

Recurrent Sebaceous gland carcinoma of Eyelid- A Case Report

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Abstract: A 63 years old male was surgically treated elsewhere for growth on left upper eyelid. On examination he was found to have fungating friable pedunculated non tender mass of about 30x40 mm in size involving middle part of left upper eyelid (about 60% of eyelid was involved). Histopathological examination from previous surgery show Sebaceous gland carcinoma of upper lid. Meticulous growth resection was carried out along with 2mm healthy lid margin. And reconstruction of lid margin was undergone by two stages Cutler Beared Operation. Post Operatively lid margin was clinically normal along with good aesthetic.)

Keywords: Aesthetic, Cutler Beared Operation, Eyelid reconstruction, Fungating mass, Masquerading lesion

I. Introduction

Sebaceous gland carcinoma is a highly malignant eyelid tumour arises from Meibomian gland, gland of zeis and sebaceous gland of caruncle and is considered as the third most common eyelid malignancy after Basal cell carcinoma and Squamous cell carcinoma. It is potentially a lethal tumour constituting 1-5.5% of all malignant epithelial eyelid tumour. It occurs during sixth to seventh decades with female preponderance of 2:1[1].

Sebaceous cells are predominantly present in Meibomian glands of tarsal plate, sebaceous glands of ocular adnexa (gland of zeis), sebaceous gland embedded in caruncle, brow and associated hair follicles of lid skin. Hence sebaceous cell carcinoma is more common in upper lid[2]. It may present as chalazion, blepharitis or conjunctivitis depending upon initial involvement of particular tissue termed as Masquerading lesions. There is tendency for the tumour for intraepidermal growth which may extend over palpebral and bulbar conjunctiva term as Pagetoid spread. Map biopsy of conjunctiva is indicated to look for pagetoid spread. The clinical features indicative of poor prognosis are duration of symptoms > 6months, tumour diameter exceeding 10mm, involvement of both upper and lower eyelids and orbital invasion.

II. Case Report

2.1 Case History

A 63 years old male presented at Eye OPD with a recurrent growth from left upper eyelid along with gradual diminution of vision left eye since 2 months. He had undergone multiple surgery elsewhere for the same eye with histopathological examination shows Sebaceous Gland Carcinoma .Now patient is coming with a recurrent fungating tumour mass from upper lid. Mass is pedunculated, friable, nontender about 30x40mm in size.(figure no 1) No history of trauma to his left eye. Past medical and ocular history was unremarkable. General and systemic examinations are within normal limit

2.2 Clinical Examination

A Soft fungating pedunculated mass measuring 30x40mm size present in left upper eyelid arising near the upper fornix. It was hyperaemic friable fix to the conjunctiva. Surrounding conjunctiva are congested. Detail ocular examination are given in table below.

	Right Eye	Left Eye
BCVA	6/6	HM+
Eye Movement	Full and Free in all the gaze	Full and free in all the gaze
Lids	Normal	A soft fungating pedunculated friable non tender mass fix to left upper tarsal conjunctiva measuring 30x40mm
Conjunctiva	Normal	Adjacent conjunctiva is congested, discharge material present
Cornea	Normal	Normal
Anterior chamber	Normal	Normal
Pupil	Normal size reacting to light	Normal size reacting to light
Lens	Pseudophakic	Cataractous
Fundus	Clear media optic disc was normal vessels and background are within normal limit	Media was hazy detail fundal artitecture are difficult to interpret because of cataract.

	FR+	
Intraocular pressure	13mm Hg	15mm Hg

Table Clinical Finding

2.3 Investigation

Histopathological examination of biopsied specimen show ulcerated skin with malignant tumours composed of cells arranged in lobules. Individual tumour cells are polygonal have moderate to abundant amount of clear cytoplasm and highly pleomorphic vesicular nuclei with distinct multiple nucleoli. Central areas of comedonecrosis are seen. It is made of numerous abnormal mitotic figures with occasional tumour giant cells. The tumour is seen invading the dermis with irregular infiltrating margins. The stroma show moderate to dense mix inflammatory cells infiltration. Features are of Sebaceous cell carcinoma. Perineural spread not seen. (Figure 8)

2.4 Diagnosis and Management

Taking into account the clinical presentation and investigation reports diagnosis of Sebaceous gland carcinoma is made. Adequate therapy requires wide excision of tumour mass with 2mm healthy tissue (Figure no 2) followed by reconstruction of lid by two stages Cutler Beared (C B)operation. The defect in the upper lid was measured and a horizontal full thickness incision of the same width is given on the lower lid about 4mm from the lid margin. Conjunctiva was separated from lower lid retractor and sutured with free edges of upper palpebral conjunctiva and formed posterior flap or lamellae. Scleral transplant of adequate size are attached over it which act as tarsal plate on later part.(Figure no. 4). Two vertical incisions are given from the edges of lower lid flap created and extended till the orbital rim or even beyond it. The skin and muscle of lower lid are pulled up under the bridge of lower eyelid which act as anterior flap or lamellae, were sutured with the skin and muscle of the upper eyelid defect(Figure no 5). Eye remain occluded for 8 weeks by the flaps. Stage 2 Cutlered Beared (C B) operation to open up the two lids were performed after 8 weeks, where the flaps are divided at the level of upper lid (Figure no 6 and 7). The lower lid component slides back, layered closure carried out. Post operatively regular monitoring carried out and found to be clinically normal and cosmetically good.

III. Discussion

The major function of the superior eyelid is to protect the eye from foreign objects and to provide tear film continuity over the cornea. Improper reconstruction of eyelid defects causes serious problems such as conjunctivitis, keratitis, and aesthetic deformities[3]. The complication rate of full thickness defects of superior eyelids is more than inferior eyelids.

A major aim is to excise a lesion completely for the treatment of eyelid tumours while maintaining anatomical and physiological functions and the cosmetic appearance of the eye. The reconstructed eyelid has to be mobile enough to protect the eyeball from negative outside effects.

If the lesion is limited inside the skin, skin grafts and local flaps could be enough but resections of full thickness tumours that have invaded tarsus and conjunctiva need more complicated surgical procedures for reconstruction.

Reconstruction procedures of superior eyelid defects change according to defect localization, size, depth, and the patient. Tissues used in superior eyelid reconstruction have to consist of well vascularized skin muscle, tarsoligamentous and mucosal membrane structures. The tissues that have these properties are generally neighbour structures[4].

Tumour defects that occupy less than 25% of superior eyelids could be fixed with primary saturation after transformation to a pentagonal shape, but full thickness defects that occupy 25–50% of the eyelid need lateral and medial canthotomy and cantholysis. Also, Tenzel semicircular flaps could be used in defects that occupy more than 50% of superior eyelids and have 2 mm tarsal tissue laterally and medially.

Cutler-Beard flaps could be used in defects that occupy more than 50% of superior eyelids[5]. The Cutler-Beard procedure is a two-stepped full thickness eyelid allocation process that is used in defects with intact levator aponeurosis. The most important advantage of this flap is that it is usable in nearly all defects. Complications of this flap include superior eyelid entropion, lid margin irregularity, eyelash loss, retraction because inferior eyelid cicatrization and bridge-flap necrosis [6]. Eyelash loss could be solved with artificial lashes or lash flaps [7].

Lid switch and lid bridge flaps prepared from the inferior eyelid are also alternatives to the Cutler-Beard flap [d]. Wide resections of the inferior eyelid and long-time exposure of the cornea to the outside are the most important disadvantages of these procedures. The Cutler-Beard flap is a good option for adequate results from an anatomical aspect in wide defects that occupy the superior eyelid.

IV. Figures



Fig 1 Tumour growth from upper conjunctiva



Fig 2 Resection of tumour along 2mm healthy tissue



Fig 3 Resected tumour mass where skin side being marked with 6-0 vicryl

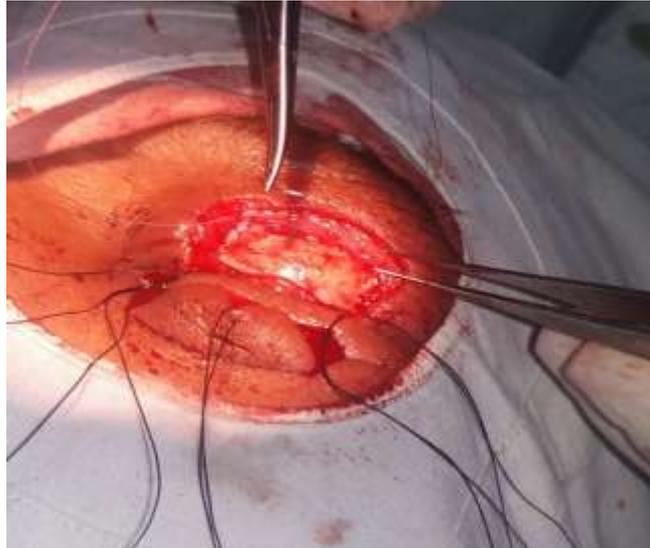


Fig 4 C B Stage 1 showing scleral implant placed between lamellae



Fig 5 C B Stage 1 complete

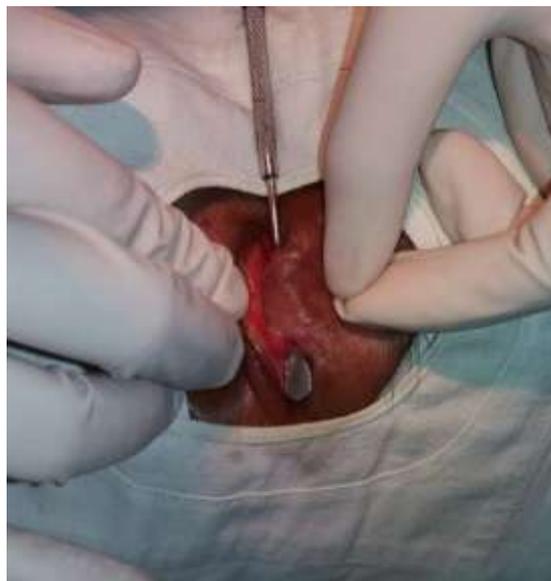


Fig 6 C B Stage 2 showing flaps passing under the bridge.



Fig 7 C B Stage 2 showing cutting of flaps after 8 weeks.

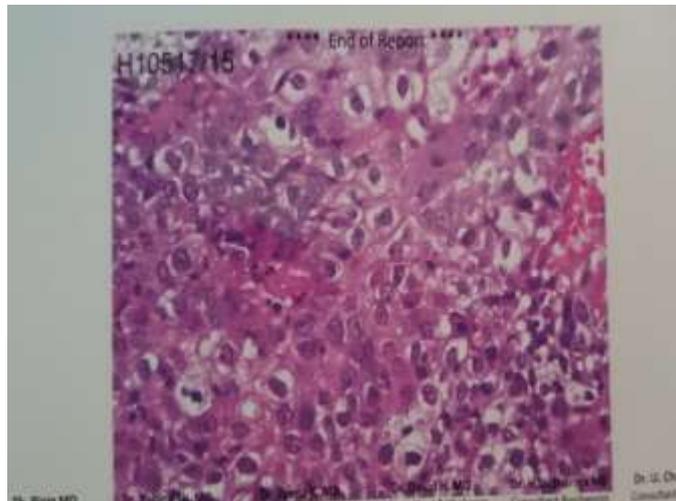


Fig 8 HPE showing features of Sebaceous gland carcinoma



Fig 9 1 month post operative C B Stage 2



Fig 10 2 months post operative C B Stage 2

V. Conclusion

Sebaceous gland carcinoma is one of the common tumour of eyelid after Basal cell carcinoma and squamous cell carcinoma. It is difficult to diagnose initially because of masquerades lesions. Once diagnose prompt surgical treatment is required, making a challenges to the surgeon because of recurrence tendency and cosmetic value in reconstruction of lid.

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