

Sebaceous gland carcinoma of the eyelid: case report

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Summary

This paper reports a case of sebaceous adenocarcinoma of the meibomian gland in a 69-year-old man. The tumour was excised and histopathological examination revealed the characteristic features of sebaceous adenocarcinoma.

Résumé

Ce rapport concerne un cas de l'adénocarcinome sébacé de la glande de Meibomius chez un homme âgé 69 ans. Le tumeur a été retranché et l'histopathologie a démontré les structures caractéristiques de l'adénocarcinome sébacé.

Introduction

Sebaceous gland carcinoma is a rare slow-growing adnexal epithelial tumour with a tendency to occur on the eyelids [1,2]. Despite the tendency of sebaceous gland carcinoma to occur in the ocular adnexal region, these tumours account for about 4.7% of all malignant epithelial eyelid tumours and only 0.67% of all eyelid tumours [3].

These tumours are often misdiagnosed as recurrent chalazion [4–6] and curetted repeatedly, or as chronic blepharoconjunctivitis [7], thereby delaying proper management and increasing tumour mortality. Sebaceous adenocarcinomas originating from the eyelids frequently produce widespread metastasis whereas those arising elsewhere on the skin are less frequent and infrequently cause metastasis [2,8].

Once the diagnosis is suspected, a full-thickness lid biopsy is required. Management

should then consist of wide excision, with preparation of frozen sections during the operation to ensure tumour-free borders.

Case report

A 69-year-old Nigerian man presented to the eye clinic of the University College Hospital, Ibadan, with a 3-month history of 'a boil' on his right upper lid. In spite of 'treating' the boil, it slowly increased in size and had recently started oozing blood on a few occasions. The mass was a large pedunculated, lobulated tumour arising from the conjunctival side of the right upper lid, measuring 3 cm by 2 cm (Fig. 1).

On the basis of a high suspicion of carcinoma, and the lack of frozen section facilities



Fig. 1. Patient with sebaceous gland carcinoma of the eyelid.

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during the period in which the patient presented, an excisional biopsy was planned. At surgery a V-shaped resection of the lid with a wide margin of normal lid was carried out. The histological report showed a malignant tumour arranged in infiltrating nests and elongated columns, supported by a delicate fibrovascular stroma. The tumour was composed of spindle-shaped polygonal epithelial cells with clear or pale eosinophilic cytoplasm with vesicular nuclei and numerous aberrant mitoses. There was pagetoid invasion of the epidermis surrounding the mass, but the margins of excision were tumour free. The features were consistent with a sebaceous gland carcinoma (Fig. 2).

The patient is still being followed up in the clinic and radiotherapy was not carried out on the basis of the tumour-free margins.

Discussion

Sebaceous gland carcinoma of the lid can arise from the meibomian glands of the tarsus and from the pilosebaceous and Zeis glands of the

skin. Sebaceous gland carcinoma arising from the glands of the skin do not usually metastasize, in contrast to those of the lid, most of which arise from the meibomian glands [8].

The upper lid is involved twice as often as the lower lid and caruncle, and a multicentric origin is possible [9].

The average age of presentation has been found to be 60–65 years [4], but our patient presented a little later.

These tumours are frequently not diagnosed early because the clinical picture is variable and in the early stages the tumour may mimic other common eye lesions like chalazion, chronic blepharoconjunctivitis, basal cell carcinoma and squamous cell carcinoma. Boniuk and Zimmerman [4] noted that pseudochalazion or blepharoconjunctivitis was the mode of initial observation in 38% and 15% of cases, respectively.

Normally, the architecture of the sebaceous gland consists of an outer array of basaloid cells which gradually mature to lipid-laden cells with holocrine secretion. In a malignant neoplasm, the normal maturational pattern of the seba-

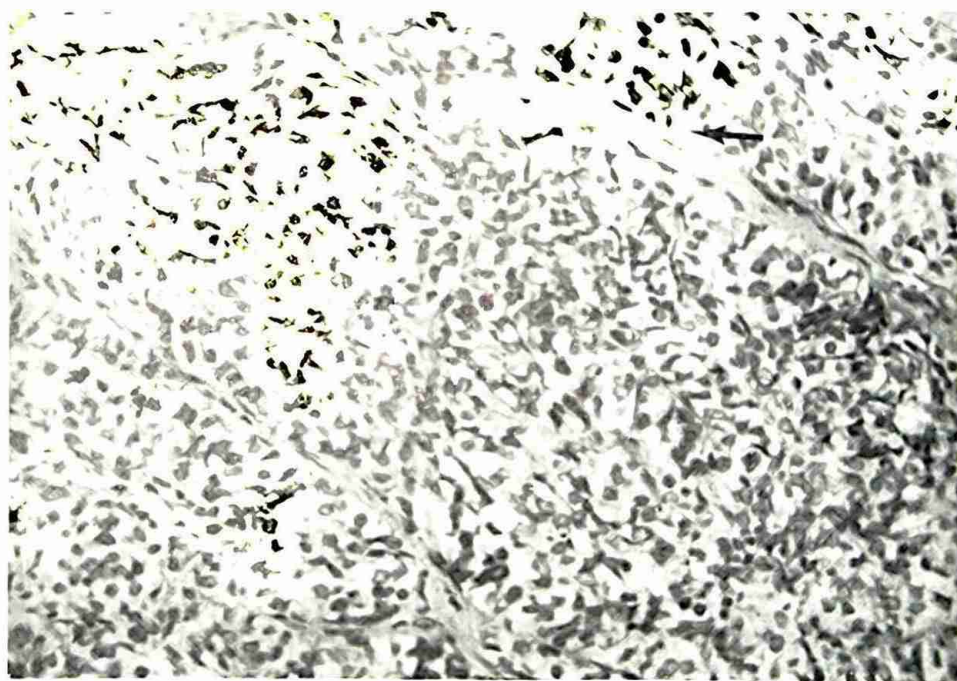


Fig. 2. Histological section of the lesion. Sheets of polygonal cells are seen, separated by delicate fibrovascular stroma (arrow) ($\times 200$).

ceous gland is replaced by anaplastic cells with various degrees of differentiation. The tumour cells are pleomorphic, with a rounded or polyhedral nucleus and prominent nucleoli. Active mitotic behaviour generally accompanies the tumour. The surface epithelium, conjunctiva, and cornea may show changes similar to Paget's disease of the intra-epithelial carcinoma of the nipple and areolar skin, associated with a ductal carcinoma of the breast.

In a series examined by Doxanas and Green [3], pagetoid change of the eyelid epithelium was noted in 55% of cases. Sebaceous carcinoma with pagetoid change has been associated with a high tumour mortality [2,10].

Rao *et al.* [2] reported a tumour mortality of about 50% in those cases with pagetoid change, whereas those tumours without pagetoid changes had only an 11% mortality.

Carcinomas of meibomian glands are slow growing and a good prognosis is possible if early diagnosis is combined with proper treatment. Once the diagnosis is suspected, an adequate biopsy is essential and should usually be full thickness. The most widely recommended treatment is wide excision of the lesion, with the use of frozen sections at the time of surgery to ensure tumour-free borders [11].

The value of irradiation as a method of treatment is still uncertain [12,13]. Ginsberg [14] advocated radiation therapy for recurrences of non-resectable tumours.

Our patient reported relatively early, within 3 months. Even though there was pagetoid invasion of the epidermis around the mass, the cut edges of the excised lesion were tumour free and it is hoped that a cure has been effected.

References

1. Lever WF, Schaumburg-Lever G. Histopath-

ology of the skin, 5th edn. Philadelphia: JB Lippincott Co, 1975:551-2.

2. Rao NA, Hidayat AA, McLean IW, *et al.* Sebaceous carcinoma of the ocular adnexa: a clinicopathologic study of 104 cases, with five-year followup data. *Hum Pathol* 1982;13:113-22.
3. Doxanas MT, Green WR. Sebaceous gland carcinoma: review of 40 cases. *Arch Ophthalmol* 1984;102:245-9.
4. Boniuk M, Zimmerman LE. Sebaceous carcinoma of the eyelid, eyebrow, caruncle and orbit. *Trans Am Acad Ophthalmol Otolaryngol* 1968;72:619-42.
5. Wolkowicz MI. Chalazionlike neoplasms of the lid: report of two cases. *Am J Ophthalmol* 1962;54:249-55.
6. Sweebee EC, Cogan DG. Adenocarcinoma of the meibomian gland: a pseudo chalazion entity. *Arch Ophthalmol* 1959;61:282-90.
7. Foster CS, Allansmith MR. Chronic unilateral blepharoconjunctivitis caused by sebaceous carcinoma. *Am J Ophthalmol* 1978;86:218-20.
8. Rulon DB, Helwig EB. Cutaneous sebaceous neoplasms. *Cancer* 1974;33:82-102.
9. Cavanagh HD, Green WR, Goldberg HK. Multicentric sebaceous adenocarcinoma of the meibomian gland. *Am J Ophthalmol* 1974;77:326-32.
10. Russell WG, Page DL, Hough AJ, *et al.* Sebaceous carcinoma of meibomian gland origin: the diagnostic importance of pagetoid spread of neoplastic cells. *Am J Clin Pathol* 1980;73:504-11.
11. Tenzel RR, Stewart WB, Boynton JR, *et al.* Sebaceous adenocarcinoma of the eyelid: definition of surgical margins. *Arch Ophthalmol* 1977;95:2203-4.
12. Ide CH, Ridings GR, Yamashita T, *et al.* Radiotherapy of a recurrent adenocarcinoma of the meibomian gland. *Arch Ophthalmol* 1968;79:540-4.
13. Hendley RL, Rieser JC, Cavanagh HD, *et al.* Primary radiation therapy for meibomian gland carcinoma. *Am J Ophthalmol* 1979;87:206-9.
14. Ginsberg J. Present status of meibomian gland carcinoma. *Arch Ophthalmol* 1965;73:271-7.

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