

References

1. Schonherr U, Naumann GOH, Lang GK, Bialasiewicz AA. Sclerokeratitis caused by *Mycobacterium marinum* [letter]. *J Ophthalmol* 1989;108:607–8.
2. Iredell J, Whitby M, Blacklock Z. *Mycobacterium marinum* infection: epidemiology and clinical features in Queensland. *Med J Aust* 1992;157:596–8.
3. Runyon EH. Anonymous mycobacteria in pulmonary disease. *Med Clin North Am* 1959;43:273–90.
4. Aronson JD. Spontaneous tuberculosis in saltwater fish. *J Infect Dis* 1926;39:315–20.
5. Linell F, Norden A. A new type of pathogenic mycobacterium. *Nature* 1951;168:826.
6. Sneath PHA, Mair NS, Sharpe ME, Holt JG, editors. *Bergey's manual of systematic bacteriology*, vol 2. Baltimore: Williams & Wilkins, 1986;1435–7, 1445–6.
7. Tanemoto K, Ishikawa H, Kigasawa K, Obazawa H, Fusegawa H, Miyachi H, Ando Y. Detection of mycobacterial DNA with polymerase chain reaction in eye discharge and gastric juices in a case of scleritis. *Nippon Ganka Gakkai Zasshi* 1997;101:97–101.

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Sir,

Bilateral non-Hodgkin lymphoma of the conjunctiva

The orbit is devoid of formed lymph nodes and any lymphomas occurring in the conjunctiva, the lacrimal gland, the eyelids and the orbit represent extranodal locations. These tumours ('orbital lymphomas') are relatively rare and can often be associated with concurrent lymphomas outside the orbit.

The most widely used classification system for systemic lymphomas is the Rappaport classification,¹ which divides cases into low-grade and high-grade lesions. In 1980 Knowles and Jacobiek² proposed a classification system of orbital lymphoid neoplasms that comprises two categories: the so-called benign lesions (pseudotumour, reactive lymphoid hyperplasia and inflammatory pseudotumour) and the truly malignant lymphoma.

The orbit is the fourth most common location of extranodal presentation, occurring in 40% of patients with non-Hodgkin lymphoma (preceded by Waldeyer's ring, gastrointestinal and skin localisations).

Approximately two-thirds of patients with 'orbital lymphomas' have lesions of the orbit, 30% lesions in the conjunctiva and 10% lesions in the eyelids. Bilateral presentation was noted in 20% of patients with lacrimal gland and conjunctival lesions, and in only 5–10% of patients with non-lacrimal gland and eyelid masses.

The following case report documents the occurrence of bilateral presentation of a non-Hodgkin lymphoma in the tarsal conjunctiva with an orbital relapse.

Case report

An 81-year-old man was referred to us due to bilateral masses in the inferior fornices. Fourteen months previously he had undergone a gastrectomy followed by radiotherapy for a non-Hodgkin lymphoma originating from the stomach and involving the first lymph node stations. Eye examination revealed the presence of mobile, salmon-coloured ovoid tumours in the conjunctival fornix, bilaterally (Fig. 1).

The lesions were surgically removed and histopathological examination showed a small and intermediate lymphocytic lymphoma with a B cell



Fig. 1. Conjunctival non-Hodgkin lymphoma involving the inferior fornix of (a) the right eye and (b) the left eye.

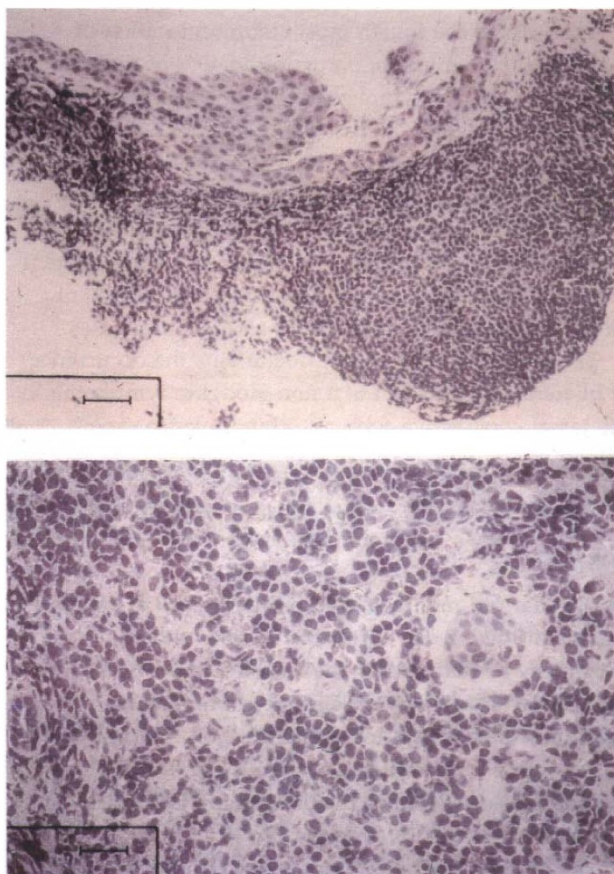


Fig. 2. (a) A dense infiltrate of medium-sized cells can be observed beneath a multilayered epithelium. Round nuclei and relatively scanty cytoplasm are evident. $\times 10$ (b) At higher magnification the nuclei appear cleaved and elongated and epithelial clumps are sometimes surrounded by the abnormal lymphocyte proliferation. $\times 25$.

immunophenotypic profile (Fig. 2). The picture was consistent with a conjunctival localisation of the lymphoid tumour.

Radiation therapy was carried out for over 3 weeks at a dose of 30 Gy, achieving complete regression without any serious side effects. Systemic and ocular follow-ups were carried out on a monthly basis to detect any further progression of the disease. After an interval of 10 months the patient presented a relapse of the tumour in his left orbit, with proptosis, ptosis and diplopia. Two large palpable nodular masses were also detectable over the left globe. The patient underwent a new cycle of radiation therapy, with complete resolution of the clinical picture.

Further follow-up lasted 18 months without any relapses. Unfortunately, the patient died from a heart attack 2 months after his last ophthalmic visit.

Discussion

As mentioned above, the frequency of conjunctival involvement in non-Hodgkin lymphoma is rather low, and is even rarer bilaterally. Recurrence of the tumour in the orbit is also unusual.

The choice of treatment we adopted followed the criteria suggested by Reddy *et al.*¹ Biopsy, when feasible, should always be obtained to determine the histological features and immunophenotypic analysis. On the basis of the staging of the disease, provided by a radiotherapy specialist, radiotherapy treatment is generally recommended.

References

1. Reddy EK, Bhatia P, Evans RG. Primary orbital lymphomas. *Int J Radiat Oncol Biol Phys* 1988;15:1239–41.
2. Knowles DM, Jakobiec FA. Orbital lymphoid neoplasm: a clinico-pathologic study of 60 patients. *Cancer* 1980;46:576–89.
3. Rosenberg S. National Cancer Institute sponsored study of classifications of non-Hodgkin's lymphomas: summary and description of a working formulation for clinical usage. *Cancer* 1982;49:2112–35.

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Sir,

Bilateral anterior uveitis associated with 0.3% Minims metipranolol

Metipranolol is a topical beta-blocker, which was introduced to the United Kingdom for the treatment of glaucoma in 1986. Adverse drug reactions to metipranolol were reported by Akingbehin and Villada,¹ who described granulomatous anterior uveitis, blepharoconjunctivitis and periorbital dermatitis. In 1991 multidose preparations of metipranolol and the single-dose Minims preparation of metipranolol 0.6% were withdrawn from the United Kingdom market.

Case report

We report a patient with bilateral granulomatous anterior uveitis which was associated with single-dose metipranolol 0.3% therapy.

A 61-year-old man was diagnosed with open angle glaucoma in June 1992. His corrected acuity was 6/6 in both eyes wearing -5.25 DS right eye and -5.00 DS left eye. The ocular pressures were 24 mmHg right eye and 22 mmHg left eye; the angles were wide open with heavy pigmentation. The glaucoma was controlled with timolol 0.5% until September 1995, when he developed irritation of both eyes and the medication was changed to preservative-free Minims metipranolol 0.3%. The ocular pressures were 28 mmHg right eye and 16 mmHg left eye. Dorzolamide 2% drops were then added twice a day in both eyes.