LETTERS TO THE JOURNAL

Sir,

Serious Eye Injuries Caused by Coin Throwing

We report on three cases of serious eye injury which occurred during a league football match in Leicester in 1992.

Case 1. A female aged 17 years was hit by a coin, causing vertical, bilinear corneal abrasions and macroscopic hyphaema.

Case 2. A male aged 17 years was hit by a coin, causing vertical, bilinear corneal abrasions, microscopic hyphaema and commotio retinae.

Case 3. A male aged 20 years was hit by a projectile, probably a coin, sustaining a vertical rupture of the globe which required immediate surgical repair. He also sustained a traumatic cataract and retinal detachment and was left with a blind, shrunken eye with no prospect of recovery.

A total of 34 injuries occurred at this single game including three other serious eye injuries, namely two chemical burns and a direct assault with a plastic chair resulting in facial lacerations, hyphaema, iris dialysis and traumatic cataract.

Injury due to football violence is well recognised. Coin throwing must represent a significant threat because of the obvious availability of the projectiles, the ease of concealing intent and the devastating effect.

It is of interest that in the two described cases where the coin did not penetrate the globe, bilinear ('tram-line') corneal abrasions were present, the two lines corresponding to the edges of the coin. This feature may well turn out to be characteristic of this particular type of injury.

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Sir,

Unexplained Foreign Body Sensation: Thinking of Loiasis in At Risk Patients Prevents Significant Morbidity

Increasing travel between the United Kingdom and West/ Central Africa has made it important to be alert to the

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possibility of loiasis, which causes significant morbidity if treatment is delayed.

Case Report

A young Nigerian woman repeatedly attended casualty complaining of something moving around her eyes. The vision remained 6/6 in each eye and there were no ocular signs on three visits over an 18-month period. A psychosomatic disorder was being considered until she presented to us with an unbearable recurrence of symptoms. A worm was seen wriggling under the bulbar conjunctiva of the right eye (Fig. 1). Microscopic examination, following excision under local anaesthesia, identified the filarial nematode Loa loa. A routine full blood count before a gynaecological procedure had shown an eosinophilia of 16% (normal range 1-6%), but its significance was not realised. The patient was treated with a 3-week course of oral diethylcarbamazine citrate (DEC) without complications. No further symptoms have been reported for 18 months following treatment.

Discussion

Tropical ocular infestation is rarely considered in the differential diagnosis in eye clinics in the United Kingdom because of its rarity. Onchocerciasis is publicised because it is an important cause of blindness. With increasing global travel ophthalmologists should be aware of less important infestations which nevertheless have the potential to cause significant symptoms.

Loa loa is nematode parasite which is endemic in Cen-

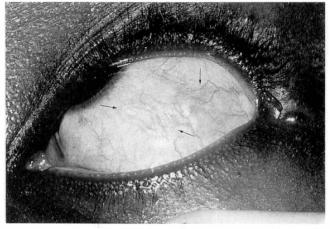


Fig. 1. An adult filarial nematode Loa loa seen under the bulbar conjunctiva of the right eye (arrows).

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tral and West Africa. Ocular features may include pain, mobile foreign body sensation and irritation caused by worms moving under the periorbital skin and conjunctiva. Acute periorbital angioedema and conjunctival nodules are early and late complications of worm death.^{1,2} Uveitis, cataract and exudative retinal detachment occur in patients with adult worms in the anterior chamber of the eye, but this presentation is fortunately rare.³ Important medical complications have recently been documented. A nephropathy can occur in up to 22% of cases.⁴ Chest complications, cured by treatment, include endomyocardial fibrosis and pleural effusion.^{5,6}

In a suspicious case without signs, eosinophilia and a rising titre of antifilarial antibody may be helpful. A definitive diagnosis is made by demonstrating a microfilaraemia, which is most common at mid-day. Twenty millilitres of citrated blood is taken, filtered and the stained filter examined for microfilariae. There is a greater tendency for amicrofilaraemic disease in expatriates compared with endemic patients⁴ so that medical treatment sometimes needs to be initiated solely on clinical grounds.

A 3-week course of oral DEC 6 mg/kg t.d.s. is used on an out-patient basis unless there is a heavy microfilaraemia, in which case in-patient monitoring is important because of serious adverse reactions such as encephalitis. Ivermectin is a safer microfilariacidal drug that is used as a single oral dose. It is particularly valuable in multiple filarial infections where the incidence of side effects with DEC is greater.⁷ Multiple doses of ivermectin have recently been used but are unable to eradicate microfilaria.⁸ The drug, while useful in mass treatment programmes, is an adjunct to DEC in the cure of loiasis. Surgical intervention may lead to serious allergic reactions associated with worm destruction and is only indicated for immediate relief of distressing local symptoms.

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The patient in this report was under the care of Mr. G. M. Thompson, Department of Ophthalmology, St. George's Hospital, Blackshaw Road, London SW17 0QT, UK.

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Sir,

Cotton-wool Spots in Giant Cell Arteritis

A 69-year-old woman was referred to the Eye Casualty Department complaining of recurrent fading of vision in either eye during the preceding 6 weeks. This typically occurred twice daily and lasted 30 minutes. Initially she had also noticed horizontal diplopia but this resolved. On further questioning she described weight loss and lethargy, together with headache and shoulder pain, starting 4 months previously. She was being treated for angina and hypertension.

Unaided visual acuities were 6/9 in each eye. Visual fields were full to confrontation and she had normal pupillary responses. The temporal arteries were strikingly prominent on each side, and were hard and non-pulsatile although not tender.

Fundoscopy showed normal discs with spontaneous venous pulsation. However each disc was surrounded by a cluster of large cotton-wool spots (Fig. 1). It was this abnormality which had prompted her referral to our department. The cotton-wool spots were not associated with any detectable vascular abnormality or haemorrhages.

Blood tests showed a greatly raised erythrocyte sedimentation rate (ESR; 120 mm/hour), a slightly reduced haemoglobin (10.0 g/dl) and a normal random glucose level. Her blood pressure was 215/105 mmHg.

Treatment was commenced at once with hydrocortisone 100 mg intravenously, then oral prednisolone, initially 80 mg daily. On the day following admission we performed biopsy of her right temporal artery. This showed classical giant cell arteritis with destruction of the elastic layer, associated giant cells and chronic inflammation.

She had one further episode of visual loss on the day following admission. Subsequently her symptoms rapidly improved, her ESR declined, and she was discharged on a reducing course of prednisolone. Six weeks later the cotton-wool spots had virtually disappeared.

At her most recent review, 3 months after presentation, she remained well on prednisolone 11 mg daily. Unaided acuities were 6/5 in each eye and pupillary responses were normal. Her optic discs were of normal colour and there were no cotton-wool spots.