

Bilateral lower eyelid basosquamous cell carcinoma: a rare case

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Abstract

Basosquamous cell carcinoma is a subtype of basal cell cancer. It is known to be more aggressive than basal cell cancer. A 70-year-old male patient was admitted to our clinic for evaluation of cosmetic problems caused by masses on both lower eyelids for at least two years. The mass excision from and reconstruction of lower eyelids were performed. Histopathological examination of the resected masses was consistent with basosquamous cell carcinoma. We present a case of basosquamous cell carcinoma involving bilateral lower eyelids with a different clinical appearance. To the best of our knowledge, this is the first report of bilateral basosquamous cell carcinoma in a patient.

Keywords: Basosquamous cell carcinoma, Bilaterally, Eyelid, Periocular.

Introduction

Basal cell carcinoma (BCC) causes about 90% of malignant tumours of eyelids.¹ It grows slowly. Although it does not metastasize, it can invade orbital and nearby intracranial structures.² BCC is often seen in the lower eyelid, the medial canthus, the upper eyelid and the lateral canthus respectively.³ Histological subtypes of periocular BCC are nodular, infiltrative, sclerosing, micronodular, keratotic, basosquamous and superficial.^{2,3}

Basosquamous celled-carcinoma (BSCC) is an aggressive subtype of BCC. The term of basosquamous celled-carcinoma is a rarely seen tumour group consisting of the basal celled-carcinoma and squamous celled-carcinoma cells nested. BSCC is one of rarely seen malignancies of the periocular region and constitutes 1-2% of all skin carcinomas. This carcinoma is also known as metatypical carcinoma, basaloid squamous cell-carcinoma, and basal squamous cell-epithelioma.⁴ While the rate of recurrence is low in BCC, BSCC tends to recur. The risk of orbital invasion is high in BSCC while it is low in BCC.² In this report, we aimed to present the case of BSCC involving

bilateral lower eyelid with different clinical appearance. Although the cases of BCC of bilateral lower eyelids have previously been reported,⁵ to our knowledge, this is the first case of BSCC involving bilateral lower eyelids.

Case Report

A 70-year-old male patient presented to our clinic with the chief complaint of mass in the lower eyelids bilaterally in February 2011. He stated that the mass of the lower eyelids started about two years ago during similar periods of time. The patient was a farmer; therefore he had a history of exposure to sunlight in the field, especially during the summer when he spent at least half of the day in the field. He denied any history of radiation therapy or exposure to radiation.

The mass on the right lower eyelid was located 2 mm medial to lateral outer canthus. It was indurated, solid, painless, immobile with ulcerations over the top. Its size was of 9 mm by 6 mm (Figure-1a). The mass on the left lower eyelid was of 9 mm x 7 mm in size. It was nodular, painless, solid and immobile with hyperpigmentation over the part adjacent to the eyelashes (Figure-1b).

On examination; the corrected visual acuities with the Snellen chart were at the level of 0.1 in the right eye and

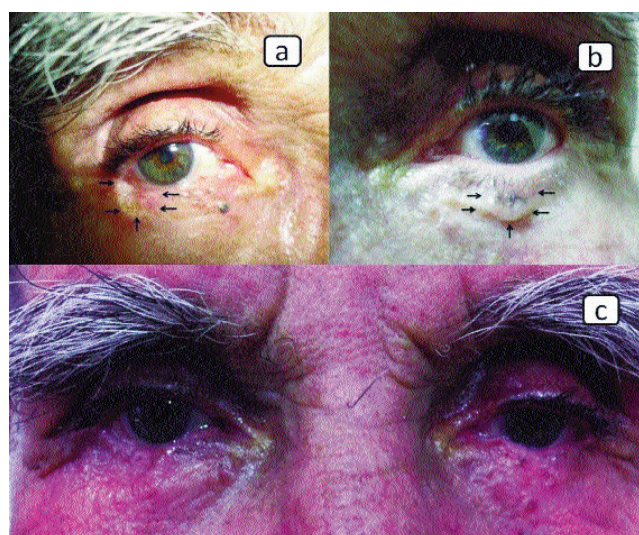


Figure-1: a) the mass in the right lower eye lid, b) the mass in the left lower eyelid, c) The post-operative image of the patient after two month of the surgery.

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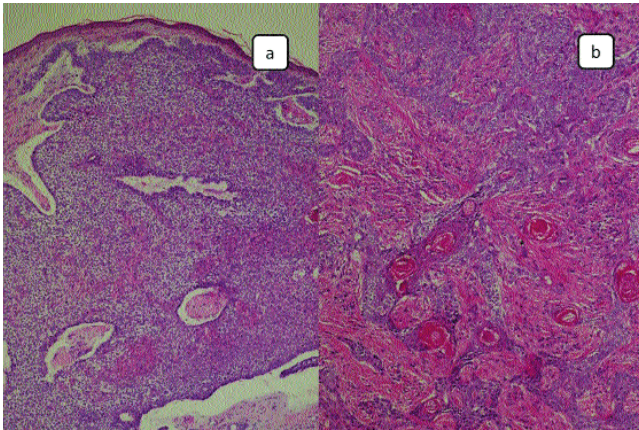


Figure-2: a) Solid islands of neoplastic cells displaying both basaloid and squamous differentiation are detected (Haematoxylin and eosin 40). B) The cells are showing squamoid differentiation with keratin formation in the central (Haematoxylin and eosin 100).

0.4 in the left eye. Bilateral intraocular pressures were within the normal limits. Anterior segment examination showed bilateral nuclear and posterior subcapsular cataract more intense in the right eye. Retinal pigment epithelial changes were observed in fundus examination bilaterally.

The mass excision from and reconstruction of lower eyelids were performed. The histopathological examination of the excised masses was consistent with BSCC. The surgical margins were clean without any perineuronal invasion. Histopathologic examination showed solid islands of neoplastic cells displaying both basaloid and squamous differentiation. The tumour cells were predominantly arranged as prominent palisading in the peripheral location (Figure-2a). Centrally, the cells showed squamoid differentiation with keratin formation, which were more obvious at high power in some areas (Figure-2b). Also there was no evidence of metastasis and lymphadenopathy with extensive work up. There was no postsurgical complication reported during follow-up visits. Functional and anatomical baseline levels were reached in both lower eyelids post-surgically (Figure-1c).

Discussion

BCC is the most commonly seen malignant tumour of the eyelid¹ involving more frequently the lower eyelid.^{3,6} Although it is the most commonly seen malignant tumour, the rate of the local spread and metastasis is less compared to the other tumours.² Periocular BCC subtypes are as follows; nodular, infiltrative, sclerosing, micronodular, keratotic, BSCC

and superficial.^{2,3} Histological subtypes are important in predicting prognosis. Because infiltrative, sclerosing, and BSCC subtypes tend to progress more aggressively than the others while nodular and superficial subtypes do not generally progress aggressively.⁷ BSCC is a rarely seen type of tumour composed of nests of BCC and squamous cell cancer cells.⁵ The rate of the recurrence and orbital invasion has been shown at a higher proportion in this type.²

The surgery is the preferred method of the treatment in BCC and cure with surgery is above 98%.⁸ Also, the surgery is the preferred method of treatment in BSCC, which was done in our case. No recurrence on follow-up was seen. In spite of low recurrence rate in BCC, BSCC may recur more frequently. The rate of the recurrence of BSCC involving periocular area in a large case series of 35 patients was reported as 17%.⁹ In the same study, the metastasis of the regional lymph nodes, brain metastasis were reported in 5 and 1 patients respectively while perineural invasion was shown in 3 patients. The authors reported high risks for the metastasis as male gender, existence of the tumour in the surgical borderline, lymphatic invasion, perineural invasion, a mass diameter larger than 2 cm, and local recurrence of tumour.⁹ Our case has not had any of these features except that the patient was male. In addition, the lung metastasis was also reported 9 years after the surgical intervention of BSCC.¹⁰ It has been emphasized that the patients who were diagnosed with BSCC need to be followed more closely because the possibility of aggressive behaviour of the tumour.⁹ In our case there was no evidence of any metastasis during initial systemic screening and during follow up visits.

Similar to BCC, BSCC most often involves the lower eyelids.⁹ The tumour was also located in both of lower eyelids in our case. Although involvement of both eyelids by BCC has been reported very rarely in healthy individuals,⁴ the case of BSCC in bilateral eyelids has not previously been reported in literature. Our case had noduloulcerative and nodular mass, with pigmentation over the superior part. In addition, another remarkable feature of our case is that both of these masses also show the same histopathological diagnosis as BSCC, which is a rare type although it has a different clinical appearance.

It should be kept in mind that the tumours with different clinical appearance and bilaterally located in the lower eyelids can represent BSCC. The patients with BSCC should have close and frequent follow-ups due to the risk of local invasion and systemic metastasis since BSCC can have an aggressive course.

References

1. Deprez M, Uffer S. Clinicopathological features of eyelid skin tumors. A retrospective study of 5504 cases and review of literature. *Am J Dermatopathol* 2009; 31: 256-62.
 2. Soysal HG, Soysal E, Markoç F, Ardiç F. Basal cell carcinoma of the eyelids and periorbital region in a Turkish population. *Ophthal Plast Reconstr Surg* 2008; 24: 201-6.
 3. Slutsky JB, Jones EC. Periocular Cutaneous Malignancies: A Review of the Literature. *Dermatol Surg* 2012; 38: 552-69.
 4. Salasche SJ, Shore JW, Olbricht SM. Periocular tumors. *Dermatol Clin* 1992; 10: 669-85.
 5. Askar I, Kilinc N, Aytekin S. Bilateral basal cell carcinoma symmetrically appearing on lower eyelids: A case report. *Acta Chir Plast* 2003; 45: 49-51.
 6. Nemet AY, Deckel Y, Martin PA, Kourt G, Chilov M, Sharma V, et al. Management of Periocular Basal and Squamous Cell Carcinoma: A Series of 485 Cases. *Am J Ophthalmol* 2006; 142: 293-7.
 7. Walling HW, Fosko SW, Geraminejad PA, Whitaker DC, Arpey CJ. Aggressive basal cell carcinomas: presentation, pathogenesis, and management. *Cancer Metastasis Rev* 2004; 23: 389-402.
 8. Mohs FE. Micrographic surgery for the microscopically controlled excision of eyelid cancers. *Arch Ophthalmol* 1986; 104: 901-9.
 9. Karatas Silistreli O, Ayhan M, Aytug Z, Gorgu M, Demirdover C. Periocular metatypical cell carcinoma: clinicopathologic correlation, management, and follow-up in 35 patients. *J Plast Reconstr Aesthet Surg* 2006; 59: 1280-7.
 10. Cunneen TS, Yong JL, Bengner R. Lung metastases in a case of metatypical basal cell carcinoma of the eyelid: an illustrative case and literature review to heighten vigilance of its metastatic potential. *Clin Experiment Ophthalmol* 2008; 36: 475-7.
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