



CODEN [USA]: IAJPBB

ISSN : 2349-7750

## INDO AMERICAN JOURNAL OF PHARMACEUTICAL SCIENCES

SJIF Impact Factor: 7.187

<http://doi.org/10.5281/zenodo.4418647>Available online at: <http://www.iajps.com>

Research Article

### CLINICOPATHOLOGICAL CHARACTERISTICS OF BASAL CELL CARCINOMA (BCC) OF THE HEAD AND NECK

<sup>1</sup>Dr. Akasha Bint E Athar, <sup>2</sup>Dr. Ayesha Nazeer, <sup>3</sup>Attia Rasool

<sup>1</sup>Dera Ghazi Khan Medical College D.G khan, <sup>2</sup>Avicenna Medical College Lahore, <sup>3</sup>Dera Ghazi Khan Medical College DG Khan.

Article Received: November 2020	Accepted: December 2020	Published: January 2021
---------------------------------	-------------------------	-------------------------

**Abstract:**

**Objective-** To study the BCC clinicopathological characteristics of neck and head

**Material and Methods-** This was a randomized control trial type study conducted in DHQ D.G khan in which E and H staining techniques were used to analyze the clinicopathological characteristics of BCC of neck and head. In this study total 114 patients were selected and analyzed on the base of tumor location, gender age, and histopathological variant and then SPSS was used for statistical analysis.

**Results-** The results of this study revealed that comparatively males have high ratio of suffering in BCC as ratio between males and females for BCC is 2.5:1 and the most anatomical site was nose and then eye. Nodular variant is the most common subtype followed by adenoid variant.

**Conclusion-** In neck and head region the most common BCC subtype is nodular variant with nose as the common anatomical site.

**Keywords:** Morbidity, variant, site, Malignancy, BCC,

**Corresponding author:**

**Dr. Akasha Bint E Athar,**

*Dera Ghazi Khan Medical College D.G khan.*

QR code



Please cite this article in press Akasha Bint E Athar *et al*, **Clinicopathological Characteristics Of Basal Cell Carcinoma (Bcc) Of The Head And Neck.**, Indo Am. J. P. Sci, 2021; 08(1).

## INTRODUCTION:

BCC is one of the most harmful and destructive in nature tumor for human beings, UV exposure and sunlight are the major reasons behind this. However, very less literature is available on this, but it is evident that it is one of the most common type of cancer affecting the human beings as its prevalence is increasing rapidly and in next some incoming years its prevalence will increase by all the other tumors. However, some studies witnessed that its prevalence also depends upon the geographical locations as BCC patient's prevalence in Australia and UK is between 18-40% and in America its prevalence is increasing with the rate of 10%. In UK around 75000 BCC patients are diagnosed every year, however in UK its prevalence is not accurately calculated as BCC cases are not considered as the skin cancer cases. In Pakistan 7.2% patients reported with skin cancer and out of these 33% were the BCC. As per another study 1.04% cases are reported in Pakistan as skin malignancies and out these 40% were BCC. The major contributing factor for BCC development is the exposure of UV radiation during childhood as the exposure of UV radiation to adults is not as harmful as for children. Recurrent exposure to sunlight is more dangerous in terms of BCC as compared to continuous exposure. UV radiations of 293, 354 and 380 nm wavelengths are linked to pathogenesis of BCC. In Pakistan BCC is more common in males as compared to females and

most common BCC sites are neck and head especially cheek, periocular areas, forehead and nose and among that nose is one of the most common sites. BCC is one of the most harmful and destructive in nature tumor for human beings. There are different variants of BCC and the commonest morphological feature in all these variants is existence of cords, columns, lobules of BCC. The objective of this study is to study the BCC clinicopathological characteristics of neck and head.

## MATERIAL AND METHODS:

This was a randomized control trial type study in which E and H staining techniques were used to analyze the clinicopathological characteristics of BCC of neck and head. Data of all the patients having malignant skin infection incase of BCC only in neck and head was retrieved from records. In this study total 114 patients were selected and analyzed on the base of tumor location, gender age, and histopathological variant and then SPSS was used for statistical analysis.

## RESULTS:

In this, 114 cases were studied thoroughly, and it was observed that mean age of patients was  $63.18 \pm 14.41$  and the patient in this with maximum age was 86 and with minimum age of 33 years old. Out of 114 patients 33 belonged to the age group of 33 to 50 years old and 81 were above 50 years of age.

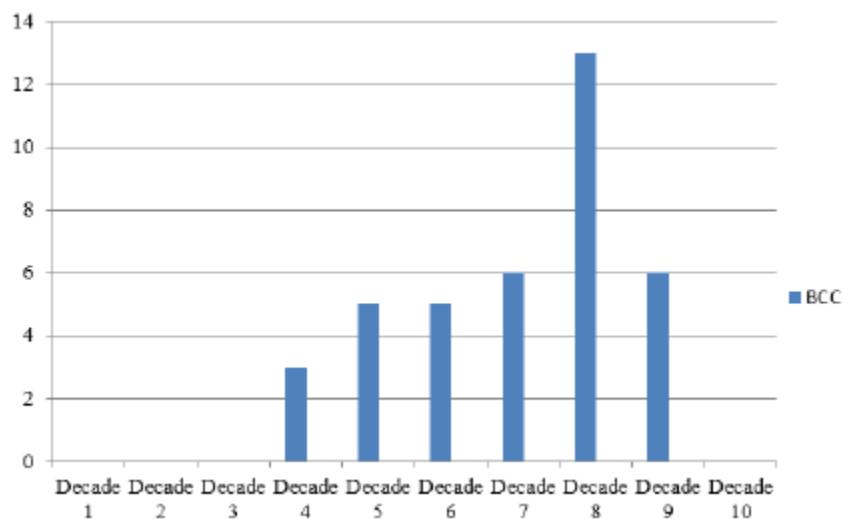


Figure 1. Age Distribution of BCC cases

The results of this study revealed that comparatively males have high ratio of suffering in BCC as out of 114 33 were females and 81 were males which means ratio between males and females for BCC is 2.5:1 and the most anatomical site was nose and then eye. Nodular variant is the most common subtype followed

by adenoid variant. Among all he patients 3 (2.63%) were pigmented variant, 3 (2.63%) were fibro epithelial variant, 6 (5.3%) were micro nodular, 12 (10.5%) were infiltrating, 18 (15.8%) were adenoid and 72 (63.2%) were nodular variant of BCC.

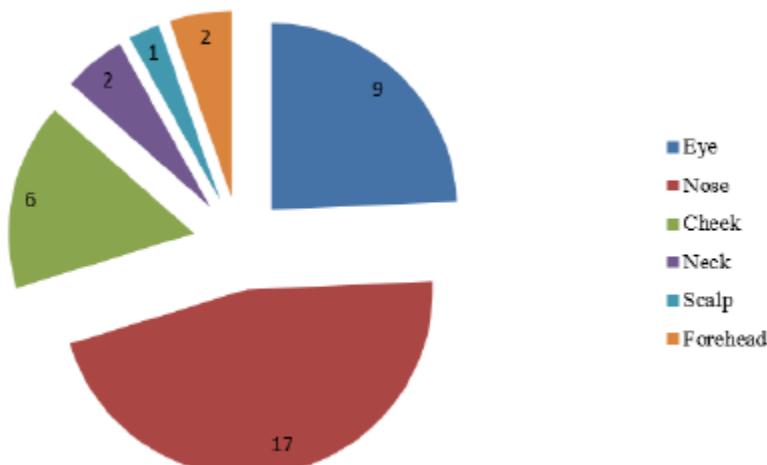


Figure 2. Site distribution of BCC

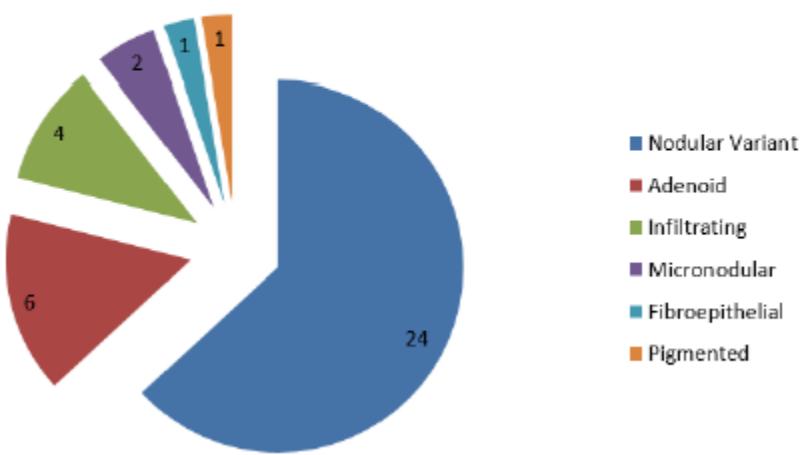
**Variants BCC**

Figure 3. Variant of BCC

**DISCUSSION:**

Basal Cell Carcinoma is non melanoma skin malignant growth with expanding frequency all around the world because of expanded bright introduction and the consumption of ozone layer in certain zones due to contamination and ecological dangers. Bright radiation makes harm DNA prompting accordingly advancement of BCC. Immunosuppressed and relocate patients are more prone to create. BCC improvement is likewise observed in Nevoid BCC Syndrome, Rasmusse disorder, Darier's sickness, Bazex condition and Rombo disorder as they share a similar Sonic Hedgehog pathway Mutation hereditary mutation In spite of the fact that, BCC is a slothful tumor and doesn't metastasize yet it is the most well-known non melanoma skin disease and causes

significant nearby demolition furthermore, grimness and is a gigantic monetary weight on the economy. It was observed that mean age of patients was  $63.18 \pm 14.41$  and the patient in this with maximum age was 86 and with minimum age of 33 years old. Out of 114 patients 33 belonged to the age group of 33 to 50 years old and 81 were above 50 years of age. The tumor to be the most continuous in age bunch between 60-69 years. The pattern of BCC in more established age could be attributed to the diminished regenerative and remedied capability of the DNA to address the hereditary harm brought about by bright sun radiations. As indicated by our investigation most of patients with BCC were male 71.05%, when contrasted with female 28.94%. The male to female proportion is 2.5: 1 the similar pattern is found in an

examination by Asif et al in which guys represent 53.2% cases with 1.2:1 proportion of male to female. It is evident that it is one of the most common type of cancer affecting the human beings as its prevalence is increasing rapidly and in next some incoming years its prevalence will increase by all the other tumors. In Pakistan 7.2% patients reported with skin cancer and out of these 33% were the BCC. As per another study 1.04% cases are reported in Pakistan as skin malignancies and out these 40% were BCC. The major contributing factor for BCC development is the exposure of UV radiation during childhood as the exposure of UV radiation to adults is not as harmful as for children. Recurrent exposure to sunlight is more dangerous in terms of BCC as compared to continuous exposure. In Pakistan BCC is more common in males as compared to females and most common BCC sites are neck and head especially cheek, periocular areas, forehead and nose and among that nose is one of the most common sites.

#### **CONCLUSION:**

In neck and head region the most common BCC subtype is nodular variant with nose as the common anatomical site.

#### **REFERENCE:**

1. Malik V, Goh KS, Leong S, Tan A, Downey D, O'Donovan D. Risk and outcome analysis of 1832 consecutively excised basal cell carcinomas in a tertiary referral plastic surgery unit. *J Plastic Reconstructive & Aesthetic Surg: JPRAS* 2010; 63(12):2057-63.
2. Camp WL, J.W. T, Athar M, Elmets CA. New agents for prevention of ultraviolet-induced nonmelanoma skin cancer. *Seminars in cutaneous Med Surg* 2011;30(1):6-13.
3. Madan V, Lear JT, Szeimies RM. Non-melanoma skin cancer. *Lancet* 2010;375(9715):673-85.
4. Katalinic A, Kunze U, Schafer T. Epidemiology of cutaneous melanoma and non-melanoma skin cancer in Schleswig-Holstein, Germany: incidence, clinical subtypes, tumour stages and localization (epidemiology of skin cancer). *Bri J Dermatol* 2003;149(6):1200.
5. Rubin AI, Chen EH, Ratner D. Basal cell carcinoma. *N Engl J Med* 2005;353(21):2262-9.
6. Baxter JM, Patel AN, Varma S. Facial basal cell carcinoma. *BMJ* 2012;345.
7. Wong CSM, Strange RC, Lear JT. Basal cell carcinoma. *BMJ* 2003;327(7418):794-8.
8. Staples MP, Elwood M, Burton RC, Williams JL, Marks R, Giles GG. Non-melanoma skin cancer in Australia: the 2002 national survey and trends since 1985. *Med J 2006;184(1):6-10.*
9. LeBoit PE, Burg G, Weedon D, Sarasin A, editors. *Pathology and Genetics of Skin Tumors*. Lyon: IARC; 2006.
10. Diffey BL, A. LJA. Skin cancer incidence and ageing population. *Bri J Dermatol* 2005;153(3): 679-80.
11. Janjua OS, Qureshi SM. Basal cell carcinoma of the head and neck region: an analysis of 171 cases. *J Skin Cancer* 2012.
12. Ahmed A, Alam MB, Khan W, Badar A, Shah SH. Frequency and characteristics of skin cancers diagnosed at Ayub Medical College Abbottabad Pakistan from 1995-2003. *J Ayub Med Coll Abbottabad* 2007;19(4):3.
13. Ricotti C, Bouzari N, Agadi A, Cockerell C. Malignant skin neoplasms. *Med Clin N Am* 2009 28-9-2016; 3:1241-64.
14. Janjua OS, Qureshi SM. Basal Cell Carcinoma of the Head and Neck Region: An Analysis of 171 Cases. *J Skin Cancer* 2012.
15. Asif M, Mamoon N, Ali Z, Akhtar F. Epidemiological and excision margin status of Basal cell carcinoma--three years Armed Forces Institute of Pathology experience in Pakistan. *Asian Pacific J Cancer Prevention: APJCP* 2010; 11(5):1421-3.