

Surgical Management of Upper Lid Sebaceous Cell Carcinoma

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Abstract

A large upper lid mass causing mechanical ptosis that was successfully managed by surgical excision with lid reconstruction in single step approach is described here. This mass was subsequently diagnosed as sebaceous cell carcinoma on histopathological examination.

Introduction

Sebaceous gland carcinoma is highly malignant and potentially lethal tumour that arises from meibomian glands; or glands of Zeiss; or from sebaceous glands of the caruncle, eyebrow, or facial skin. It can masquerade benign eyelid diseases. Clinically they may simulate chalazion, chronic blepharitis, superior limbic keratoconjunctivitis, pannus associated with adult inclusion conjunctivitis, squamous cell or basal cell carcinoma.¹ Hence, awareness of this condition and appropriate measures for accurate and early diagnosis is essential to avoid its spread.

History and Examination

A 50 year old female presented to ophthalmic out patient department of our hospital with chief complaints of painless, large upper lid mass since 2 months, with lid drooping and inability to open the eye completely with resultant visual compromise in straight gaze. The mass had started as a small nodule, but gradually increased in size after it was pricked with finger nail by the patient.

On examination, the best corrected vision for distance in both eyes was 6/18 on Snellen's chart with +1 D sphere. The right eye upper lid had mechanical ptosis due to an oval, nodular mass measuring 1.5 x 1.3 x 1 cm, pink in colour with yellow spots with black

discoloration at the tip of the undersurface of the mass, with no areas of ulceration or abnormal vasculature. It had non-homogenous soft to firm consistency. The adjacent 2 mm skin showed induration, however rest of the upper lid skin was normal and movable. The lid margin was normal with no loss of eyelashes. The lower lid was normal. On everting the upper lid, palpebral conjunctiva showed minimal papillary congestion. Slit lamp examination of the right eye showed congested bulbar conjunctiva with grade II nuclear sclerosis. Rest of the anterior segment examination was within normal limits with normal pupillary reflex. Fundus examination of the right eye revealed multiple, small, soft drusens scattered over the macula, while rest of the findings were within normal limits. The left eyelid, anterior segment examination and pupillary reflex was normal. Fundus examination of the left eye also revealed multiple, small, soft drusens scattered over the macula, with normal findings in rest of the visualized fundus. The extra ocular movements of both the eyes were normal and bony margins were clinically intact. The preauricular, submandibular or any other lymph nodes were not palpable.

The right eye USG B Scan showed no orbital extension. USG abdomen ruled out any visceral involvement. All routine blood investigations along with liver and renal functions were also normal. All other systemic examination were within normal limits.

Surgical Management

A wide surgical excision of the mass with lid reconstruction was planned. Informed consent was taken. The upper lid was infiltrated with 2% lignocaine with adrenaline along with hyalase. 4 ml peribulbar block was also given superiorly. Traction sutures with

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4-0 silk were placed 1 cm beyond the margins of the mass. Lid guard was placed to avoid any accidental injury to the cornea during surgery. Skin incision was marked with gentian violet 6 mm away from the mass in wedge fashion with apex pointing upwards. Full thickness lid and the tumour was excised along the mark. Haemostasis was achieved with cautery. As the resultant lid defect was approximately 30 - 40%, the lid was repaired with direct closure. The conjunctiva was reapposed with 6-0 ethilon continuous suture. The bites were taken sub conjunctivally. Both the upper and lower ends of this suture were brought out through the skin and secured over the forehead at the end of the surgery. Orbicularis oculi muscle and skin were sutured in separate layers using 7-0 vicryl. While suturing, care was taken to avoid any dead space or overlapping of the wound edges to ensure adequate wound closure. At the end, traction

sutures were cut. Eye was padded with antibiotic ointment and excision biopsy sample was sent for histopathological examination.

Post operatively, patient was treated with systemic and local antibiotics for 7 days. The patient was observed for any bleeding, infection or any wound gape. On 7th post operative day, the loose end of the suture of deeper layer was pulled out and skin sutures were removed.

The histopathological examination of the biopsied mass revealed tumour cells arranged in lobular pattern showing irregular, ill defined borders with abundant foamy vacuolated cytoplasm, nuclear pleomorphism, prominent nucleoli, and 2 - 3 mitotic figure per high power field that was suggestive of moderately differentiating sebaceous cell carcinoma.

In our patient the upper lid had healed very well without any cosmetic blemishes, ptosis or any



Fig. 1 :Pre operative clinical photo showing upper lid mass



Fig. 3 :Post operative :Lid appearance after the reconstruction



Fig. 2 :Surgical excision of full thickness lid with the mass

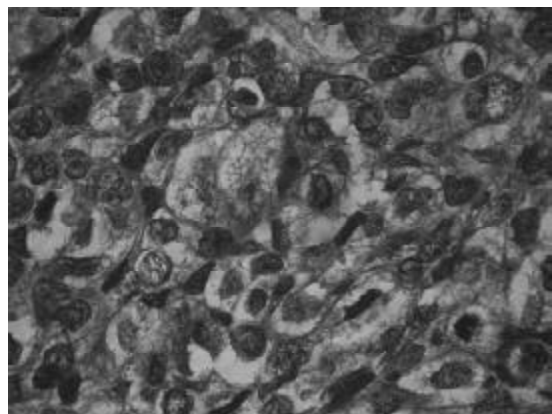


Fig. 4 :Histological appearance

abnormalities of the margin and there was no evidence of any recurrence on subsequent follow ups .The management of this large lid mass was successful due to early diagnosis and prompt surgery.

Discussion

Carcinoma of the sebaceous glands is of considerable significance to ophthalmologists as they occur more frequently on the lids and are commonly misdiagnosed as chalazion or recurrent blepharitis. They are more often seen in females, around 5th - 6th decade and occurs more frequently in the upper lid due to its abundant distribution of sebaceous gland.² This tumour may have varied clinical presentation.³ It may occur as a nodular mass located deep in tarsus with loss of lashes, or as a diffuse swelling within tarsal plate with firm to hard texture. Any recurrent chalazion especially with loss of eye lashes or unilateral chronic blepharitis or superior limbic keratoconjunctivitis should raise the suspicion and warrant biopsy.³ Sometimes, spread to the lacrimal gland or to the orbit may be the presenting feature which may mislead the diagnosis, but CT scan would be helpful in such cases. A characteristic feature of sebaceous cell carcinoma is the way it infiltrates. Intraepithelial spread or pagetoid spread is the infiltration of single tumour cells into the overlying epithelium and may lead to telangiectasia of conjunctival vessels. Sebaceous cell carcinoma may also spread through direct extension into adjacent structures such as the intracranial cavity, orbit and paranasal sinuses. It may spread to regional lymph nodes like intraparotid, preauricular and submandibular. Distant metastases to organs like liver, lung, brain and bone are possible, but rare. Sebaceous cell carcinoma may be associated with the development of coexistent distant primary malignancies, most common being colon carcinomas followed by genitourinary carcinoma.

They are best managed by wide surgical excision with the margins extending well beyond the palpable tumour because of the diffusely infiltrating character of neoplasm. The adequacy of the excision may be estimated by frozen section monitored on Moh's surgical technique.⁴ As there are possibilities of conjunctival intra epithelial spread of sebaceous carcinoma, biopsies of conjunctiva away from the lesion and their histopathological examination may be considered in selective cases.⁵ These lesions may be multicentric and even with good histopathological control of the margin, local recurrence rate can be upto 30% in few cases. Radiotherapy is reserved only for those patients who are too ill for surgery or have refused surgery. In case of orbital invasion, exenteration may have to be considered in advanced cases.

After the surgical excision of tumour, lid reconstruction is also equally important. The goals of lid reconstruction are: to reestablish the anatomic integrity, restore its physiological functions and provide best cosmetic appearance.⁶ The reconstruction of the upper lid depends upon the amount of lid defect and accordingly various procedures can be utilized for the repair. For the defect < 40%, in elderly individuals due to excessive lid laxity and stretchability as was the case of our patient, a direct closure in layers can be done.

Generally, these patients respond well to the surgical excision. However, the prognosis is poor if the diagnosis is done beyond 6 months, if the tumour size is more than 1 cm, in cases with lymphatic spread or orbital invasion or highly infiltrative growth pattern on histopathological examination.

Conclusion

With the increased awareness of the varied manifestation of this tumour, improved

diagnostic technique, more aggressive therapy and knowledge of different techniques for lid repair it is possible to successfully manage such tumours in single step.

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CHOLESTEROL LOWERING AND EZETIMIBE

Ezetimibe and Simvastatin in Hypercholesterolaemia Enhances Atherosclerosis Regression (ENHANCE) trial, which addresses the question of whether additional lowering of low-density lipoprotein (LDL) cholesterol with ezetimibe beyond the level achieved with simvastatin beneficially affects the progression of atherosclerosis.

When administered in combination, ezetimibe and a statin lower plasma LDL cholesterol below the level that can be achieved with a statin alone.

The ENHANCE trial was conducted in patients with familial hypercholesterolaemia. Combination therapy resulted in LDL cholesterol levels that were 27% lower than those achieved with monotherapy and C-reactive protein levels were also significantly lower with combination therapy. Unexpectedly, however, the trial showed that despite increased lowering of LDL cholesterol in the group that received ezetimibe, the rate of progression of atherosclerotic disease, as measured by intima-media thickness, was the same in the two study groups. It is this paradox, which is at odds with our traditional understanding of the relationship between LDL cholesterol and atherosclerosis, that has puzzled investigators and clinicians alike.

Until such data are available, it seems prudent to encourage patients whose LDL cholesterol levels remain elevated despite treatment with an optimal dose of a statin to redouble their efforts at dietary control and regular exercise. Niacin, fibrates, and resins should be considered when diet, exercise, and a statin have failed to achieve the target, with ezetimibe reserved for patients who cannot tolerate these agents.

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