ISSN- O: 2458 - 868X, ISSN–P: 2458 – 8687
National Library of Medicine - ID: 101731606

International Journal of Medical Science and Innovative Research (IJMSIR)
IJMSIR : A Medical Publication Hub
Available Online at: www.ijmsir.com
Volume – 7, Issue – 1, February – 2022 , Page No. : 26 - 29

Meibomian gland carcinoma – A case report

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Citation this Article: Dr. Apara Desai, Dr. Anne Wilkinson, Dr. Sadhana Mahore, Dr. Sabiha Maimoon, Dr. Anjali Patrikar, “Meibomian gland carcinoma – A case report”, IJMSIR- February - 2022, Vol – 7, Issue - 1, P. No. 26 – 29.

Type of Publication: Case Report

Conflicts of Interest: Nil

Abstract

Sebaceous gland carcinomas are rare cancers involving the sebaceous glands (meibomian glands). They most often affect the eyelids. It is the second common malignancy involving eyelids after basal cell carcinoma. Meibomian carcinoma may form a local mass or may diffusely thicken the eyelid. It may also resemble inflammatory processes because of predilection for intraepithelial spread. It resembles a variety of other malignancies, hence establishing correct diagnosis is necessary as the overall mortality can be as high as 22%. As sebaceous carcinomas may metastasize, histopathological examination holds immense importance in diagnosis of this condition. Surgical excision is the treatment of choice for sebaceous carcinomas. We hereby present a case of a 75 years old male with a mass over the right upper eyelid since 6 months.

Keywords: Sebaceous carcinoma, eyelids.

Introduction

Sebaceous carcinoma (SC), or meibomian gland carcinoma, is a malignant tumor derived from the adnexal epithelium of sebaceous glands. It may arise in ocular or extraocular sites and exhibit such a variety of histologic growth patterns and diverse clinical presentations that the diagnosis is often delayed for months to years. [1] Although sebaceous carcinoma may arise from any sebaceous glands of the body, but they most commonly occur in meibomian glands or tarsal glands. Meibomian gland carcinomas are relatively more common in Asians. Meibomian carcinomas occur in both sexes with slight preponderance to females. Usually,

these tumors develop in middle life, and, as with many other neoplasms, the age between 40 and 80 is considered most vulnerable.[3] Metastasis of meibomian carcinoma is generally along the path of lymphatic drainage. Treatment by surgical excision is advisable, although recurrences frequently develop if excision is not complete. Therefore, histopathological examination is necessary to rule out differential diagnosis. We report a case of a 75year old male presenting with swelling over upper eye lid.

Case Report

A 75 years old male came to ophthalmology out-patient department with chief complaints of swelling over right upper eyelid since 6 months. It was associated with serosanguinous discharge. No signs of inflammation were present. No other significant history present.

On local examination:

A mass of size 4x6 cm was present over right upper eyelid. The mass was soft, non-tender and mobile. The mass was bleeding on touch and was associated with serosanguinous discharge (Figure 1).

MRI (plain + contrast)

Showed an ill-defined exophytic soft tissue lesion arising from right upper eyelid involving the ocular and extraconal region of right orbit and extending to involve pre-septal, pre-maxillary and zygomatic tissues and fungating beyond the orbit. Lacrimal gland was not visualised separately. There was extraocular muscle edema. No bony erosions or intracranial extension noted. The imaging features were consistent with malignant neoplastic etiology.

Clinically suspecting it to be of neoplastic origin, fine needle aspiration was advised and done which showed sheets and clusters of large, round to oval cells with round nuclei and moderate to scanty foamy eosinophilic cytoplasm showing anisonucleosis and pleomorphism (Figure 2). Typical basaloid arrangement was not seen. Cytological features were suggestive of epithelial malignancy most probably meibomian gland carcinoma.

The lesion was excised and sent for histopathological examination.

On gross examination

We received a globular, irregular, nodular, partly skin covered, soft to firm, greyish brown tissue mass measuring 4 x 3.5 x 2.2 cm. Cut surface showed greyish white areas. (Figures 3 & 4).

Microscopic examination

Revealed a partly skin covered tumor mass showing lobules of tumor cells separated by intervening fibrous septae. The tumor cells showed round to oval vesicular nuclei and moderate amount of clear cytoplasm. They showed mild to moderate anisonucleosis and pleomorphism, with presence of occasional bizarre cells and mitotic figures (Figures 5 & 6). There was mixed inflammatory infiltrate in the intervening stroma. Surgical margins were free from tumor deposits.

Discussion

The first case report of ocular sebaceous carcinoma (Meibomian gland carcinoma) in 1891, is credited to Allaire although earlier cases were described by Malherbe and Robin and by Thiersch in 1865.[1] Meibomian gland carcinoma is a rare tumor of the ocular adnexa, comprising less than 1% of all eyelid tumors. About two thirds of these carcinomas occur in the upper lid; they may be multifocal or diffuse.[4] It may arise in ocular or extraocular sites and exhibits such a variety of histologic growth patterns and diverse clinical presentations that the diagnosis is often delayed for months to years.[1] The clinical picture of Meibomian carcinoma is focused about the growth of a painless firm

nodule that develops more frequently in the upper than in the lower eyelid. Multiple Meibomian carcinomas have been reported in a single lid and the malignant potential of these tumors is demonstrated by both extension and metastasis.[3] There are several reports that larger lesions, incompletely excised tumors, histopathologic features such as poor differentiation, multicentric origin, pagetoid spread and delayed diagnosis of more than 6 months were associated with poor prognosis.[1] Surgical excision is the treatment of choice.

Conclusion:

Meibomian carcinomas are often misdiagnosed as less aggressive entities. They may masquerade clinically as a chalazion. As a result, it is often treated with a conservative resection, which may subsequently prove inadequate. It is critical to achieve a negative tumor margin to prevent local recurrence and metastasis. Hence, excision and histopathological examination is important.

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Legends Figures

Figure 1: Clinical photograph showing mass over right upper eyelid.

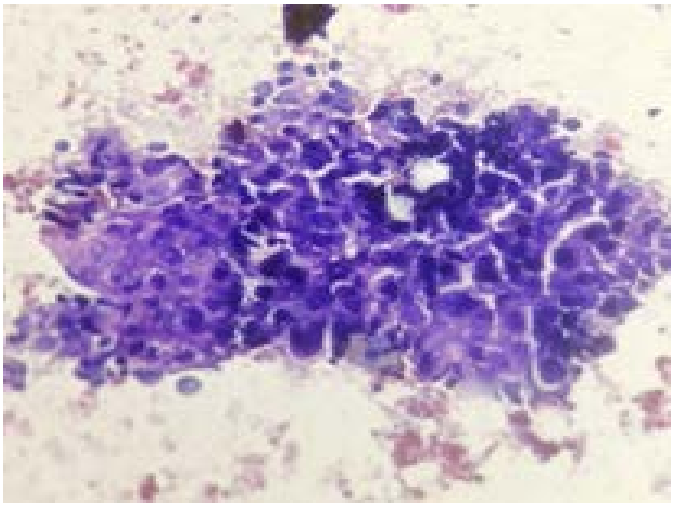

Figure 2: FNAC of right upper eyelid mass showing clusters of large cells with foamy eosinophilic cytoplasm.

Figure 3: Gross photograph of excised specimen showing nodular, partly skin covered mass.

Figure 4: Gross showing greyish white cut surface of the mass.

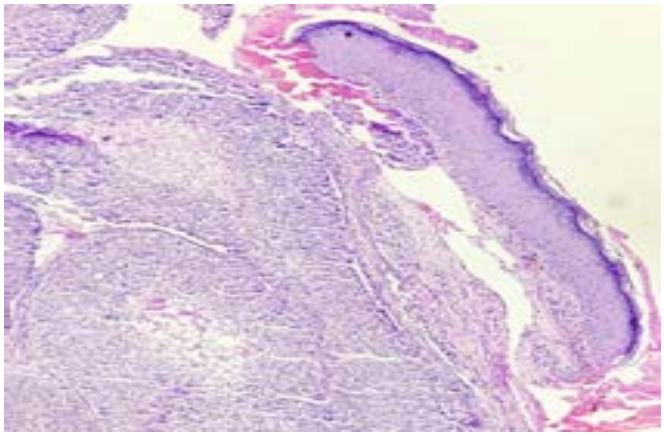

Figure 5: Photomicrograph showing skin covered tumor mass showing lobules of tumor cells with intervening septa (Hematoxylin & Eosin stain 10x).

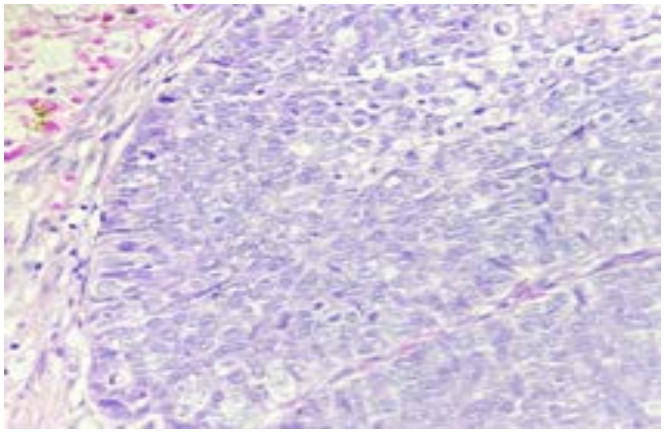

Figure 6: Photomicrograph showing mildly pleomorphic tumor cells with vesicular nuclei and moderate clear cytoplasm (Hematoxylin & Eosin stain 40x).