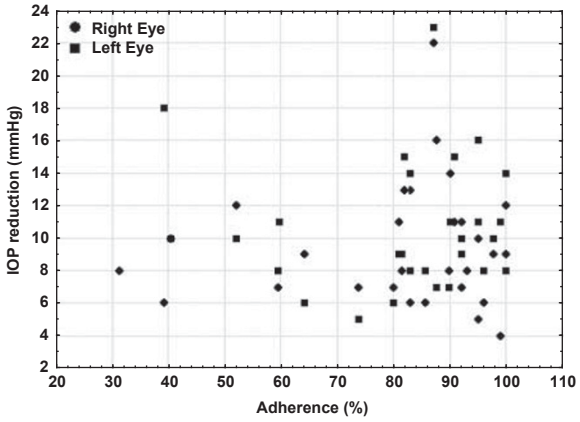

Figure 1 The relationship between adherence to hypotensive medication and IOP reduction measure at the time of a clinic appointment.

no relationship between IOP reduction and adherence (see Figure 1).

We do not find this surprising. The post-treatment IOP measured at a clinical appointment reflects whether or not the medication has been taken in the last few days rather than long-term adherence. Patients attending a hospital appointment are reminded to medicate and pre-clinic appointment adherence is likely to be very high. The short-term hyperaemia that often accompanies the onset of prostaglandin treatment is not an uncommon sign at follow-up appointments and suggests the recent re-introduction of medication.

Although patients tend to overestimate their adherence (for which data are supplied in our paper), simple non-judgemental questioning is likely to give a better estimate of adherence than an analysis of IOP data collected at follow-up appointments.

Conflict of interest
The authors declare no conflict of interest.

References

1 Cate H, Broadway DC. Association between intraocular pressure and adherence: is there one? *Eye* 2011; **25**: 1238.
2 Ajit RR, Fenerty CH, Henson DB. Patterns and rate of adherence to glaucoma therapy using an electronic dosing aid. *Eye* 2010; **24**: 1338–1343.

RR Ajit[1,2], CH Fenerty[1,2] and DB Henson[1]

[1]Manchester Royal Eye Hospital, Manchester, UK
[2]University of Manchester, Manchester, UK
E-mail: david.henson@manchester.ac.uk

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Sir,

A rare case of endogenous *Streptococcus group C* endophthalmitis associated with cellulitis

Group C Streptococci are part of the human flora[1] and rarely cause opportunistic infections. Here we report a case of endophthalmitis presumably caused by a cellulitis of the arm.

Case report

A 59-year-old woman with non-insulin-dependent diabetes mellitus had been given an influenza vaccination into her left arm with chronic lymph oedema. Two days later she developed painful swelling of the arm. Another 24 h later she noticed decreased visual acuity of the right eye and pain. On presentation, the patient was febrile and a cellulitis involving the entire left arm with marked swelling was present. Systemic therapy with penicillin 2.4 g every 4 h and flucloxacillin 1 g every 6 h had already been started. The visual acuity was hand movements. The cornea showed mild exposure keratopathy due to a lagophthalmos of 2 mm secondary to a pre-existing facial nerve palsy. The pupil was mid-dilated and non-reactive. A hypopyon was present and visualization of the posterior segment was not possible owing to dense vitritis. Vitreous and anterior chamber taps were done and ceftazidime (2.25 mg/0.1 ml) and vancomycin (1 mg/0.1 ml) were injected intravitreally. Gram staining of the aqueous tap featured Gram-positive cocci growing in chains, which were later identified as *group C Streptococci*. The B-scan showed an attached retina and dense vitreous debris. Blood cultures (taken after commencement of systemic antibiotics) did not grow any microorganisms. One day later the visual acuity further deteriorated to perception of light. Owing to corneal stromal opacity it was not possible to safely perform a vitrectomy. Topical prednisolone hourly and 50 mg oral prednisone were added to the antibiotic treatment. Despite three more intravitreal injections of antibiotics over the following 10 days there was no improvement. Surgery involving keratoprosthesis, lensectomy, and vitrectomy was now offered to the patient, who declined this approach. The eye eventually became phthisical.

Comment

Streptococcal endophthalmitis is exogenous in the vast majority of cases and is caused by organisms from the viridians group (50%), followed by *Enterococcus* (27%), *Streptococcus pneumoniae* (12.5%), and beta-haemolytic *Streptococci* (10.5%).[2] Endogenous *Streptococcal* endophthalmitis is uncommon, and we could only find two case reports in which *group C Streptococcus* was the causative microorganism.[3,4] Our case highlights the importance of early recognition and the poor prognosis of endogenous *Streptococcal* endophthalmitis.

Conflict of interest
The authors declare no conflict of interest.

References
1 McDonald M, Towers RJ, Andrews RM, Carapetis JR, Currie BJ. Epidemiology of Streptococcus dysgalactiae subsp. equisimilis in tropical communities, Northern Australia. *Emerg Infect Dis* 2007; **13**: 1694–1700.
2 Mao LK, Flynn Jr HW, Miller D, Pflugfelder SC. Endophthalmitis caused by streptococcal species. *Arch Ophthalmol* 1992; **110**: 798–801.
3 Ahmed SI, Gripaldo RE, Alao OA. Group C streptococcal endocarditis. *Am J Med Sci* 2007; **334**: 212–214.
4 Bhally H, Casey K. Endogenous endophthalmitis secondary to Streptococcus group C infection. *Infect Med* 2004; **21**: 128–130.

A Ebneter, L Goold and JS Gilhotra

South Australian Institute of Ophthalmology and Discipline of Ophthalmology & Visual Sciences, University of Adelaide, Adelaide, South Australia, Australia
E-mail: ebneter.andreas@gmail.com

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Sir,

Comment on a new ocular trauma score in pediatric penetrating eye injuries

We read with interest Acar *et al*'s[1] article on their newly proposed paediatric penetrating ocular trauma score (POTS). The authors have designed POTS to be used specifically in paediatric penetrating injuries to prognosticate for future visual acuity (VA) rather than using the more widely recognised but non-specific ocular trauma score (OTS) designed by Kuhn *et al*[2] as part of the United States Eye Injury Registry.

We appreciate that the authors felt that the age of the patient and location of the wound were important prognostic factors and so included them in the scoring system. The authors decided to downscale the amount of points scored for initial VA due to problems that were inherently present when trying to obtain an accurate VA in children, especially those with a significant injury. They identified that the POTS was statistically significant in predicting final VA.

As the article stands, the authors have not demonstrated any reasons why POTS should be used instead of OTS for paediatric penetrating injuries. VA still needs to be obtained to enter into the POTS system. We therefore suggest two ways in which POTS could be more rigorously tested to demonstrate any benefit.

First, the POTS could be calculated without using the VA score. As the authors pointed out, the relationship between initial VA and final VA is statistically significant. It would be interesting to see whether POTS without any VA inclusion gives a statistically significant result or whether it is purely the initial VA prognostic factor that makes POTS statistically significant in predicting final VA. Second, the authors could apply the OTS to their data and compare the two scores directly to identify any benefit of one over the other.

Unless a clear benefit of POTS over OTS can be demonstrated, there would be no reason to use POTS preferentially. As the authors demonstrated in their study, VA can usually be obtained in all but the very youngest children, and so it may be that VA is the most important factor and can be used as a stand-alone predictor of final VA.

Conflict of interest

The authors declare no conflict of interest.

References
1 Acar U, Tok OY, Acar DE, Burcu A, Ornek F. A new ocular trauma score in pediatric penetrating eye injuries. *Eye* 2011; **25**: 370–374.
2 Kuhn F, Maisiak R, Mann L, Mester V, Morris R, Witherspoon CD. The Ocular Trauma Score (OTS). *Ophthalmol Clin North Am* 2002; **15**(2): 163–165.

HE Sharma[1], N Sharma[2] and A Kipioti[3]

[1]The Birmingham and Midland Eye Centre, Birmingham, UK
[2]The University of Birmingham, Birmingham, UK
[3]Heart of England NHS Foundation Trust, Birmingham, UK
E-mail: hannahsharma@hotmail.co.uk

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Sir,

Response to Sharma *et al*

We thank Sharma *et al*[1] for their comments regarding our paper.[2] Ocular trauma score (OTS) is an important systematics in the prediction of final visual acuity (VA) after trauma. However, it is a heterogenous classification. In OTS, all classification systematics are based on initial VA. Moreover, scoring and classification are the same in all age groups. Another challenge is the accurate determination of initial VA, which is the cornerstone of OTS classification. Since in the open-glob injuries the evaluation of relative afferent pupillary defect is mostly impossible, the comparison of OTS and POTS is irrational.

The main aim of the development of pediatric OTS (POTS) was to determine a new scoring system without using initial VA. The age of the patient is important as the proliferative changes are more intense in the pediatric group and an amblyopia risk exists. Additionally, the dynamics of wound healing are different from those of adults. Taking into account the amblyogenic effect of the trauma-related damage and the visual immaturity of the pediatric eye, we propose modification in the much appreciated and widely used OTS by adding the age of the child in the scoring system.

As zone 3 injuries have worse prognosis and coexistent pathologies have a statistically significant effect on the determination of prognosis in the other reported studies, localization of the wound and coexistent pathologies were included in the classification proposed by our team.