

An Interesting Case of Sebaceous Gland Carcinoma of Upper Eyelid with Tubercular Lymphadenitis

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Abstract

Sebaceous gland carcinoma (SGC) is a rare, potentially aggressive tumor and the third most common malignancy of the eyelid.

We present a case of SGC (confirmed by histopathology) of right upper eyelid in a 48-year-old female, which was managed by excision of mass with 5 mm clear margin with lid reconstruction using Cutler Beard technique and three cycles of cryotherapy. A positive uptake on PET scan of left cervical lymph node followed by FNAC of the same showed tubercular lymphadenitis rather than metastasis. Coming across this case raises a possibility of association of SGC with TB but having said that further research is needed for the same.

Keywords: Sebaceous gland carcinoma, Cryotherapy, Tubercular lymphadenitis

Introduction

Sebaceous gland carcinoma (SGC) is a rare, potentially aggressive tumor of the eyelid. It is the third most common malignancy of the eyelid.¹ Risk factors include advanced age, Asian race, women, or previous radiation to head or neck. SGC affects all races, Asians in particular, and represents the most common or second most common periocular malignancy in this group.² Periocular SGC may arise from the meibomian glands (most common), the glands of Zeis and the sebaceous glands of the eyelid skin. SGC arises two to three times more frequently in the upper eyelid than the lower lid due to the presence of more meibomian glands (approximately 50 in number) in the upper eyelid compared to the lower eyelid (approximately 25 in number).³ Any association of SGC with tuberculosis is yet to be established.

Case Description

A 48-year-old female housewife presented with complaints of mass on right upper lid since the past 2 years which

was insidious in onset, painless, started as a pea grain size and slowly increased but in the last 6 months it had rapidly increased to the current size. She also had itching and redness in the right eye.

There was no history of radiation exposure or long-term exposure to sun, significant weight loss, loss of appetite, malaise, low-grade fever or trauma. There was no history of any local surgical intervention in the past. There was no similar complaint in any other family member.

General physical examination was normal with apparently no significant lymphadenopathy.

On examination, best corrected visual acuity was 6/6 using +1.50 DS+0.75DC at 5 degree in the right eye and 6/6 using +1.50 DS+0.50 DC at 60 degree in the left eye.

In the right upper lid, there was a well demarcated multinodular mass involving middle part of lid margin extending till lid crease vertically, measuring 10×9 mm in size (Fig. 1). Overlying skin was shiny with prominent vessels. There

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was loss of eyelashes and anterior and posterior margin of the lid in the part of mass could not be delineated. It was warm on touch, non-tender, hard in consistency, non-

compressible and non-reducible. No pulsations were felt over the mass.



Figure 1. Multinodular Mass on Right Upper Lid

A shallow ulcer measuring about 6×2 mm, 0.5 mm deep with rolled-out edges with sloughed base was present on the posterior aspect of overhanging edge of mass.

On lid eversion, upper palpebral conjunctiva was congested and upper fornix was normal. Rest of the anterior and posterior segments was within the normal limit.

Anterior and posterior segments of the left eye were within the normal limit.

Hematological investigations and viral markers including ELISA (enzyme linked immunosorbent assay) for HIV (human immunodeficiency virus) were within normal range.

FNAC (fine needle aspiration cytology) of the mass showed features suggestive of sebaceous cell carcinoma.

After taking written informed consent, the patient was undertaken for excision of mass with 5 mm clear margin with lid reconstruction, using Cutler Beard technique (Step 1). The sample was sent for histopathology. Two cycles of cryotherapy (freeze and thaw) were given at the cut ends of the upper lid intraoperatively.

Histopathology report of the biopsy sample confirmed our diagnosis of sebaceous cell carcinoma stage Ic (T2b N0 M0) (according to AJCC staging) with lateral margin positive (Fig. 2).

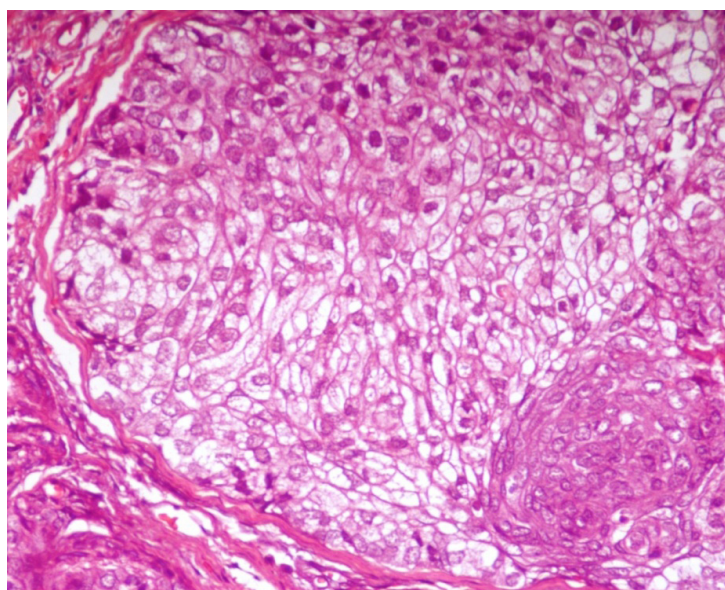


Figure 2. Cells Show Moderate Pleomorphism, Coarse Granular Cytoplasm and Prominent Nucleoli 400X

Post-operatively, the patient underwent full-body PET (positron emission tomography) scan which showed no focal abnormal FDG avid lesion in the right upper eyelid but multiple enlarged FDG avid left cervical, mediastinal and upper abdominal lymph nodes with possibility of active infective etiology – tuberculosis. No other focal abnormal FDG avid lesion was seen in the rest of the body.

Since there was a positive lateral margin, additional 2 mm lateral margin was excised and two cycles of cryotherapy

(freeze and thaw) were given from skin side. The sample was sent for histopathology and it came out to be tumor-free.

In view of PET scan findings, FNAC of left lower cervical lymph node was carried out, which showed many epithelioid cell granulomas in reactive lymphoid background (Fig. 3). ZN stain for acid fast bacilli was positive, suggestive of tubercular lymphadenitis and the patient was started on category-1 anti-tubercular treatment.

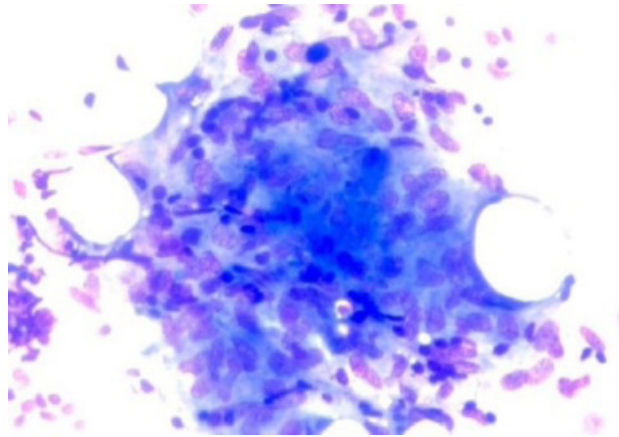


Figure 3. Epithelioid Cell Granuloma in Reactive Lymph Node Background

After 6 weeks, second step of Cutler Beard procedure was performed and upper lid was reconstructed and again two cycles of cryotherapy (freeze and thaw) were given.

After completion of anti-tubercular treatment for 6 months, the patient underwent a full-body PET scan which showed no avid uptake in right upper lid or any lymph node and the patient was asymptomatic with good lid mobility (Fig. 4).



Figure 4. Tumor-Free Right Upper Lid 6 Months Post-Operative

Discussion

Sebaceous gland carcinoma represents 1–5.5% of eyelid malignancies and is considered to be the third most common eyelid malignancy after basal cell and squamous cell carcinomas.¹

It occurs more frequently in females and is considered to

be a tumor of older patients (mean age 73 years)³ unlike our patient who was comparatively young (48 years).

It can present as loss of eyelashes, destruction of Meibomian orifices or chronic unilateral blepharo-conjunctivitis⁴ and is often underdiagnosed.

Treatment of SGC primarily is surgical excision of the tumor.

An excision with 4–5 mm of normal tissue carries very good prognosis⁵ but it is not necessary that 5 mm clear margin renders tumor-free. The poor prognostic factors are involvement of upper or both eyelids and tumor size of 10 mm or more, duration of symptoms more than 6 months (mortality 38%), poorly differentiated tumors, infiltration into blood vessels and lymphatics, orbital extension, multicentric origin and pagetoid spread.⁶ Studies have shown cryotherapy serves as an adjunct to surgery in SGC.¹ As our case had multiple poor prognostic factors, we performed three cycles of cryotherapy after excision of tumor to minimize recurrence.

The incidence of metastasis (41%) is also alarming. It spreads by continuous growth, lymphatic spread or hematogenous spread⁷ to almost all body organs like cervical nodes, lung, pleura, liver, brain, pericardium, lips, ethmoid sinus, or skull. Thus every patient of SGC should undergo a full-body PET scan but a positive uptake on PET scan is not necessarily a metastasis, like in our case it was histopathologically proved to be tubercular lymphadenitis and the patient responded well to anti-tubercular therapy.

Studies have shown that tuberculosis has a strong association with malignancies.⁸ Similarly, in our patient carcinoma being an immunocompromised state, predisposed the patient to develop an infectious form of tuberculosis. However, there are no previous studies showing association between tuberculosis and SGC, making ours a rare case.

Conclusion

Sebaceous cell carcinoma easily masquerades inflammatory conditions of eyelid, such as blepharo-conjunctivitis or chalazion; thus it should be kept as a differential in any recurrent inflammatory condition of eyelid. After confirmation of diagnosis by FNAC, surgical excision with 5 mm margin should be performed with at least three cycles of cryotherapy to prevent recurrence. SGC is a highly malignant tumor and spreads extensively in almost all body organs but it is not necessary that positive uptake in any lymph node is metastasis. Like in our case, positive uptake in left lower cervical lymph node came out to be tuberculosis and not metastasis. Coming across this case raises a possibility of association of SGC with TB but having said that further research is needed for the same.

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Consent by Patient

I have been explained in my own language about my disease and its prognosis. I hereby give my full, free and voluntary consent for the use of the data for educational and research purposes. I have been confirmed that my identity shall not be disclosed.

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Conflict of Interest: None

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