

Adenoid type of basal cell carcinoma presenting like a sebaceous cyst: A case report

Rajesh Chaudhary, Sanjeev Sharma, Ankit Shukla

ABSTRACT

Introduction: Basal cell carcinoma (BCC) is the most common skin cancer seen mostly in the sun-exposed parts of the body like over face, head, neck, nose, eyelids but the presence at covered areas is not uncommon. Adenoid type of BCC is the rare form with a very low malignant potential. Surgery is the recommended treatment modality. **Case Report:** We present a case of 38-year-old female who presented with a small lesion looking like a sebaceous cyst near the medial epicanthus of the eye. It was excised and proved to be adenoid type of basal cell carcinoma. The patient underwent complete excision and forehead rotation flap was taken to cover the defect. **Conclusion:** Although the basal cell carcinoma is a non-melanocytic skin cancer; adenoid type of BCC is a rare histopathological variant which can morphologically present as pigmented nodule without any site predilection.

Keywords: Adenoid type BCC, Basal cell carcinoma (BCC), Non-melanocytic, Rare form of BCC, Skin cancer

How to cite this article

Chaudhary R, Sharma S, Shukla A. Adenoid type of basal cell carcinoma presenting like a sebaceous cyst: A case report. J Case Rep Images Surg 2015;1:9–12.

Article ID: 100003Z12RC2015

doi:10.5348/Z12-2015-3-CR-3

INTRODUCTION

Basal cell carcinoma (BCC) is the most common skin cancer seen mostly in the sun-exposed parts over face, head, neck, nose, eyelids, inner canthus of the eyes, but the presence at covered areas is not uncommon [1]. The BCC around the eyes is most commonly seen over the lower lid, medial canthus, upper eyelid and lateral canthus respectively. Basal cell carcinoma has an excellent prognosis as it causes local destruction and rarely metastasis to distant organs. It is also called the rodent ulcer because of its locally invasive nature hence extensive laboratory workup and imaging studies are not required. Surgery is the mainstay of treatment where 95% of lesions are cured by complete excision, 99% with Mohs surgery whereas radiotherapy cures 90% [2, 3]. The adenoid type of basal cell carcinoma is rare variant which can present anywhere in the body like a nodule or ulcer, with or without pigmentation even in the covered parts of the body.

CASE REPORT

A case of 38-year-old female, a farmer by occupation, presented with a small 5x5 mm sized lesion with a

Rajesh Chaudhary¹, Sanjeev Sharma², Ankit Shukla¹

Affiliations: ¹MS, Senior Resident, Department of Surgery, Dr. RP Govt. Medical College Kangra at Tanda, HP, India; ²MS, Professor, Department of Surgery, Dr. R.P. Govt. Medical College Kangra at Tanda, HP, India.

Corresponding Author: Dr. Rajesh Chaudhary, MS, Senior Resident, Department of Surgery, Dr. RP Govt. Medical College Kangra at Tanda, HP, India; Email: topgun.chaudhary@gmail.com

Received: 18 April 2015

Accepted: 24 June 2015

Published: 10 August 2015

punctum in the center just below the medial epicanthus at the root of the nose for last one year which has started increasing in size suddenly over a period of weeks and became slightly itchy and painful but no bleeding or discharge. No history of trauma or any surgery in the past. The patient was fair complexioned, well built with, no other known risk factors for skin cancer. On examination the lesion looked like a sebaceous cyst and so the decision to excise it was taken. The patient was taken up for surgery and the lesion was excised (Figures 1 and 2). While removing the lesion; it contained the black necrotic material suspicious of melanoma and was sent for histopathological examination. The examined Sections showed nests and sheets of cells forming adenoid and cribriform structures with focal individual cell necrosis and pigmented macrophages. Squamous eddies were seen. Mitotic figures were fragment. Hyaline material was seen in lumen and surrounding nests were seen. Cells appeared basaloid. No definitive evidence of palisading of basal nuclei or sebocytes or ulceration or rippled pattern or follicular papilla was seen (Figure 3). The above findings suggested adnexal neoplasm with trichoblastic (basaloid) and adenoid appearance, hence the diagnosis the adenoid type of basal cell carcinoma. The patient was again taken up for surgery and the complete excision of the lesion with a wide margin was done. All the resected margins were free of invasions. the defect was covered with a paramedian forehead flap. The patient has recovered well.

DISCUSSION

Arising from the basal layer of the epidermis, Basal cell carcinoma is the most common non-melanomatous skin cancer seen mostly in the sun-exposed parts over face, head and neck, nose, eyelids inner canthus of the eyes but the presence at covered areas is not uncommon [1]. It is a slow growing tumor with a very little metastatic potential but it is locally infiltrative hence known as the rodent ulcer. It comprises about 65% of all the epithelial tumors but causes very less cancer related deaths whereas squamous cell carcinoma is less common and more likely to metastasize and cause deaths [2]. It occurs in the middle aged or elderly with 90% of lesions found on the face above a line from the lobe of the ear to the corner of the mouth. A skin biopsy may be necessary to confirm the diagnosis and is often required to determine the histologic subtype of BCC. Clinicopathologic types of BCC, include the nodular, infiltrative, micronodular, morpheaform, and superficial; whereas histologically nodulocystic or noduloulcerative type accounts for 70% of BCC tumors.

The BCC is divided mainly into 2 categories; undifferentiated and differentiated with further subtypes. There are 'high risk' and 'low risk' BCCs. High risk BCCs are the ones that are large (>2 cm) and located at specific sites (near the eye, nose and ear) and have ill-defined



Figure 1: After the excision of the initial lesion.



Figure 2: Complete excision of the lesion with a forehead rotation flap to cover the defect

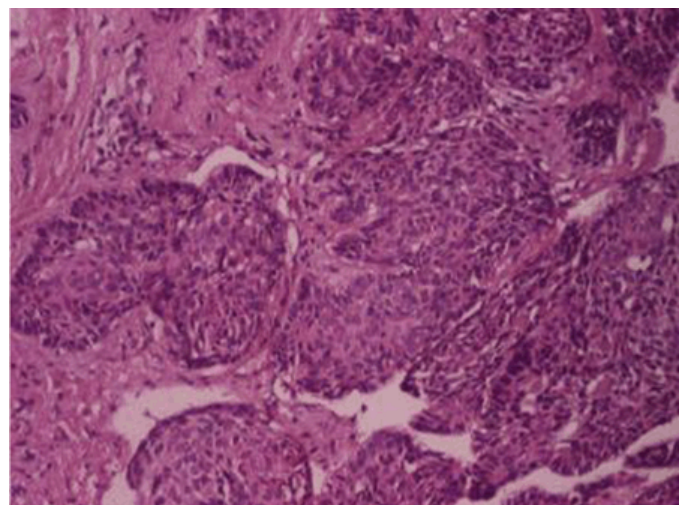


Figure 3: Adenoid type of basal cell carcinoma (H&E stain, x200).

margins. Waxy and frequently cream colored, these lesions present with rolled, pearly borders surrounding a central ulcer. Although superficial basal cell tumors commonly occur on the trunk and form a red, scaling lesion, pigmented BCC lesions are tan to black in color. Morpheaform BCC often appears as a flat, plaque-like lesion [3, 4]. The BCC is most commonly seen on the head (70%), on trunk (25%), penis, vulva, or perianal skin [5]. Adenoid type of BCC is considered to be a less malignant subtype of differentiated BCC which has no particular site predilection and it has been reported at various sites including axillae, back, leg, inner canthus of eye, chin, forehead, cervix and prostate. It can present as a pigmented or non-pigmented nodule or in an ulcer form. Histopathologically this rare variant shows arrangement of cells in the intertwining strands and radially around islands of connective tissue, resulting in a tumor with a lace like pattern. The lumina may be filled with a colloidal substance or with an amorphous granular material, but the secretory activity of the cells lining the lumina cannot be delineated even with histochemical methods [6]. There is paucity of literature on exact incidence of adenoid BCC but Bastiaens et al. reported the incidence of 1.3% [7]. An article by Zhang et al. have demonstrated that the ultraviolet (UV)-specific nucleotide changes in two tumor suppressor genes, TP53 and PTCH, are both implicated in the development of early-onset BCC [8]. Sunlight is the most frequent association with development of BCC; A latency period of 20–50 years is typical between the time of ultraviolet (UV) damage and BCC clinical onset. Both ultraviolet B and ultraviolet A radiation can cause BCC. Ultraviolet B is the primary agent responsible for most skin cancer. The incidence of BCC therefore rises with proximity to the equator, although 33% arise in parts of the body which are not sun exposed [9]. Other predisposing factors include exposure to arsenical compounds, coal tar, aromatic hydrocarbons, ionizing radiation and genetic skin cancer syndromes [3, 4] chronic immunosuppression in patients suffering from HIV and in transplant patients those on corticosteroids has been implicated in the genesis of BCC. The history of previous skin cancers also increases the likelihood of having a BCC in the near future [10].

Arsenic has been a causative agent for BCC. Albinism has been implicated. The lifetime risk for BCC in the white population has been estimated to be from 23–39% in men and women [11]. Surgery is the preferred treatment, like any other variant of basal cell carcinoma, with a margin of 0.5–1.0 cm around the lesion. The various other treatment modalities include, electrodesiccation, cryotherapy, radiation therapy, photodynamic therapy and pharmacological therapy. Topical agents used in the treatment of superficial BCC are topical 5-FU, imiquimod and tazarotene. Basal cell tumors located at areas of great aesthetic value, such as the cheek, nose, or lip, may be best approached with Mohs surgery [12]. The defects thus created near the nose can be covered by forehead skin flaps as they match the thickness, texture, and proximity.

They could be two stage or three stage procedure. The skin flaps could be median, paramedian, sickle type or oblique. Paramedian ipsilateral or contralateral skin flaps based on supratrochlear artery are the popular ones [13].

CONCLUSION

Basal cell carcinoma is the most common skin cancer. It has no site predilection and this skin cancer can present in a varied pattern. The above case presented like a sebaceous cyst near the medial epicanthus on operation grossly looked like melanoma, which subsequently proved to be an adenoid type basal cell carcinoma, which is one of the rarest forms of basal cell carcinoma.

Author Contributions

Rajesh Chaudhary – Substantial contributions to conception and design, Acquisition of data, Analysis and interpretation of data, Drafting the article, Revising it critically for important intellectual content, Final approval of the version to be published

Sanjeev sharma – Substantial contributions to conception and design, Acquisition of data, Analysis and interpretation of data, Drafting the article, Revising it critically for important intellectual content, Final approval of the version to be published

Ankit Shukla – Substantial contributions to conception and design, Acquisition of data, Analysis and interpretation of data, Drafting the article, Revising it critically for important intellectual content, Final approval of the version to be published

Guarantor

The corresponding author is the guarantor of submission.

Conflict of Interest

Authors declare no conflict of interest.

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