Sir,

Reply to J Deane

Thank you for giving me an opportunity to respond to the comments made by Mr Deane on the results of retinal detachment surgery performed by general ophthalmologists in a district general hospital. The author's point on the risk of macula-on detachment becoming macula-off before they are dealt with at the tertiary centre is a valid one, and to my knowledge has not been studied. I agree with the author in that if there is significant delay in patients with macula-on detachment reaching the regional centres, there may be a role for the ophthalmologists in the referring centres in their surgical management. However, I am not sure of the number of general ophthalmologists available with sufficient training and competence to take on retinal detachment surgery. Certainly, the newer generation of ophthalmologists without additional subspecialty training are unlikely to be able to perform such surgery.

The situation in our region is such that referral of patients with macula-on detachment is treated on an urgent basis and hence the risk of macula-on detachment becoming macula-off detachment before surgery is likely to be minimal. Any future college audit on retinal detachment surgery should be able to look at this aspect and provide us with an answer for this question and appropriate guidelines.

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Sir,

Orbital cellulitis *vs* allergic reaction to hyaluronidase as the cause of periorbital oedema

We read with interest the case report by Varma *et al*[1] regarding a case of presumed orbital cellulitis after peribulbar anaesthesia for cataract surgery. The patient presented 2 days postoperatively with periorbital oedema, redness, proptosis, conjunctival chemosis, and restriction of ocular movements on the operated eye, and improved following treatment with intravenous antibiotics.

We would like to report three cases, which presented 1–2 days postoperatively with the same apparent clinical appearance and outcome, but which we believe to represent a different diagnosis. All three cases presented with periorbital swelling within 48 h of surgery after uncomplicated peribulbar anaesthesia. Patients had mild (one or two lines) reduction of Snellen's visual acuity and no RAPD. There was no purulent discharge from the eye. All patients were apyrexial. Antibiotic treatment was not administered as the signs were attributed to an allergic reaction to hyaluronidase rather than infection, but the patients were closely observed.

As in Varma's case, each had a peribulbar anaesthesia, which included hyaluronidase. In all our cases, there had been previous exposure to hyaluronidase in the same or fellow eye, implying that sensitisation had taken place. Varma *et al* do not comment on whether their patient had had previous exposure to hyaluronidase, but she did have previous cataract surgery to the fellow eye, and may therefore have been sensitised.

The rapid onset of signs in the absence of pyrexia and with negative blood and tissue cultures in the case noted by Varma *et al*, lend support to the possibility that this case may also have been allergic rather than infection. Allergy to hyaluronidase is a recognised complication. In cases noted by Kirby *et al*,[2] Minning[3] and Taylor *et al*,[4] a type I allergic reaction to hyaluronidase during surgery was confirmed later with skin-patch testing. A feature of these reactions was marked periorbital oedema.

The possiblity of allergic reaction to hyaluronidase should be considered when a patient presents with a rapid onset of signs, especially if the patient has had previous exposure to hyaluronidase.

References

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2 Kirby B, Butt A, Morrison AM, Beck MH. Type I allergic reaction to hyaluronidase during ophthalmic surgery. *Contact Dermatitis* 2001; **44**(1): 52.
3 Minning CA Jr. Hyaluronidase allergy simulating expulsive choroidal hemorrhage. *Arch Ophthal* 1994; **112**(5): 585–586.
4 Taylor IS, Pollowitz JA. A little known phenomenon: allergic reaction to hyaluronidase. *Ophthalmology* 1984; **91**: 1003.

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Sir,

Reply to Z Youssef *et al*

We appreciate the interest shown by the authors Youssef *et al* in our article[1] titled 'Orbital cellulitis after peribulbar anaesthesia for cataract surgery'. They point out that the orbital cellulitis in our case could well be an allergic reaction to hyaluronidase used during peribulbar anaesthesia. They felt that sensitisation to hyaluronidase occurred as a consequence of peribulbar block to the fellow eye operated previously, resulting in a type 1 hypersensitivity reaction on peribulbar block to the second eye. This is a possibility; however, we note that all three cases reported by Youssef *et al* were apyrexial, there was lack of purulent discharge, and orbital cellulitis presented 1–2 days postoperatively after uncomplicated peribulbar anaesthesia. Their patients spontaneously resolved without antibiotic treatment. In our patient, symptoms and signs suggestive of infection were presence of purulent discharge from the affected eye and leucocytosis on blood testing. There was occurrence of trauma to periorbital soft tissues during the peribulbar block, which could possibly have resulted in access of skin flora to the orbit and cellulitis. The inflammation settled only after a course of broad-spectrum intravenous antibiotics.

We note that in the cases reported by Minning *et al*[2] and Taylor *et al*,[3] the allergic reaction occurred within minutes of the retrobulbar block, was associated with local pruritis and the oedema responded to intravenous administration of diphenhydramine hydrochloride. Kirby *et al*[4] have also reported allergic reaction following use of hyaluronidase. Their patient developed periorbital oedema and chemosis within minutes of administration of local anaesthetic. Systemic symptoms such as sweating, nausea, and hypertension were also seen. In our patient, the ocular examination was unremarkable on the first postoperative visit and periorbital oedema developed 2 days following injection of the local anaesthetic. There were no systemic or local signs suggestive of an allergic phenomenon in our patient. Hence, we feel that in our case the diagnosis was orbital cellulitis and not an allergic reaction to hyaluronidase.

References

1 Varma D, Metcalfe TW. Case report entitled 'Orbital Cellulitis after peribulbar anaesthesia for cataract surgery'. *Eye* 2003; **17**(1): 105–106.
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Sir,

A hypopyon is a sign of post-trabeculectomy endophthalmitis or not?

We read with interest the case reported by Tan *et al* in July 2003 issue of *Eye*. The author presented one of the first cases of late bleb-related endophthalmitis caused by group B Streptococcus.[1] As the authors emphasized, delayed-onset endophthalmitis usually occurs in the leaking bleb and most of the cases were caused by *Staphylococci* or *Streptococci*.[2,3] and fewer cases by fungus.[4] However, other forms of organisms occasionally causes hypopyon and mimic bacterial endophthalmitis. We present an atypical case of acute retinal necrosis syndrome (ARNS) mimicking bleb-related endophthalmitis after trabeculectomy.

A 76-year-old woman complained of a visual disturbance in her right eye for the previous 7 days. She had suffered from shingles around the right eye. She had experienced chronic recurrent iridocyclitis with secondary open-angle glaucoma for the last 10 years and had received trabeculectomy 3 years ago in the right eye.

Best-corrected visual acuity was light perception in the right eye. The right conjunctiva was severely injected.