positive common leucocyte antigen but sparse staining using B and T cell markers. This, considered with the cellular morphology, the biological behaviour and the radiological features of the tumour, notwithstanding the results of gene rearrangement studies, supported the diagnosis of null cell lymphoblastic lymphoma.

This case report presents features of null cell lymphoma of the orbit, which is extremely rare. It highlights the importance of considering all aspects of tumour behaviour, including the clinical, radiological and histopathological information, in establishing the diagnosis. Our patient has responded well to therapy and is disease-free almost 4 years after completion of therapy, but long-term follow-up is required.

References

- Bullock JD. Orbital tumours in childhood. Ophthalmology 1986;93:379–84.
- Shields JA, Bakewell B, Augsburger JJ, Donoso LA, Bernardino V. Space-occupying orbital masses in children: a review of 250 consecutive biopsies. Ophthalmology 1986;93:379–84.
- De Potter P, Flanders AE, Shields CL, Shields JA. Magnetic resonance imaging of orbital tumours. Int Ophthalmol Clin 1993;33:163–73.
- Volpe NOJ, Jakobiec FA. Paediatric orbital tumours. Int Ophthalmol Clin 1992;32:201–21.
- Knowles DM, Jakobiec FA, McNally L, Burke JS. Lymphoid hyperplasia and malignant lymphoma occurring in the ocular adnexa. Hum Pathol 1990;21:959–73.
- 6. Jakobiec FA, Knowles DM. An overview of ocular adnexal tumors. Trans Am Ophthalmol Soc 1989;88:420–44.

A.J. King¹
G.T. Fahy¹
L. Brown²
¹Department of Ophthalmology
²Department of Pathology
Leicester Royal Infirmary
Leicester, UK

G.T. Fahy, MD, FRCOphth 🗷 Department of Ophthalmology University Hospital Galway, Ireland

Sir,

Metastatic cutaneous melanoma to the conjunctiva in an Afro-Caribbean patient

Ocular metastasis from cutaneous melanoma is well documented, though uncommon. The usual site of metastasis is the uveal tract, and other sites such as the retina, vitreous, optic nerve, and orbit have been reported.¹⁻⁴ Metastasis to the conjunctiva is very rare;^{5,6} the largest published series consists of five cases.⁵ We report a further case which, to our knowledge, is the first case of a conjunctival metastasis from a cutaneous melanoma in a patient of Afro-Caribbean origin.



Fig. 1. Solid vascularised mass of the palpebral conjunctiva causing eversion of the lower lid.

Case report

A 58-year-old Afro-Caribbean man was referred to the Eye Department with a 2 month history of a slowly enlarging lesion in the left lower lid. He had originally presented to the hospital 4 years earlier with a histologically proven acral lentiginous melanoma of his right heel, which had been completely excised. He had subsequently developed metastases in the lymph nodes, skin and lungs which were treated by local excision, radiotherapy and chemotherapy.

Ophthalmic examination disclosed a solid vascularised nodular mass of the palpebral conjunctiva of the left lower lid. The lesion was amelanotic with a diameter of approximately 12 mm causing eversion of the lower lid and secondary lateral ectropion, with a small area of conjunctival ulceration (Fig. 1). His visual acuity was 6/6 unaided in each eye and the remainder of his ocular examination, including fundoscopy through dilated pupils, was unremarkable. Biopsy of the lid lesion was undertaken and histopathological examination showed metastatic melanoma (Fig. 2). In view of the patient's widely disseminated disease it was decided not to proceed to complete excision of the lesion. He died 3 months after diagnosis of conjunctival metastasis.

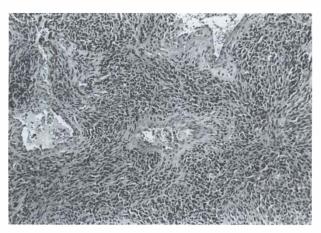


Fig. 2. Conjunctival tissue extensively infiltrated by metastatic melanoma (haematoxylin-eosin; original magnification, ×400).

Comment

It is well known that cutaneous malignant melanomas are very rare in people of Afro-Caribbean origin. However, as in this patient, when they present they are usually acral lentiginous melanomas, with the palms, soles and subungual regions being favoured sites and associated with poor survival. Abetastatic cutaneous melanoma to the conjunctiva is also exceedingly rare and is usually not even mentioned in major clinicopathological reviews on ocular metastases. Only three previous cases of ocular metastases from cutaneous melanoma in Afro-Caribbeans have been reported, all of which were to the orbit presenting with proptosis. To our knowledge, this is the first case report of a metastatic melanoma to the conjunctiva in an Afro-Caribbean patient.

References

- 1. Ferry AP. Primary malignant melanoma of the skin metastatic to the eye. Am J Ophthalmol 1972;74:12–9.
- Font RL, Naumann G, Zimmerman LE. Primary malignant melanoma of the skin metastatic to the eye and orbit. Am J Ophthalmol 1967;63:738–54.
- De Bustros S, Augsburger JJ, Shields JA, Shakin EP, Pryor CC II. Intraocular metastases from cutaneous malignant melanoma. Arch Ophthalmol 1985;103:937–40.
- Fishman ML, Tomaszewski MM, Kuwabara T. Malignant melanoma of the skin metastatic to the eye: frequency in autopsy series. Arch Ophthalmol 1976;94:1309–11.
- 5. Jakobiec FA, Buckman G, Zimmerman LE, La Piana FG, Levine MR, Ferry AP, *et al*. Metastatic melanoma within and to the conjunctiva. Ophthalmology 1989;96:999–1005.
- Kiratli H, Shields CL, Shields JA, De Potter P. Metastatic tumours to the conjunctiva: report of 10 cases. Br J Ophthalmol 1996;80:5–8.
- 7. Third National Cancer Survey: advanced three year report 1969–1971. Incidence. Publication no. 74-637. Bethesda: Biometry Branch, National Cancer Institute, 1974.
- 8. Fleming ID, Barnawell JR, Burlison PE, Rankin JS. Skin cancer in black patients. Cancer 1975;35:600–5.
- Spencer WH, Zimmerman LE. Conjunctiva. In: Spencer WH, editor. Ophthalmic pathology: an atlas and textbook. 3rd ed. Philadelphia: WB Saunders, 1985:109–228.

N.G. Ziakas¹ T. Eke¹ C.H. Kendall² D.B. Goulstine¹

¹Department of Ophthalmology ²Department of Histopathology Leicester Royal Infirmary Leicester LE1 5WW, UK

Mr N.G. Ziakas ⊠ University Eye Clinic 93 Metropoleos Street 54622 Thessaloniki, Greece Fax: +30 31240666 e-mail: ziakas@med.auth.gr

Sir,

Late infection of a 5-fluorouracil enhanced bleb following systemic chemotherapy

Since the introduction of 5-fluorouracil (5-FU) to improve the results of trabeculectomy, 1 concerns have arisen over the risk of delayed-onset bleb infections. The reported incidence following 5-FU usage is between 3.8% 2 and 5.7%. 3 However, a recent retrospective study 4 found no difference in the rates of such infections whether trabeculectomy was performed with or without adjunctive antiproliferative agents. Systemic factors, such as diabetes mellitus and chemo- or radiotherapy for neoplastic disease, may also influence the development of post-operative ocular infections. 5,6

We present a case of delayed-onset bleb infection affecting a 5-FU enhanced trabeculectomy occurring in a patient shortly after commencing chemotherapy for carcinoma of the lung.

Case report

A 76-year-old non-diabetic man was diagnosed with chronic open angle glaucoma in 1988. He underwent a left trabeculectomy in 1989 and a right trabeculectomy in 1991. The latter failed and a repeat right trabeculectomy was performed in 1995 with peroperative 5-FU. This resulted in good intraocular pressure (IOP) control and stable visual fields on no topical medication, with a shallow bleb in the left eye and a thin-walled bleb in the right.

In July 1997 he was found to have an inoperable squamous cell carcinoma of lung and was commenced on MIC (mitomycin, iphosophosphamide, cisplatinum) chemotherapy. Three days later, his right eye became sore and inflamed with some discharge. After a further 7 days he presented to the Eye Casualty department, where a bleb abscess with some associated anterior chamber activity was found. Staphylococcus aureus was isolated from a conjunctival swab. This delayed-onset bleb infection responded to treatment with topical gentamicin and cefuroxime plus systemic ciprofloxacin. A bleb leak developed during the admission but eventually settled. Unfortunately, subsequent bleb failure with loss of IOP control occurred plus increasing nuclear sclerosis. A phacotrabeculectomy (without 5-FU) was performed, 7 months after the bleb infection occurred, via the inferotemporal quadrant with restoration of IOP control and a corrected vision of 6/9.

He subsequently underwent a further five cycles of chemotherapy, but with a 20% reduction in the chemotherapy dosage because of this episode of neutropenic sepsis. Prophylactic topical chloramphenicol was also used during these cycles. No further episodes of bleb infection occurred, until his death in October 1998.

Comment

The adjunctive use of 5-FU has increased the success rate of filtering surgery^{1,2,7–9} but relatively high incidences of bleb-related sequelae have been noted.^{2–4} A possible explanation for the higher occurrence of late bleb-related infection in these eyes is the toxic effect of 5-FU on the existing activated fibroblasts.² Also, with the use of 5-FU