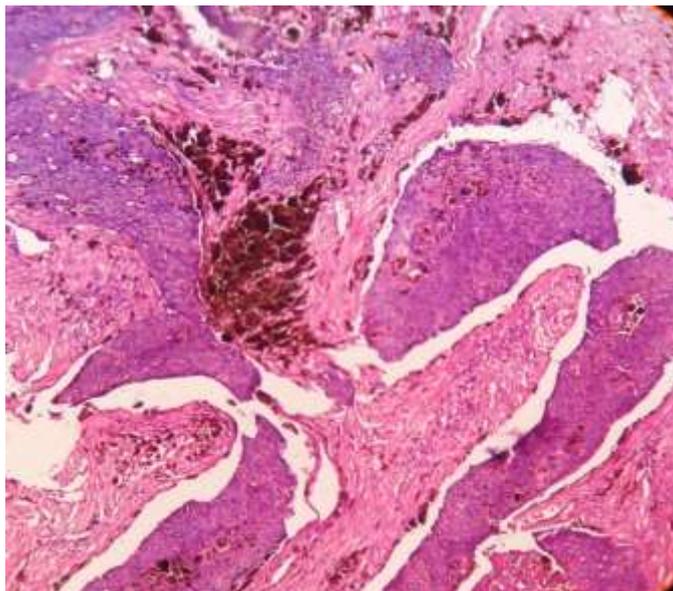
Basal cell carcinoma is neoplasm of basal keratinocytes and is most common human malignancy, accounting for estimated 80% of skin cancer<sup>1</sup>. Most often it occurs on sun exposed area, particularly on face of white skinned adults but can occur at any cutaneous site and any race. It can also develop in sunlight protected skin, in lower leg associated with chronic venous stasis, over AV malformation, X-ray exposure. There are many subtypes of basal cell carcinoma including superficial nodular, infiltrative and pigmented type<sup>2</sup>. Approx. 7% of basal cell carcinoma are pigmented. Pigmented variant of BCC is characterised by irregularly pigmented, well marginated nodule with telangiectatic vessel on its surface. Centre may be depressed or ulcerative<sup>3</sup>. Colour varies from light brown to dark black. The tumor may resemble a malignant melanoma. It grows in indolent fashion but rarely metastasize. BCC is cured by simple excision but if untreated, tumor may invade subcutaneous fat, skeletal muscles, bone and become recalcitrant to excision.

### Case report

A 51 yr old male with dark complexion presented with pigmented mass on alae of nose bilaterally for last 5 yrs. He had no complain of fever or pain. On examination, pigmented mass was present on ala of nose of size 3cmx2cm with irregular margin, firm in consistency, non tender and fixed to skin. Histopathological examination of tissue is done which shows island of basaloid cells with peripheral palisading surrounded by retraction artifacts. Also pigments in stroma as well as in island of cells.



**Figure 1-** tumour shows island of of cells with pigments in island and stroma ( H&E x20)



**Figure 2-** tumour shows island of of cells with pigments in island and stroma ( H&E x40)

## II. Discussion

Jacob Arthur in Dublin in 1827 first coined the term “rodent ulcer” to describe basal cell carcinoma. BCC comprises 65% of all malignant skin tumor and 80% of non-melanoma cancer<sup>4</sup>. It occurs mostly in fourth decade of life or later but also reported in younger patients with male:female ratio 3:2. Combination of environmental factors, phenotype and genetic predisposition are the main aetiological factors<sup>5</sup>. Among environmental factors, intermittent U.V radiation exposure is most important risk factor and other less important are exposure to ionising radiation, arsenic and coal tar<sup>6</sup>. Bart RS et al also noted that pigmented BCC is more common in dark eyed people and very rare in blue eyed people. There are many subtypes of BCC like nodular, superficial, spreading, pigmented, cystic, micronodular, morphea form and infiltrating, of which nodular form is most common<sup>7</sup>. According to study done by RoKW et al, pigmented BCC shows lesser subclinical infiltration than nonpigmented BCC. Pigmentation can be found in different clinical variant of BCC but vary in colour depending on no. of melanocytes and amount of melanin present within tumor. HMB45 and S100 currently two most useful immunomarker to identify melanocytes and melanoma. Differential diagnosis for pigmented BCC include pigmented naevus, melanoma, pigmented seborrheic keratosis and pigmented Bowen's disease<sup>8</sup>.

Histology shows nest of basaloid cells with peripheral palisading, abundance of melanin and melanophages and moderate inflammatory infiltrate. The melanocytes are located among tumor nests, while the melanophages are present in the stroma. Increased awareness is required in Indian population particularly with more outdoor activities. Our patient is 52 yrs old male presented with pigmented mass over ala of nose bilaterally. Any pigmented lesion need to be observed for increase in size. Treatment of choice in PBCC is surgical excision but for more aggressive BCC Mohs Microscopic Surgery is recommended. Intralesional injection of interferon alpha is an alternative treatment option.

## III. Conclusion

BCC is the most common nonmelanoma skin cancer in the world. Pigmented BCC is rare, but it is becoming increasingly common in Asian population due to exposure to UV radiation. It is commonly treated as benign naevus by most general physician so clinical suspicion is important in case of pigmented lesion. Therefore patient should be educated and reinforced about this malignancy so that patient survival can be increased.

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