

## Case Report

# Case report of a rare case of meibomian gland carcinoma of the lower eyelid

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**Received:** 14 June 2016

**Accepted:** 02 July 2016

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### ABSTRACT

The sebaceous gland carcinoma is a very rare, highly malignant tumour of the eyelid arising from sebaceous glands of the eyelid such as meibomian glands, glands of Zeis, and caruncle. The tumour is more commonly seen in elderly females and more commonly involve the upper eyelid. We present a rare case of meibomian gland carcinoma of the left lower eyelid in a 59-year-old female who came with a history of a slow growing painless swelling of the lower eyelid. Histopathological examination confirmed poorly differentiated meibomian gland carcinoma.

**Keywords:** Sebaceous gland carcinoma, Meibomian gland carcinoma, Lower lid mass

### INTRODUCTION

The sebaceous gland carcinoma is a lethal highly malignant slow growing tumour of the eyelid arising from meibomian glands located in the tarsal plate, glands of Zeis, sebaceous glands of caruncle, and periocular skin. It is third most common malignancy of the eyelid and the incidence rate is about 1-1.5%.<sup>1</sup>

Meibomian gland carcinomas are relatively rare tumours representing about 1% of all malignant tumours of the eyelid.<sup>2</sup> The upper eyelid is the most common site of origin seen in 63% of cases, the lower lid in 27% of cases, and both in 5% of cases.<sup>1</sup> SGC is seen more commonly in women in the 6<sup>th</sup> to 7<sup>th</sup> decade of life.<sup>3</sup> It has a high recurrence rate (9-36%), with a significant metastatic potential, and a high mortality rate.<sup>4</sup>

The tumor mimics benign and inflammatory conditions like chalazion, meibomianitis, chronic blepharoconjunctivitis so early diagnosis becomes difficult which may result in delayed diagnosis leading to wide spread of the tumour.<sup>5</sup> The tumour may spread regionally into the lacrimal sac, nasolacrimal duct, preauricular and

submandibular lymph nodes, and rarely disseminate hematogenously to lung, liver, bone and brain.<sup>6</sup> The carcinoma may also exhibit multicentric spread to the other eyelid, conjunctiva, or corneal epithelium.<sup>7</sup> Diagnosis is established by demonstration of intracytoplasmic lipid by fat stains. Wide and complete surgical excision with microscopic monitoring of the margins should be done to prevent dissemination.<sup>8</sup>

### CASE REPORT

We present a case report of a 59 years old female patient who presented in the OPD with a painless, swelling in the left lower eyelid since 9 months. The mass started as a small nodule but gradually increased in size. She also complained of itching and spontaneous bleeding from the mass. There was no history of pain, redness or discharge from the mass.

On examination, a left lower eyelid mass measuring of 11x5 mm extending from the left lateral canthus to the junction of medial half and lateral half of the eyelid was seen. It was pink in colour, firm in consistency, nontender, mobile, lobulated mass, with an irregular

fungating surface and skin over the mass was adherent with loss of eyelashes (Figure 1). Rest of the lid skin was normal and movable.

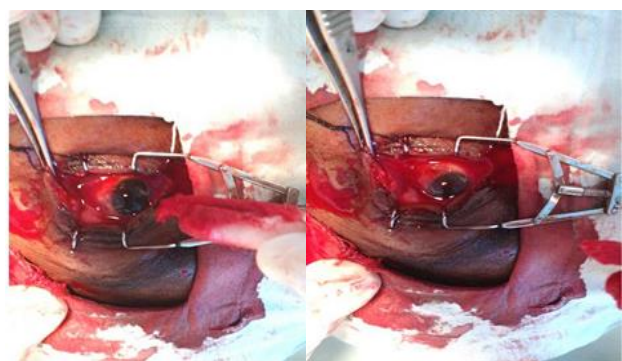


**Figure 1: Mass of size 11 x 5 mm extending from the lateral canthus to the junction of medial half and lateral half of the lower eyelid.**

The best corrected visual acuity was 6/9. Orbital margins were palpable normally. There was no displacement of eyeball and extraocular movement was accurate in all directions of gaze. The preauricular, submandibular or any other lymph nodes were not palpable. The anterior and posterior segment of the right eye was within normal limit. On systemic examination, there was no regional or systemic lymphadenopathy.

**Treatment**

Wide excision of the growth was done (Figure 2). Excisional biopsy was done and the excised tissues were sent for Histopathological examination which revealed poorly differentiated meibomian gland carcinoma.



**Figure 2: Intraoperative photos during excision of mass.**

**DISCUSSION**

Carcinoma of the sebaceous glands though rare, is a highly aggressive malignant tumour with a mortality rate second only to malignant melanoma.<sup>9</sup> 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. Any patient presenting with a recurrent chalazion, especially with loss of eyelashes or with unilateral chronic blepharitis should raise the suspicion and biopsy should be advised since delay in diagnosis leads to a poor prognosis.<sup>2,10,11</sup>



**Figure 3: Clinical photograph of patient postoperatively.**

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.<sup>12</sup> After the surgical excision of tumour, lid reconstruction is also equally important.<sup>2,14</sup>

Mohs micrographic surgery is the most common and effective method of treatment. Mohs surgery helps in tissue sparing since only the required area is excised so better cosmetic and functional integrity of the eyelid can be maintained with fewer scars and less complication during reconstruction. Comprehensive examination of tumour margins is done so risk of recurrence is decreased with Mohs surgery.

Radiotherapy, though not a reliable method can be used in patients who are too ill for surgery or have refused surgery. Recurrence of tumour usually occurs within 3 years following radiotherapy alone.<sup>13</sup>

Systemic chemotherapy can be considered prior to or after surgical excision. In case of spread of tumour to regional lymph nodes, the patient should be referred to a head and neck surgeon for possible lymph node or radical neck dissection.

Because of delay in making diagnosis and delay in the treatment, the mortality rate is 5-10% and 25% in case of distant metastasis. The poor prognostic factors include upper or both eyelids involvement, tumour size of 10 mm or more, duration of symptoms >6 months (mortality

38%), poorly differentiated tumours, infiltration into blood vessels and lymphatics, orbital extension, multicentric origin, and finally pagetoid spread.<sup>14</sup>

*Funding: No funding sources*

*Conflict of interest: None declared*

*Ethical approval: Not required*

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**Cite this article as:** Devi B, Das RK, Medhi S. Case report of a rare case of meibomian gland carcinoma of the lower eyelid. *Int J Res Med Sci* 2016;4:3629-31.