



Journal Homepage: -www.journalijar.com

INTERNATIONAL JOURNAL OF ADVANCED RESEARCH (IJAR)

Article DOI:10.21474/IJAR01/11292
DOI URL: <http://dx.doi.org/10.21474/IJAR01/11292>



RESEARCH ARTICLE

BASAL CELL CARCINOMA OF THE FACE - A RARE CASE REPORT

Dr. Abira Chattopadhyay¹, Dr. Aritra Chatterjee², Dr. Mohsina Hussain³, Dr. Tarun Kanti Santra⁴ and Dr. Md. Arif Hossain⁵

1. Associate Professor, Department of Oral and Maxillofacial Surgery, Dr. R Ahmed Dental College and Hospital, Kolkata.
2. Clinical Tutor, Department of Oral and Maxillofacial Surgery, Dr. R Ahmed Dental College and Hospital, Kolkata.
3. Post Graduate Trainee, Department of Oral and Maxillofacial Surgery, Dr. R Ahmed Dental College and Hospital, Kolkata.
4. Dental Surgeon, Siuri Super-speciality Hospital, Birbhum.
5. Resident Surgeon, Department of Oral and Maxillofacial Surgery, Dr. R Ahmed Dental College and Hospital, Kolkata.

Manuscript Info

Manuscript History

Received: 05 May 2020
Final Accepted: 10 June 2020
Published: July 2020

Key words:-

Basal Cell Carcinoma, Ultraviolet Radiation, Dark-Skinned Individuals, Complete Excision, Recurrence

Abstract

Though less prevalent in the Indian subcontinent, basal cell carcinomas are the second most common cutaneous malignancy in darker skinned individuals. The main risk factor for the development of BCC is ultraviolet radiation, which explains its occurrence in the sun exposed head and neck areas, most frequently above the line joining the angle of mouth and the tragus of ear and less commonly in the trunks, extremities, genital areas or perianal regions. Diagnosis is usually based on the clinical features and is confirmed by histopathology. In most cases BCC is easy to diagnose despite numerous variants and does not require confirmation by immunohistochemical staining. Complete removal of the lesion in the first surgical intervention should be achieved because primary BCC has higher cure rates than recurrent ones. In this article we present a case of a facial BCC in a middle-aged man which was excised completely and followed for 1 year without any untoward post-operative complication or recurrence.

Copy Right, IJAR, 2020,. All rights reserved.

Introduction:-

Nonmelanoma skin cancers (NMSCs) or keratinocytic carcinomas mainly comprise of squamous cell carcinoma (SCC) and basal cell carcinoma (BCC). These cutaneous malignancies are common in the whites but are rare in the dark-skinned individuals. The NMSCs affect only about 1%-2% of the Indians but predominates in the whites, affecting more than one-third of their population.¹ This disparity in occurrence is primarily due to the protection offered by eumelanin pigment against ultraviolet radiation induced DNA damage, which is responsible for induction of carcinogenesis. The main risk factor for the development of BCC is ultraviolet radiation, which explains its occurrence in the sun exposed head and neck areas, most frequently above the line joining the angle of mouth and the tragus of ear and less commonly in the trunks, extremities, genital areas or perianal regions. It is considered as a malignant lesion due to its property of causing disfigurement and local destruction of the tissues by invading into the adjacent structures but, in contrast to SCC, it rarely metastasizes to distant sites or causes death.² BCC is most

Corresponding Author:- Dr. Mohsina Hussain

Address:- Post Graduate Trainee, Department of Oral and Maxillofacial Surgery, Dr. R Ahmed Dental College and Hospital, Kolkata.

commonly seen in the middle-aged or older group of people.³ However, nowadays there is a change in the trend in which more incidences of BCC are noted in the younger population, possibly because of longer hours of direct sun exposure.² Complete removal of the lesion in the first surgical intervention should be achieved because primary BCC has higher cure rates than recurrent ones.⁴ In this article we present a case of a facial BCC in a middle-aged man which was excised completely and followed for 1 year without any untoward post-operative complication or recurrence.

Case Report:

A 44-year-old, otherwise healthy male patient, presented to our institution with dental pain. However, after addressing the chief complaint of the patient and further examination, a crusted ulceration on the right side of the nose was observed. (Fig. 1) Since he was not aware about the scope and versatility of Oral and Maxillofacial Surgery, he did not present about the problem to us in the first instance, but we convinced him it was this speciality that would provide him with the best care. After he was thoroughly convinced, he gave us a detailed history and agreed to go forward with the treatment protocol as suggested by us. The lesion was present since a period of 2 years. He had undergone homeopathy treatment for the same, but to no avail and the lesion had gradually increased in size over time. The lesion was not painful and there was no history of bleeding or discharge. On examination, a single ulcer with rolled out edges over the right ala of the nose and adjoining nasolabial fold measuring about 1.5cm x 1cm in greatest dimension was observed. It was non tender, not fixed to the underlying structures and no discharge was present on palpation. Based on the clinical features we made a provisional diagnosis of BCC and since the lesion was less than 2cm in greatest dimension we planned for complete excision under general anaesthesia followed by histopathological diagnosis. Pre-operatively, the laxity of the of skin in the nasolabial fold area was assessed and decision for a primary closure was done. Wedge excision of the complete lesion with a safety margin of 5mm along the resting skin tension lines was done followed by undermining and primary closure without any tension. The final diagnosis of BCC was confirmed by the post-operative histopathological report. (Fig. 2) Sutures were removed on the 5th post-operative day. (Fig. 3) He did not suffer from any complication or recurrences in the follow up period of 1 year.

Discussion:-

Basal cell carcinoma (BCC) is a slow growing, locally aggressive, rarely metastasising, low grade cutaneous neoplasm arising from the basal layer of the epidermis and invading into the surrounding structures.⁵ SCC represents 30%-65% of skin cancers in dark coloured individuals including Indians and 15%-25% in whites, whereas BCC on the other hand contributes to 65%-75% of cutaneous malignancies in whites and 20%-30% in Asian Indians.⁶ 80-85% of all Basal Cell Carcinomas reported in medical literature have been located on the head and neck region, 15% on the trunk and less than 2% in unusual areas, such as the abdomen.⁷ The main etiologic factor in the development of BCC is ultraviolet radiation, however, considering that lesions also occur in non-sun-exposed areas, the existence of other contributing factors such as immunosuppression, Fitzpatrick skin type (phototype) I-II-III, trauma to the anatomical site, ionizing radiation, genodermatoses and arsenic exposure are proposed.⁷ The primary aim of treatment is the complete excision of the tumour tissue. Other treatment modalities include cryotherapy, immunomodulatory drugs, laser treatment or locally applicable chemotherapeutic agents.⁸ Facial BCC is particularly concerning as it is often found in an aesthetically delicate location. Incisions must be made respecting the natural skin creases and tension should be reduced to minimum. Some researchers believe a narrow margin is sufficient for treating BCC, whereas others recommend excision with a larger safety margin. Although lesions that are excised using a narrow margin entails a risk of a positive margin and recurrence, reconstruction may be difficult with a wide surgical margin especially in risky and aesthetic areas.⁷ Wolf & Zitelli⁹ found that a clearance with 4-mm margins totally cleared 98% of well-defined lesions smaller than 2 cm in diameter. They also found that BCCs larger than 2 cm in diameter tend to display more aggressive characteristics and increased subclinical invasion. If BCC is left untreated, it can invade deeper tissues including muscles and bone.² BCC usually has a good prognosis but clinically, poor prognostic factors include tumour size > 2 cm, increased depth of invasion, distribution in the mid facial region, poorly defined margins, long- standing lesion, recurrent disease and immunosuppression. Our patient presented with lesion size of less than 2cm and hence complete excision with 5mm safe margins followed by primary closure in this case resulted in a favourable outcome.

Conclusion:-

Though less prevalent in the Indian subcontinent, basal cell carcinomas are the second most common cutaneous malignancy in darker skinned individuals. Diagnosis is usually based on the clinical features and is confirmed by

histopathology. In most cases BCC is easy to diagnose despite numerous variants and does not require confirmation by immunohistochemical staining. A 4-mm excision margin is adequate to eradicate primary BCC lesions smaller than 2 cm in diameter. Nevertheless, even in these lesions, assessing the histological types, lesion site and previous treatment history must be considered in surgical planning for a favourable outcome.

Clinical Pictures:



Fig 1:- The lesion (BCC) present on the right ala of the nose and adjoining nasolabial area.

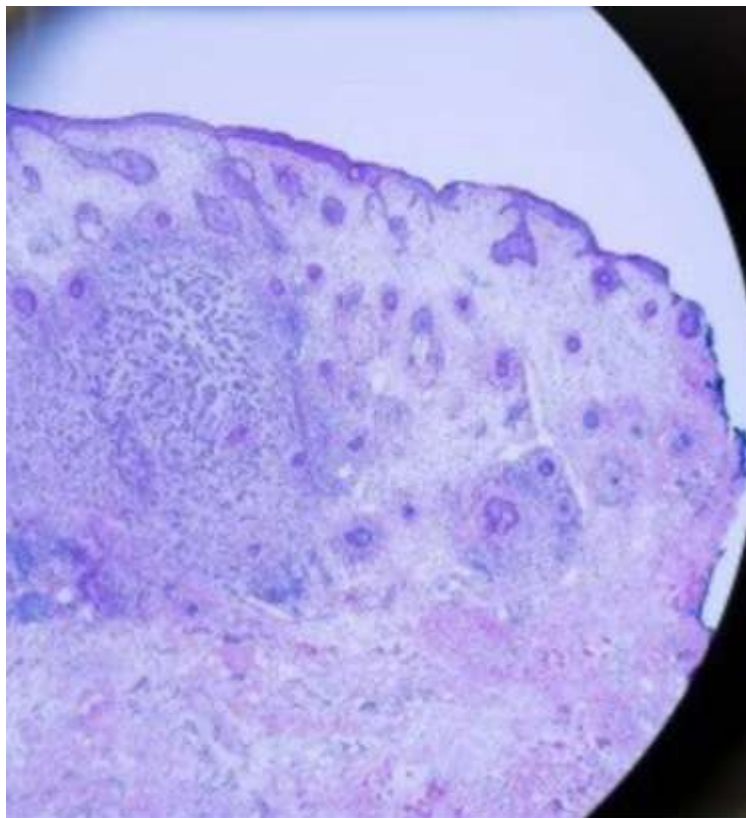


Fig 2:- Photomicrograph of BCC.



Fig 3:- Surgical site after suture removal.

References:-

1. Khullar G, Saikia UN, De D, Radotra BD. Nonmelanoma skin cancers: An Indian perspective. *Indian Journal of Dermatopathology and Diagnostic Dermatology*. 2014 Jul 1;1(2):55.
2. Madhura KM, Honeyalsinh MH, Rinkan VA. Basal cell carcinoma: A case report. *IJSS Journal of Surgery*. 2015;1:21-22.
3. Malhotra AK, Gupta S, Khaitan BK, Verma KK. Multiple basal cell carcinomas in xeroderma pigmentosum treated with imiquimod 5% cream. *Pediatr Dermatol* 2008;25:488-91.
4. Luz FB, Ferron C, Cardoso GP. Surgical treatment of basal cell carcinoma: an algorithm based on the literature. *Anais brasileiros de dermatologia*. 2015 Jun;90(3):377-83.
5. Mackiewicz-Wysocka M, Bowszyc-Dmochowska M, Strzelecka-Węklar D, Dańczak-Pazdrowska A, Adamski Z. Basal cell carcinoma—diagnosis. *Contemporary Oncology*. 2013;17(4):337.
6. Gloster HM Jr, Neal K. Skin cancer in skin of color. *J Am Acad Dermatol* 2006;55:741- 64.
7. Ogueta IC, Fuentes CS, Madison A, et al. Basal cell carcinoma at an unusual location: case report. *J DermatCosmetol*. 2018;2(1):60–61. DOI: 10.15406/jdc.2018.02.00040
8. Ünverdi ÖF, Yücel S, Berk OS. Recommended Surgical Margins for Basal Cell Carcinoma: Is 3 mm Safe Enough?. *Advances in Skin & Wound Care*. 2020 Apr 1;33(4):209-12.
9. Wolf DJ, Zitelli JA. Surgical Margins for basal cell carcinoma. *Arch Dermatol*. 1987;123:340-4.