- 6 Atherino CC, Atherino CC. Maxillary sinus mucocoeles. *Arch Otolaryngol* 1984; **110**: 200–202.
- 7 Raj P, Mohanraja D, Siddiq MA. Nasal non-Hodgkin's lymphoma causing mucocoele of maxillary antrum. *J Laryngol Otol* 2000; **114**: 158–159.
- 8 Jayaraj SM, Patel SK, Frosh AC. Mucocoeles of maxillary sinus. *Int J Clin Pract* 1999; **53**: 391–393.
- 9 Makeieff M, Gardiner Q, Mondain M. Maxillary sinus mucocoeles—10 cases—8 treated endoscopically. *Rhinology* 1998; **36**: 192–195.

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Sir,

Aeromonas sobria corneal ulcer

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A case of perforated corneal ulcer secondary to *Aeromonas sobria* in a man with no pre-existing ocular pathology is presented.

Case report

A 58-year-old retired man presented to the ophthalmic casualty complaining of a sore right eye for the past week. He had no significant past medical or ocular history. On examination, he had a best corrected visual acuity of hand movements close to face with accurate projection in the right eye and 6/6 in his left eye. The left eye was normal. The right eye had circumcorneal injection with a 3.5 × 3.5 mm corneal ulceration. There was marked oedema and infiltration of the surrounding cornea. A 2.4 mm hypopyon was also recorded. A provisional diagnosis of a bacterial corneal ulcer was made and a corneal scrape performed for Gram's staining, bacterial/fungal culture and sensitivity. Antibiotic therapy using a combination of topical gentamycin forte (14 mg/ml), cefuroxime (50 mg/ml) and atropine (1%) eye drops was initiated. Gram negative rods were detected on Gram's staining and the topical treatment was reported to be adequate. Daily review of the patient over the next 5 days showed a gradual reduction of the hypopyon. The corneal ulcer, however,

progressed creating a deep crater and a resultant decemetocele, which subsequently perforated on day 6. The perforation was sealed using histoacryl glue (Figure 1). A bandage lens was placed on the cornea following glue application. Culture and sensitivity along with biochemical testing demonstrated the organism to be an oxidase positive Gram negative rod, which was identified as *Aeromonas sobria* using API zone, bioMercurix sa and profile number 1050004. The organism was sensitive to cefatazidime, ciprofloxacin, gentamycin and piperacillin. Subsequent follow-up for over 4 weeks revealed a gradual improvement in the corneal ulcer. The medication was gradually tapered off over that period. The glue, however, remained *in situ* for 2 months and fell off spontaneously leaving a vascularised cornea with an anterior synechiae and a complicated cataract. The patient is currently awaiting a triple procedure.

Discussion

Aeromonas sobria is a motile, polarly flagellated and oxidase positive Gram negative bacteria of family Pseudomonaceae.¹ Since its recognition as a human pathogen, it has been implicated in a number of infective pathologies including intestinal infections, peritonitis, bacteraemia, sepsis, osteomyelitis and wound infections¹ including corneal ulcers^{2,3} and endophthalmitis.⁴ Keratitis resulting from *Aeromonas sobria* infection is usually posttraumatic with a history of contamination with water or soil.^{2–4} Although clinical presentation is non-specific, a hyperaemic purulent exudation and corneal ulceration associated with hypopyon is the usual presentation.² The extent of the lesion depends on the virulence of the species.² Frequent topical antibiotics are

Figure 1 Anterior segment photograph showing the perforated ulcer being managed with tissue glue.

the mainstay of treatment with gentamycin, chloramphenicol and tetracycline being the agents of choice.^{1,2}

The presentation of this gentleman with bacterial keratitis caused by *Aeromonas sobria* in an otherwise healthy eye and lacking any history of trauma or contamination with soil or water is fairly atypical, a fact never reported before. It further emphasises the fact that when presentation is atypical, specific requests should be made to the microbiologists to search for these rare ocular pathogens.

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References

- 1 Altwegg M, Geiss HK. *Aeromonas* as a human pathogen. *Crit Rev Microbiol* 1989; **16**(4): 253–286.
- 2 Carta F, Pinna A, Zanetti S, Carta A, Sotgiu M, Fadda G. Corneal ulcer caused by *Aeromonas* species. *Am J Ophthalmol* 1994; **118**(4): 530–531.
- 3 Feaster FT, Nisbet RM, Barber JC. *Aeromonas hydrophila* corneal ulcer. *Am J Ophthalmol* 1978; **85**(1): 114–117.
- 4 Lee LR, O'Hagan S, Dal Pra M. *Aeromonas sobria* endophthalmitis. *Aust NZ J Ophthalmol* 1997; **25**(4): 299–300.

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Orbital cellulitis after peribulbar anaesthesia for cataract surgery

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Keywords: orbital cellulitis; peribulbar anaesthesia; cataract surgery

Sir,

Orbital cellulitis is an uncommon complication of ophthalmic surgery. It has been reported after strabismus surgery, blepharoplasty, radial keratotomy and retinal surgery.^{1,2} This is a short case report of orbital cellulitis following peribulbar anaesthesia. It has been described before, but alcohol preparation was thought to be a contributory factor.

Case report

A 79-year-old woman underwent uneventful phacoemulsification and posterior chamber intraocular lens implantation in the left eye. A peribulbar injection consisting of 2% lignocaine hydrochloride, 0.75% bupivacaine hydrochloride and hyaluronidase 1500 units was administered. A total of 4 ml was injected at the junction of the middle and outer thirds of the lower lid and 2.5 ml at the medial canthus via a 3/8 inch, 25 gauge needle. Skin preparation with 5% povidone iodine was done prior to peribulbar block. She developed ecchymosis following injection of the local anaesthetic. On the first postoperative day review, her unaided visual acuity was 6/12 in the left eye and, except for a trace of cells and flare, the ocular examination was unremarkable. The following day she re-presented with periorbital swelling, pain, redness and discharge in the operated eye. There were no systemic or ocular preoperative risk factors for occurrence of postoperative infection.

On examination, her uncorrected visual acuity was 6/12 in the right eye and 6/36 in the left eye. The left eye examination showed 5 mm of axial proptosis, periorbital swelling, conjunctival chemosis and severe restriction of ocular movements. The anterior chamber showed a trace of cells and flare, and the posterior segment examination was unremarkable. Pupil testing, intraocular pressure and colour vision examination was normal. The right eye was pseudophakic. A diagnosis of left orbital cellulitis was made. The patient was admitted to hospital and intravenous antibiotics were commenced. CT scan orbit and paranasal sinuses showed the left eye to be proptosed, with extensive periorbital soft-tissue swelling consistent with orbital cellulitis. The adjacent sinuses were clear and without evidence of sinusitis (Figure 1). Culture of conjunctiva, nose and pharynx was negative. Blood cultures were also negative. The leucocyte count showed mild leucocytosis. The patient was allergic to penicillin. Intravenous clindamycin and gentamicin were administered to provide Gram-positive and Gram-104 negative coverage. Renal function tests and blood gentamicin levels were regularly monitored to prevent renal toxicity. Dramatic improvement in the proptosis and ocular inflammation was seen over the next 24 h. The