**Meibomian Gland Carcinoma - A Brief Case History**

**K. Kalaivani MS**

**Introduction**

Sebaceous Carcinoma is an aggressive tumor and the most lethal of all eyelid malignancies. It forms about 1-3% of all malignant tumors of the lid. Sebaceous carcinoma presents in adults after 30 years of age with mean age being about 65 years. Younger individuals who received radiation therapy for bilateral inherited Retinoblastoma can acquire sebaceous carcinoma as a secondary tumor. There is a female preponderance (57 – 77 % patients are women). The tumor arises from the Meibomian glands of tarsus, from the Zeis glands in association with eyelashes and also from the caruncle. It affects upper lid 2-3 times more frequent than lower lid.

Sebaceous Carcinoma of non eyelid skin is extremely rare and therefore every ophthalmologist should be familiar with the characteristics of this neoplasm.

**Case History**

A 60 year old female presented to us with a firm nodular swelling of size 5×3 mm in the upper lid, left eye of 4 months duration, 1mm away from the lid margin with no pain or tenderness, skin over the swelling freely moving, not subsiding with treatment. Because of the age and consistency, we asked her to go for FNAC. But she didn’t turn up. Then, after 6 months, she came with the larger, painless swelling of size 20 × 10 mm, arising and projecting beyond the upper lid.

Skin over the swelling was smooth and freely mobile over the outer surface, while the conjunctiva appeared adherent in most of the areas below. Despite the size of the tumor, there was no ulceration of the skin or conjunctiva. Globe appeared normal on external, slit lamp and ophthalmoscopic examination. Right eye and adnexa showed no abnormality. **CT scan of the orbit** was taken to look for the intra orbital extension and it was found to be normal.

**Discussion**

Most frequent site of origin is Meibomian glands of upper eyelid. It starts as a firm to hard, small painless nodule resembling a chalazion. Because of the deep localization of the tumor within the tarsus, the distinctive yellow colouration will not be seen initially. Until sebaceous carcinoma erupts out of the tarsus, skin is generally movable over the lesion differentiating it from squamous cell carcinoma and the basal cell carcinoma. It may break open on the conjunctival side (44 – 80 % incidence) with the fungating or papillomatous appearance, sometimes present as unilateral blepharo conjunctivitis (masquerade syndrome) causing a prolonged delay in diagnosis.
A most striking point in this case is the lack of ulceration of the skin and conjunctiva. The non-ulcerating character of Meibomian gland carcinoma was emphasized by Willis (1953), Scheie and others (1964). Meibomian carcinoma can present misleadingly as anterior orbital or lacrimal gland tumor (direct spread). Orbital extension occurs in 6-16% of the cases. It is associated with increased mortality rate up to 75%. Sebaceous carcinoma locally metastasize to pre auricular, cervical and supra clavicular lymph nodes in 17 – 23 % of cases. Site of distant metastasis include lung, liver and brain.

Well defined edge, lack of skin and conjunctival involvement and lack of local and distant metastases nearly after 10 months in this case, contrast sharply with the experience of some authors. For example, Scheie and others (1964) observed that many meibomian gland carcinoma metastasize and are ultimately fatal; Magnus (1947) reported a fatal case with liver metastases. However, Subramaniyam and others (1965) said that metastases occur late in the meibomian gland carcinoma and Willis (1953) considered them to be insignificant.

**Treatment includes**

- Surgical excision with full thickness eyelid resection including 3-5 mm of clinically tumor free margins should be done and the surgical margins should be monitored by frozen sections to ensure that there is no residual tumor.
- Intra epithelial cytoplasmic tumor invasion is treated with double freeze thaw cryotherapy or with radiotherapy (5000-6000 Gy).
- Orbital invasion is managed by exenteration of the orbit.
- Documented regional nodes can be managed by radical neck dissection and external beam radiotherapy.

**Recurrence**

9 – 36 % recurrence within 5 years of surgical removal. Local recurrence occurs in lid and orbit in 6 - 17 % of cases. In 17 – 28 % of cases, recurrence involves the regional lymph nodes.

**Prognosis**

- < 6 months duration - 14% mortality.
- > 6 months duration - 38% mortality.
- < 10 mm size - 18% mortality.
- > 10 mm size - 60% mortality.
- Involvement of upper and lower eyelid with nodules – 83 % fatality.
- Tumors of Zeis and Meibomian glands - 58% mortality.
- Orbital, vascular and lymphatic invasion, poor differentiation all carry worst prognosis.

**Conclusion**

Although sebaceous carcinoma is considered to be the most malignant and fatal of all lid tumors, there has been a recent improvement in prognosis due to early diagnosis and aggressive treatment. All patients need to be followed up closely for local recurrence, regional lymph node involvement and distant metastasis.

**References**