postoperatively, the patient managed 6/36 unaided vision improving to 6/12 with a pinhole. Unfortunately, 2 months postoperatively she developed macular pucker and increasing tautness of her nasal giant retinal tear edge with a local area of subretinal fluid. There was also increasing cataract formation. A revision vitrectomy was carried out combined with phacoemulsification and intraocular lens implantation. The macular membrane was peeled, further relieving retinotomies carried out on the nasal retinal edge and the silicone oil replaced. After further postoperative laser, 4 months following this procedure, the silicone oil was removed and at 6 months follow-up, her best corrected vision was 6/24 with a stable attached retina.

# Comment

664

Previous reports describe penetrating ocular injuries caused by fish hook prongs.<sup>1–4</sup> In our case, the shank of a triplet fish hook caused severe ocular damage, which to date has required further ocular surgery with moderate visual outcome. We emphasise the potentially sight threatening nature of this recreational pastime and the need for protective eyewear.

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## Sir,

# Bilateral hypopyon following streptokinase treatment for acute myocardial infarction

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Streptokinase, a commonly used thrombolytic agent, is a nonenzymatic protein produced by beta-haemolytic streptococci. It has been associated with several allergic reactions including bronchospasm, urticaria and anaphylaxis.<sup>1</sup> We report an unusual case of bilateral uveitis with hypopyon following streptokinase therapy for myocardial infarction (MI).

## Case report

A 74-year-old Caucasian gentleman was admitted with acute central chest pain of 3 hours duration and electrocardiogram was diagnostic for an anterior MI. Immediate medical management involved intravenous diamorphine 5 mg and cyclizine 50 mg. He was subsequently thrombolysed with 1.5 million units of intravenous streptokinase. Within 24 hours of receiving treatment, he had developed bilateral sore red eyes and reduced vision, worse in his left eye. However, he was only referred to the ophthalmology department 72 hours later, by which time his cardiovascular status had been stabilised and his ocular symptoms had actually begun to improve.

His past ocular history was significant for mild left amblyopia, ocular hypertension and bilateral retinoschisis. Best corrected visual acuity (BCVA) was 6/9 in the right eye (RE) and counting fingers in the left eye (LE). Ocular examination revealed bilateral conjunctival injection and anterior uveitis with hypopyon. The hypopyon measured 0.8 mm RE and 2 mm LE. Intraocular pressures were 22mmHg RE and 24mmHg LE. The vitreous in his RE was quiet and the fundus showed inferotemporal retinoshisis, but there was no fundus view of his LE. Ultrasound examination of his LE showed no signs of inflammatory activity. The patient had no clinical signs or symptoms of systemic vasculitis and no previous history of allergies. He was treated with intensive topical steroids and cycloplegics to which he had a prompt response and his BCVA improved to 6/6 RE, 6/12 LE by the second day of treatment. He subsequently made a complete visual recovery by the fourth week of treatment and his BCVA was 6/6 RE and 6/9 LE.

## Comment

So far, seven cases of acute anterior uveitis following streptokinase therapy have been reported to the Committee on Safety of Medicines (personal communication). Of these, only one case had bilateral hypopyon.<sup>2</sup> The pathogenesis of streptokinase-induced



uveitis is most likely because of an immune complex hypersensitivity reaction, and not because of any specific toxicity to the eye.<sup>3</sup> It could possibly be related to the individual's previous exposure to streptococcal antigens. Streptokinase may also be associated with other immunological reactions such as serum sickness<sup>4</sup> and Guillain–Barre syndrome.<sup>5</sup>

Apart from streptokinase, this gentleman also had diamorphine and cyclizine as part of his immediate medical treatment. Ocular side effects of these drugs include miosis for diamorphine and nonspecific blurred vision for cyclizine. However, anterior uveitis is not a recognised or reported side effect of either of these drugs. Hence, streptokinase was thought to be the most likely culprit in this case. Other causes of acute bilateral hypopyon include Behcet's disease, HLA B-27 positive status and endogenous endophthalmitis.

The widespread use of streptokinase as a thrombolytic agent could lead to an increased incidence of this immunological phenomenon. Therefore, it is important for ophthalmologists to recognise this unusual ocular hypersensitivity reaction, so that it will be managed appropriately and any unnecessarily invasive management such as the use of intravitreal or intracameral antibiotics will be avoided.

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#### Sir,

# Isolated conjunctival neurofibromas at the puncta, an unusual cause of epiphora

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We report an unusual case of epiphora caused by mechanical obstruction of the puncta by isolated neurofibromas.

#### Case report

A 45-year-old lady, originally from Surinam, presented with a 3 year history of epiphora and irritation of both eyes. There was no other relevant past medical or family history. Visual acuity was normal. External examination revealed 'hypertrophy' of the upper and lower puncta (Figure 1) of both eyes. Peripheral vascularization of the cornea and hyperaemia of the conjunctiva were also noted. Excision biopsy of the flesh-coloured punctal lesions was performed. Histology revealed that the lesions were neurofibromas. There were no other ocular features of neurofibromatosis.

A thorough systemic examination including a neurology review with MRI revealed no other stigmata of neurofibromatosis and there was no family history of neurofibromatosis. An outpatient review 2 months later revealed resolution of her symptoms of epiphora.

## Comment

Neurofibromas are benign peripheral nerve sheath tumours characterized by a combined proliferation of Schwann cells, endoneural fibroblasts, and axons. They are usually associated with systemic neurofibromatosis, but can occur as isolated lesions.<sup>1</sup>

Three types of neurofibroma occur in the orbit: solitary, diffuse, or plexiform (the latter is considered pathognomonic of neurofibromatosis). Ocular involvement may include the eyebrow, eyelids, conjunctiva, iris, choroid, optic nerve, and orbit.

Three features of this case are unusual. Firstly, isolated conjunctival neurofibromas are rare and have not been previously described at the puncta causing epiphora. Secondly, neurofibromas are usually associated with



**Figure 1** Hypertrophy of the upper and lower puncta of both eyes.