while gardening. She did not recall being stung before and had no ophthalmic history. Over the ensuing weeks she developed periorbital pain, a pea-sized nodule by her left lower eyelid and gradual blurring with disturbed colour vision in her left eye. On examination visual acuity was 6/6 right and 6/24 with no improvement on pinhole left; previously an optometrist had recorded acuities as 6/6 in either eye. A left relative afferent pupillary defect (RAPD) was present with reduction in colour vision of the left eye, and a central scotoma was demonstrated on confrontation fields. The anterior segment was white and quiet with normal intraocular pressure, and on dilated fundal examination the optic disc appeared normal. At 1 month follow-up, left visual acuity had improved to 6/12 with a persistent RAPD and no colour vision. A large nodule some 1.5×1.0 cm was now palpable over the inferonasal aspect of the left orbit. Electrophysiological tests revealed abnormal visual evoked potentials with both delay and decreased amplitude, consistent with an inflammatory optic neuritis.

She was reviewed after a further 3 months, at which time left visual acuity was 6/9, with improving colour vision, and the RAPD had resolved. CT of the left orbit revealed a cystic lesion arising from the inner canthal region extending posteriorly in close relation to the medial rectus. Because this mass was causing an ectropion (outturned eyelid) and secondary epiphora, it was excised; the histology was reported as fibroadipose tissue with a giant-cell reaction consistent with a panniculitis. At her last review, 24 months after the initial injury, left visual acuity remained 6/9 with full resolution of symptoms and clinical signs.

COMMENT

The stings of wasps, bees and hornets (Hymenoptera) are painful but usually inconsequential. Ocular complications include retained foreign body, conjunctivitis, corneal oedema or perforation, keratitis, mydriasis, optic nerve swelling and visual loss. Chen *et al.*² reported chemosis, corneal oedema, hyphaema and cataract formation in a single case. Our patient developed a constellation of symptoms and signs after her stings consistent with an optic neuropathy. This is a very rare complication;^{3–5} moreover, no previous report describes simultaneous development of optic neuropathy and an orbital inflammatory granuloma.

With regard to the mechanism of optic nerve damage, allergic, immune and toxic phenomena have been implicated and there is probably an interplay between all three. Hymenoptera venom is known to contain histamine and dopamine, polypeptide toxins and high molecular weight enzymes such as phospholipase and hyaluronidase.⁶ It also possesses anticholinesterase-like activity.⁷ Hypersensitivity reactions to stings may be immediate (acute anaphylaxis) or delayed, involving the nervous system

including the optic nerve. Song and Wray measured visual evoked potentials soon after an ocular bee sting and proposed an acute and irreversible demyelination of the optic nerve secondary to an allergic response to the venom.⁴ In our case, however, it was probably a delayed immune-mediated reaction that triggered both the optic neuropathy (distant effect) and development of the orbital mass (local effect at sting site). Indeed, the clinical course was typical of the demyelinating type seen in multiple sclerosis or postviral illness, in which the prognosis is good. The optic nerve pathology is likely to have been retrobulbar, since the optic disc appeared normal. If we had seen the patient earlier, we might have given prednisolone to control the inflammatory response.

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'Football' contact lenses— an own goal

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Designer cosmetic contact lenses are increasingly popular. As with prescription contact lenses, the complications range from self-limiting to sight-threatening.

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Figure 1 Football contact lenses

CASE HISTORY

A man aged 24 attended eye casualty with irritation and discomfort in both eyes. His vision was 6/6 in the left and no light perception in the right, this being due to a past injury with consequent traumatic cataract and retinal detachment. Two months earlier he had paid £280 for a pair of 'football' designer contact lenses to hide the white reflex from his right cataract. They were purchased over the counter and were not properly fitted. He said he had been given no advice.

Since he had been unable to remove the contact lenses himself, they had been *in situ* continuously for two months (Figure 1). Attempts to remove the contact lenses at slit lamp examination were unsuccessful despite instillation of topical anaesthetic drops. Eventually, they had to be removed under general anaesthesia. On examination of the corneas there were no contact-lens-related complications. He was counselled on the importance of proper contact lens fitting and aftercare.

Four months later he returned to eye casualty with the same symptoms. He had put the contact lenses back in his eyes almost immediately after discharge and they had remained there continuously ever since. This time, we managed to remove the contact lenses at the slit lamp. There were two corneal abrasions in the left eye due to contact lens overwear, and he was treated with topical ofloxacin drops and chloramphenicol ointment. Examination of the contact lenses by the microbiology department revealed Gram-positive cocci on microscopy but no bacterial, acanthamoeba, or fungal growth. On review five days later, the corneal abrasions had healed without serious sequelae. We strongly reiterated our advice regarding contact lens wear before discharging him again.

COMMENT

Of contact lens wearers, about 6% experience a complication in the course of a year.^{1,2} The risk increases with certain pre-existing eye conditions and with non-adherence to approved care regimens.^{2,3} Contact-lens cases

can also be a source of contamination and should be cleaned and disinfected regularly.⁴ It is good practice for eye care professionals to see contact lens wearers at intervals to review and discuss replacement schedules, cleaning regimens, and complications²—not least because wearers regard their eye care practitioner as the most important source of advice on hygiene and care.⁵ Even then, many do not heed instructions.⁶

Designer cosmetic contact lenses are easily available and come in a variety of colours and designs. Sales in the UK have increased fourfold over the past year. In contrast to refractive contact lenses, which have to be prescribed and dispensed by qualified eye care professionals, cosmetic lenses can be sold by anyone over the counter without fitting or advice on aftercare. At present there are no regulations in the UK covering their sale.

Complications from contact lens wear are the same whether their purpose is refractive, therapeutic, or cosmetic. In the USA an article has highlighted the ocular complications of wearing non-prescribed cosmetic contact lenses bought through unlicensed sellers,⁷ and the Food and Drug Administration has warned of the dangers. There have been no such warnings in the UK.

Our patient bought a pair of designer football contact lenses to improve the cosmetic appearance of his right eye. The opportunity for review and education did not arise, since there were no follow-up visits, and he was not aware of the potential complications of leaving non-extended-wear contact lenses *in situ* for several months. In his case, proper fitting and aftercare was particularly desirable since a serious complication in his seeing eye would have caused devastating visual morbidity. All contact lenses should be properly fitted and cared for according to the approved regimens.

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