

A Rare Case of Basal Cell Carcinoma in a Non-Sun-Exposed Area: Case Report

Sheikh Manzoor¹, Seerat Fatima², Rinchan Angmo³

ABSTRACT

Introduction: Basal cell carcinoma is one of the most common carcinomas affecting mainly the sun-exposed areas, seen much more commonly in the Caucasian population across the world. Its occurrence in the Indian population is known, and in the Kashmiri population in particular, a variant of BCC (basal cell carcinoma), the “Kangri Cancer” is known to occur.

Case report: The occurrence of BCC in the Asian population, at a non-exposed site is rare and hence we present a case of a 50-year-old female patient with a 5-year-old lesion in the axilla that was diagnosed as BCC (basal cell carcinoma).

Conclusion: This case is to emphasize that dermatologists should keep in consideration the diagnosis of basal cell carcinoma in such lesions occurring in any patient population.

Keywords: Basal Cell Carcinoma, Non-Sun-Exposed Area

INTRODUCTION

Basal cell carcinoma (BCC) is the most common cutaneous malignancy and accounts for approximately 80% of all nonmelanoma.

Skin cancers¹ It has been attributed to be most prevalent cancer type among white-skinned populations worldwide and particularly in industrialized Western societies.² It is uncommon in Asians (non-Indian population originating in Asia) and Black African races.³ These tumors typically arise in sun-exposed areas; rarely, they occur in nonexposed areas and have been found on the trunk, genitals, nails, axilla, nipple, or sole of the foot.^{4,5} BCC is caused by various factors including exposure to excessive actinic, ionizing and, ultraviolet (UV) radiation and these are accepted as most important causal factors.

Other causative factors are exposure to chemical carcinogens, and possibly infection with human papilloma viruses, ethnic differences, type of skin, chronic irritation, chronic inflammation, burns, skin lesions, immunologic, and genetic factors.^{6,7} Khangri cancer, an a variant of skin cancer is seen in India in Kashmiri population who use khangri in extreme cold to keep their body warm.⁸ Although these cancers rarely metastasize, basal cell carcinomas can invade nearby structures. Therefore, early recognition is critical to optimize outcomes.⁹ Hence we report a case of BCC in a female patient of Asian population, arising in a non-sun-exposed area such that BCC is kept as a differential in a chronic non-healing lesion even if it arises in atypical sites in atypical populations.

CASE REPORT

A 50 year old female patient, presented to the Out Patient Department of Dermatology SKIMS MC-H Bemina with a cutaneous lesion in her left axilla since the past 5 years. The patient had no other co-morbidity as such and did not have any history of trauma, injury or radiation exposure to the site. The patient first noticed a small raised lesion in her axilla 5 years back. It was asymptomatic and did not trouble the patient and hence she did not consult any medical practitioner for the same. Since the past 1-2 years she noticed increase in size in the lesion and slight pain and discomfort while dressing or rubbing against the lesion. On examination, the patient had a well defined, hyper pigmented (purplish-brown) plaque measuring about 2cm and 1cm in horizontal dimensions with rolled out edges. It was non tender and freely mobile from underlying structures (fig-1,2,3).

A wide excision was performed with 1cm free margins and the specimen was sent for histopathology. Dermoscopic examination showed blue-grey ovoid to structure less areas. The biopsy result showed a Basal cell carcinoma, superficial (multifocal) type with pigmentation with all peripheral margins being microscopically free (distance from nearest margin being 1mm and deep margins 5mm away).

DISCUSSION

Basal cell carcinoma is a rare cutaneous malignancy in India and in black population and its occurrence has been reported in dark skinned population as 1-2% and Australia has been reported to bear highest rate of basal cell carcinoma in the world.¹⁰ BCC is preferably located in the upper two thirds of the face, and the nose is affected in 25-30% of cases.¹¹ It can have diverse histological features, including the presence of pigment and mucin.¹² Usually, there is agreement in considering certain locations of BCC as unusual, which include breasts, periungual region, palms, soles, glutei and

¹Professor and Head, Department of Dermatology Venereology and Leprosy, SKIMS MC-H, Bemina, ²Post-Graduate Resident, Department of Dermatology Venereology and Leprosy, SKIMS MC-H, Bemina, ³Senior Resident, Department of Dermatology Venereology and Leprosy, SKIMS MC-H, Bemina, India

Corresponding author: Seerat Fatima, Department of Dermatology, SKIMS MC-H Bemina, Srinagar 190018, J&K, India

How to cite this article: Manzoor S, Fatima S, Angmo R. A rare case of basal cell carcinoma in a non-sun-exposed area: case report. International Journal of Contemporary Medical Research 2021;8(2):B1-B3.

DOI: <http://dx.doi.org/10.21276/ijcmr.2021.8.2.4>





Figure-1: Basal cell carcinoma: a well defined, hyper pigmented (purplish-brown) plaque measuring about 2cm and 1cm in horizontal dimensions with rolled out edges in the axilla.



Figure-2: Basal cell carcinoma skin: Dermoscopic image showing blue-grey ovoid to structureless areas.

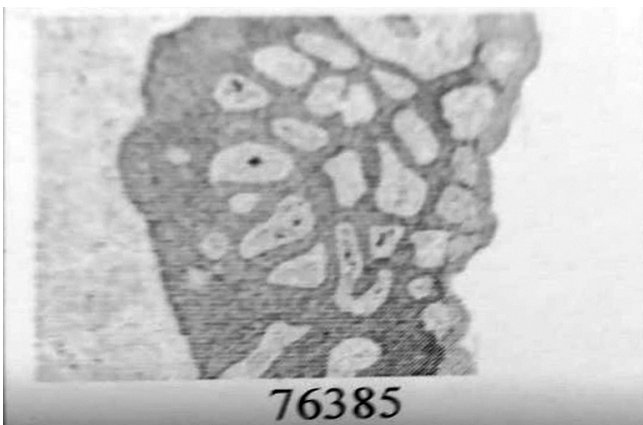


Figure-3: Histopathology skin showing, Basal cell carcinoma, superficial (multifocal) type with pigmentation with all peripheral margins being microscopically free (distance from nearest margin being 1mm and deep margins 5mm away).

intertriginous areas like the axilla, groin and genitals.¹³ Despite the fact that sun exposed sites are more likely to harbor this kind of tumor, up to one third of them occur in unexposed areas.¹⁴ In addition, these tumors are rare in the forearms, hands and lower limbs, despite significant sun exposure. The occurrence of this malignancy on the lower limbs was three times greater in women than in men,¹⁵ perhaps due to greater sun exposure. Regarding possible associations of tumor location with histological subtypes, some studies showed that unexposed areas like the trunk and the limbs display predominantly superficial pattern, while those in sun exposed areas like the nose, neck and head, show mainly nodular pattern.¹⁶ The sclerodermiform pattern is not significantly associated with anybody site.¹⁷ Delay

in diagnosis is common and likely due to multiple factors, including (1) patient delay in presentation for what they might consider trivial irritation; (2) misdiagnosis of BCC for inflammatory, allergic, or infectious skin lesions; (3) rarity of BCC is sun-protected areas; (4) diversity of macroscopic appearance, ranging from erythematous papules and patches to nodules, plaques, and ulcers, mimicking other more common per anal lesions in the differential diagnoses of a per anal mass (Table 1); and (5) in dark skinned people, BCC may be pigmented and mistaken for malignant melanoma[9]. Long-term follow-up includes monitoring for BCC in other sites, as patients who have had one BCC may have as much as a 50% risk of developing a second primary BCC within 5 years.¹⁸

CONCLUSION

This case of BCC, superficial multifocal type occurring at a rare site (axilla) in a patient of Asian ethnicity was reported to emphasize that we as dermatologists should keep in consideration the diagnosis of basal cell carcinoma in such lesions occurring in any patient population, even in the atypical non sun-exposed areas of skin.

REFERENCES

1. H. W. Rogers, M. A. Weinstock, S. R. Feldman, and B. M. Cold iron. Incidence estimate of nonmelanoma skin cancer (keratinocyte carcinomas) in the US population, 2012. *JAMA Dermatology* 2015;151:1081–1086.
2. Hakverdi S, Balci DD, Dogramaci CA, Toprak S, Yaldiz M. Retrospective analysis of basal cell carcinoma. *Indian J Dermatol Venereol Leprol* 2011; 77: 251-255.
3. Moore MG and Bennett RG. Basal Cell Carcinoma in Asians. A Retrospective Analysis of Ten Patients. *Journal of Skin Cancer* 2012 :Article ID 741397, 5
4. R. Betti, C. Bruscajin, E. Inselvini, and C. Crosti. Basal cell carcinomas of covered and unusual sites of the body. 4 Case Reports in *Surgery International Journal of Dermatology* 1997;36:503–505.
5. M. J. Roth, J. B. Stern, H. M. Haupt, R. R. L. Smith, and S. J. Berlin. Basal cell carcinoma of the sole. *Journal of Cutaneous Pathology* 1995;22:349–353.
6. Pfister H, TerSchegget J. Role of HPV in cutaneous premalignant and malignant tumors *Clin Dermatol* 1997; 15: 335-47.
7. Crowson AN. Basal cell carcinoma: Biology, morphology and clinical implications. *Modern Pathology* 2006; 19:127-47.
8. Kumar R, Ansari Md. K, Ahmed S.S. Unusual presentation of basal cell carcinoma: *Asian Pac. J. Health Sci.*, 2014; 1: 539-542.
9. Audrey V. Carr, Edward Feller, Fouad R. Zakka et al; A Case Report of Basal Cell Carcinoma in a Non-Sun-Exposed Area: A Rare Presentation Mimicking Recurrent Perianal Abscess: *Hindawi Case Reports in Surgery* Volume 2018, Article ID 9021289, 5 pages
10. Gruijl F, Coebergh JW. Rapid and continuous increases in incidence rates of basal cell carcinoma in the southeast Netherlands since 1973. *J Invest Dermatol* 2004; 123:634-638.
11. Roenigk RK, Ratz JL, Bailin PL, Wheeland RG.

- Trends in the presentation and treatment of basal cell carcinomas. *J DermatolSurgOncol*. 1986; 12:860-5.
12. T. R. Wade and A. B. Ackerman. The many faces of basal-cell carcinoma. *Dermatologic Surgery* 1978;4:23–28.
 13. Etter L, Cook JL. Basal cell carcinoma of the umbilicus: a case report and literature review. *Cutis*. 2003; 71:123-6.
 14. Bhagchandani L, Sanadi RE, Sattar S, Abbott RR. Basal cell carcinoma presenting as finger mass. A case report. *Am J ClinOncol*. 1995; 18:176-9.
 15. Lynch FW, Seidman H, Hammond EC. Incidence of cutaneous cancer in Minnesota. *Cancer*. 1970; 23:83-90.
 16. Ane Beatriz MautariNiwa, Eugênio R. A. Pimentel. Basal cell carcinoma in unusual locations: An *Bras Dermatol*. 2006; 81:S281-4.
 17. Betti R, Inselvini E, Carducci M, Crosti C. Age and site prevalence of histologic subtypes of Basal cell carcinomas. *Int J Dermatol*. 1995; 34:174-6.
 18. N. M. Mc Loone, J. Tolland, M. Walsh, and O. M. Dolan, Follow-up of basal cell carcinomas: an audit of current practice. *Journal of the European Academy of Dermatology and Venereology* 2006;20:698–701.

Source of Support: Nil; **Conflict of Interest:** None

Submitted: 30-12-2020; **Accepted:** 26-01-2021; **Published:** 27-02-2021