Recurrent Meibomian gland Carcinoma of Lower Eyelid in Male: A case report

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ABSTRACT

Meibomian gland carcinomas are very rare and locally invasive eyelid malignancies. It has predilection for upper lid and mostly occurrs in elderly females. An unique case of recurrent mebomian gland carcinoma of lower eyelid is reported in a 54 years male. Tumor and full thickness lid was excised followed by lid reconstruction by Mastarde rotational flap. Histopathology report revealed moderately differentiated meibomian gland carcinoma. One year postoperative recurrence was observed for which patient was again advised for wide surgical excision followed by post operative radiotherapy.

Key words: *Chalazion, Eyelid reconstruction, Meibomian gland tumors, Sebaceous carcinoma*

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INTRODUCTION

Sebaceous gland carcinoma (SGC) accounts for less than 1 % of all cutaneous malignancies[1]. Meibomian glands are specialized form of sebaceous gland present at the rim of eyelids. Meibomian gland carcinoma are relatively rare tumors representing about 1% of all malignant tumors of the eyelid[2]. It is most lethal eyelid malignancy second only to malignant melanoma of the eyelid[3].They are locally invasive and metastasize to liver , brain and lymph nodes . SGC usually occurs in the 6th to 7th decade of life and more frequently in women than in male [4,5]. It has predilection for upper eyelids [2,6]. Clinically it masquerades benign and inflammatory conditions like chalazion and blepheritis, which may result in delayed diagnosis [7]. Which can be confirmed only by histopathology. Demonstration of intracytoplasmic lipid by fat stains establishes the diagnosis[8]. Early diagnosis with wide and complete surgical excision is advised to prevent dissemination. Recurrence rate of 9-36% and 17-28% lymph node metastasis have been reported in literature[9]. Poor prognostic factors are upper eyelid involvement, poor tumor differentiation, multicentric origin, intraepithelial spread and orbital extension[9]. We report a case of recurrent meibomian gland carcinoma of lower eyelid in 56 year male, recurrence noted slightly away from initial site, after complete remission for one year.

CASE REPORT

A 54 year male farmer presented to Ocular oncology & Occuloplasty clinic of Department of Ophthalmology, Institute of Medical Sciences, Banaras Hindu University, Varanasi, UP, India in April 2014 with complain of slow growing, painless, nodular mass on right lower eyelid for two years duration. There was no history of pain, redness or discharge from the mass. Patient was a heavy smoker and tobacco chewer. He was non diabetic. His vital signs were stable and on systemic examination there was nothing abnormal. The mass was multinodular, firm in consistency, non-tender, mobile and 2.5 cm x 2.0cm x 2.5 cm in size at lateral canthus of right eye. The surface was irregular and overlying skin was tense with telangiectases (figure 1 a,b). Adjacent skin around the tumor was indurated but rest of the lid skin was normal and movable. On eyelid eversion, palpebral conjunctiva showed congestion and yellowish –white lobular architecture of tumor and loss of eye lashes(figure 1c). Orbital margins were palpable normally. There was no displacement of eyeball and extraocular movement was normal. The examination of opposite eyelid, anterior and posterior segment was within normal limit. There was no lymphadenopathy. Left eye was within normal limit except early lental changes. CT Scan, X-ray chest, ultra sonography whole abdomen and renal and liver function test were suggestive of no distant metastasis. It was suspected as malignant mass hence full thickness excision of mass along with healthy tissue was done under local anesthesia and lid defect was reconstructed by Mastarde rotational flap (figure 2a, b). Excised tissues were sent for histopathological examination which revealed as moderately differentiated sebaceous gland carcinoma with tumor free margin(figure 3 a,b,c). Patient was all right for

one year (figure 2c), after that he again noticed nodular mass away from previous location (figure 4). The patient was again advised for wide surgical excision followed by post operative radiotherapy.

Figure 1(a,b,c): Preoperative clinical photographs of patient having Sebaceous gland carcinoma of right lower eyelid, showing nodular mass at lateral canthus (a,b). Eyelid eversion demonstrates yellowish–white lobular architecture of tumor and loss of eye lashes (c).

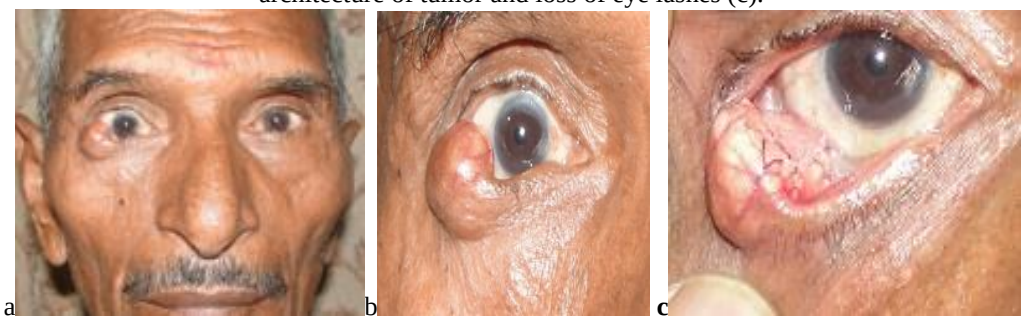


Figure 2: Clinical photograph of patient, per-operative (a), immediate post-operative (b) and after six month (c)

Figure 3: Excised tumor mass (a), Microphotograph H and E X40 (b) and H and E X 100 (c) showing moderately differentiated MGC showing lobules of malignant cells with sebaceous differentiation / intra-cytoplasmic lipid**.**

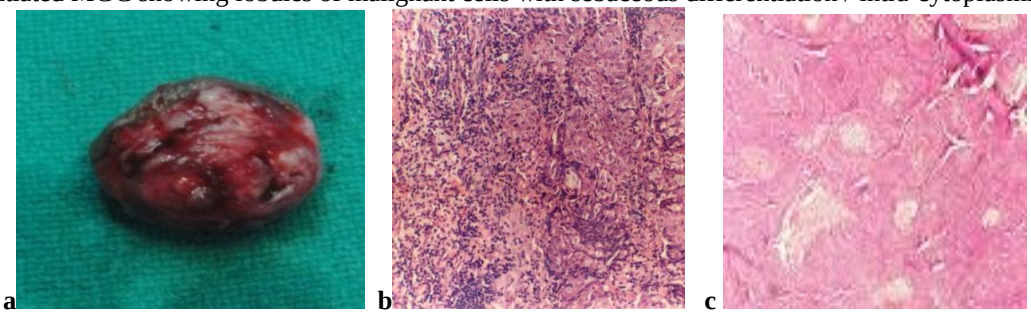
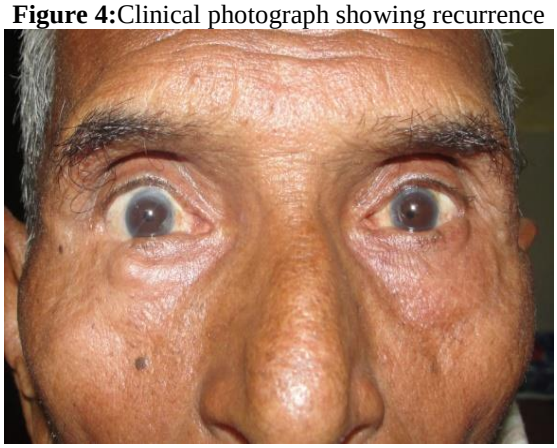


Figure 4: Clinical photograph showing recurrence



DISCUSSION

Meibomian gland carcinoma is rare but aggressive eyelid malignancy. It is a very slow growing tumor commonly seen in elderly population with female predisposition [5,9]. The upper eyelid involvement is two to three time more common than lower lid probably due to large number of meibomian glands in the upper eyelid .However in our case report, the patient is male, slightly younger age group and tumor involves lower eyelid.

Meibomian gland carcinoma can be treated well by wide surgical excision of the lesion with normal tissue and lid reconstruction [6].One can use Frozen section or Mohs surgery for intraoperative evaluation of , margins of lesions for residual tumor but these may not be completely reliable because sebaceous carcinoma can have patchy epithelial involvement with skip areas[10]. In our case wide surgical excision lead to moderate lid defect which was reconstructed by Mastarede check rotation flape and histopathology revealed tumor free margin. This case is unique, also because of complete remission which persisted for one year after that new lesion appeared, which may be because of unique feature of meibomian carcinoma. Unlike other periocular malignancies like basal cell carcinoma and squamous cell carcinoma, meibomian gland carcinoma has multicentric origin and pagetoid or intraepithelial spread. The meibomian gland carcinoma can spread through direct, lymphatic or hematogenous route. The most common site of extension include orbit, periauricular and submandibular lymph nodes and parotid gland. Radiotherapy can be alternative or adjunct to surgery [10].

CONCLUSION

Meibomian gland carcinoma are relatively rare eyelid tumor. Early diagnosis and wide surgical excision of growth with healthy tissue and long -term follow-up is essential since it is most aggressive eyelid tumor and has high rate of local recurrence, regional and distant metastasis.

REFERENCES:

1. Ghosh SK, Badopadhyay D , Gupta S , Chatterjee G, Ghosh A. Rapidly growing extraocular sebaceous carcinoma occurring during pregnancy :A case report . Dermatol Online J 2008; 14:8
2. Doxanas MT ,Green WR. Sebaceous gland carcinoma :Review of 40 cases.Arch Ophthalmol 1984 ;102 : 245-9.
3. Marlis Z,Hintschich CR, Garner A, et al .Sebaceous carcinoma of the eyelid : Clinicopathological study .Br J Ophthalmol. 1989 ;82 ; 1049-55.
4. Kass LG , Hornblass A . Sebaceous carcinoma of ocular of the ocular adnexa .Surv Ophthalmol 1989; 33: 477-90.
5. Rao NA, McLean JW, Zimmerman LE. Sebaceous carcinoma of the eyelid and caruncle : correlation of clinicopathologic features with prognosis. In Jakobiec FA (ed): Ocular Adnexal Tumors. Birmingham, Aesculapius. 1978, 461-76.
6. Wolfe JT III , Yeatts RP, Wick MR,et al . Sebaceous carcinoma of the eyelid : Errors in clinical and pathologic diagnosis .Am J Surg Pathol 1984 ; 8 : 597-606.
7. Maurya RP, Bhatia RP ,Thakur V, Maurya OPS, Kumar M . A clinic-pathological study of meibomian gland carcinoma. Ann Ophthalmol 1997 ; 29(1) : 27-30.
8. Yeatts RP, Waller RR .Sebaceous carcinoma of the eyelid : Pitfalls in diagnosis. Ophthalmic Plastic Reconstructive Surg 1985 ; 1: 35-42.
9. Ni C , Seari SS ,Kou PK ,Chu FR, Chong CS ,Albert DM et al. Sebaceous cell carcinoma of the ocular adnexa . Int Ophthalmol Clin 1982;22: 23-61
10. Kapoor R . Primary Meibomian gland carcinomas: a technical challenge to treat from Radiotherapist prospective . Austin J clin Case Rep 2014;1(3): 1-3.