A Rare Case Report of Sebaceous Cell Carcinoma of the Lower Eyelid

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Abstract: The sebaceous gland carcinoma is a very rare, highly malignant tumor of the eyelid arising from sebaceous glands of the eyelid such as meibomian glands, glands of Zeis, and sebaceous glands of the caruncle. We present here a case of 60 year old male with a history of painless swelling in the left lower eyelid of 6 months duration that was gradually progressive in nature. Examination showed a left lower eyelid mass measuring 2cm x 1.5cm extending from the mid point of the lower eyelid to the lateral canthus. The mass was yellowish in color, firm in consistency, non-mobile, non-tender and lobulated. The mass involved palpebral conjunctiva with irregular fungating surface. The skin overlying the mass was adherent. Vision was 6/18(Rt.Eye) and 6/12(Lt.Eye) without glasses. Anterior and Posterior segment of left eye was normal. Orbital margins were palpable normally. No proptosis and systemic lymphadenopathy. FNAC of the mass gave the picture suggestive of sebaceous carcinoma. Wide excision of the growth was done and the excised tissue sent for histopathological examination which confirmed poorly differentiated sebaceous cell carcinoma.

Keywords: sebaceous cell carcinoma, lower lid mass, fungating mass, malignant eyelid tumour, excision biopsy

1. Introduction

The sebaceous carcinoma is a very rare malignant neoplasm primarily found in the area of the eyelid. Most of these cases originate in the tarsal meibomian glands. Meibomian gland carcinoma is considered to be the second most common eyelid malignancy after basal cell carcinoma[1].

Risk Factor

The condition occurs more frequently in females. The upper eyelid accounts for the majority of cases. Older age is risk factor, as the reported median age at presentation has ranged between 57 and 72 years. However, tumors can arise in younger individuals who have been treated with periocular irradiation. The tumor has a higher incidence in Asia compared with North America.[2]

Prevalence

Eyelid SGC is relatively uncommon accounting for 1–5% cases of malignant eyelid tumors in the USA.[3] In the United Kingdom, the estimated annual incidence is 0.41 cases per million population.[4] In the Asian-Indian population, eyelid SGC is a relatively common eyelid malignancy accounting for 28–60% cases of all eyelid malignancies.

Clinical feature

These tumours are slow growing which may initially look benign in appearance and simulates to a number of benign pathological conditions like chalazion, papilloma, seborrhoeic keratitis, keratoacanthoma etc. A delay in diagnosis, which can be attributed primarily to ability of this tumour to masquerade as more benign conditions, often leads to inappropriate management with increased morbidity and mortality rates.[5]

Eyelid Sebaceous gland carcinoma is an aggressive tumor causing metastasis-related mortality in 3–41%[6]. On the basis of published literature, the clinical features predictive of poor prognosis are duration of symptoms greater than 6 months, tumor diameter exceeding 10 mm, involvement of both upper and lower eyelids, and orbital invasion[7]. The pathologic features predictive of poor prognosis are multicentric origin, poor differentiation, high infiltrative pattern, vascular invasion, lymphatic invasion, and pagetoid invasion by the tumor.[8]

Wide and complete surgical excision with microscopic monitoring of the margins should be done to prevent dissemination.[9]

2. Case Report

A 60 year old male presented with swelling of left lower eyelid since 6 months. Swelling was below the middle of eyelid margin involving outer half of the lid. It was insidious in onset and gradually progressive and not associated with pain and discharge from the swelling. There was no history of any trauma or any ocular and systemic disease in the past. No history of any surgical intervention.

![Figure 1: Appearance of the patient in first visit](image-url)
Clinical examination
On Ocular examination Visual acuity of the left eye was 6/6,N. On inspection the swelling was in outer half of lower eyelid upto lateral canthus. Size was 2cm x 1.5 cm and shape was irregular with surface lobulated towards skin side and fungating towards conjunctival side. The extent of the swelling was from the mid point of lower eyelid to lateral canthus and colour was yellowish on conjunctival side. However the swelling was normal in appearance but hypopigmented in lower part of swelling.

On palpation there was no rise in temperature over the swelling. It was firm in consistency and was adherent to the overlying skin. Rest Anterior and posterior segment was within normal limits. On ocular examination of right eye all findings were within normal limit.

Investigation
Routine Blood Investigations were done and found out to be normal showing Hb (Haemoglobin) = 11.8 gm/dl, TC (Total Count) = 7,900/cmm, Neutrophils= 44%, Lymphocytes=45%, Monocytes= 3%, Eosinophils= 8%, Basophil not found. RBS (Random Blood Sugar) = 116mg/dl.

CT (Computerized Tomography) Scan of the Brain was performed with 16slice MDCT(OPTIMA 540) followed by multi planer reconstruction and volume rendering without administration of intravenous contrast agent and no significant abnormality was detected in brain and skull. Infratentorial and supratentorial compartments were found out to be normal, there was no any evidence of any space occupying lesion, no focal areas of altered CT attenuation was noted in the cerebral parenchyma. There was no evidence of any extradural or subdural collections.

Figure 2: CT scan picture of brain and orbit

FNAC of the mass gave the picture of individual cells to be enlarged, pleomorphic with high N:C ratio, coarse chromatin, pigment nucleoli with moderate amount of vacuolated cytoplasm suggestive of sebaceous cell carcinoma.

Treatment
Wide excision of the growth was done with frozen section biopsy showing margins free of tumour cells and excised tissue was sent for histopathological examination.

Figure 3: Intraoperative procedure

Figure 4: Mass after excision

Figure 5: Post Operative day one

Histopathological report of the mass gave the picture of sebaceous cell carcinoma. Patient is in follow up with no recurrence since nine months post surgery.
3. Discussion

Sebaceous cell carcinoma commonly arises in the periorcular area, is an uncommon condition that arises from meibomian gland, gland of zeis or from sebaceous gland of caruncle, eyebrow and facial skin[7].

It is a very slow growing tumour commonly seen in elderly population with female predisposition. The upper eyelid involvement is two to three times more common than lower eyelid. In our case report, the tumour involves the lower eyelid.

Sebaceous cell carcinoma are typically found in women, more in 7th decade of life but in this case patient is of 60 yrs male with lower eyelid involvement.

Numerous factors have been reported to influence the prognosis. Tumour in excess of 10 mm are associated with a poor outcome[7] and in this case also size of the tumour is quite big.

Map biopsies, impression cytology and FNAB are some of tests to establish a diagnosis. Treatment of sebaceous gland carcinoma is primarily surgical. Surgical treatment may range from a local wide excision, with the margins extending well beyond the palpable tumour because of the diffusely infiltrating nature of neoplasm.[10]

Wide surgical excision was recommened by Reese[11] and the same recommendation was adopted for this case.

Prognosis is still regarded as being poor compared with most malignant eyelid tumour with a mortality 2nd only to malignant melanoma[6].

Therefore sebaceous cell carcinoma needs special attention not only because of its masquerading tendency but also because of its much higher prevalence in the Indian subcontinent in contrast to western world[12].

4. Conclusion

It goes beyond doubt that Sebaceous cell carcinoma is a great mimicker. On one hand, it mimics as simple a inflammatory clinical condition, on the other hand it may turn out to be a fatal metastatic tumor. Precise diagnosis followed by apt management with a multimodal approach should be undertaken to achieve good tumour control and reduce the morbidity and mortality in these patients.

References