

recommended. Until a preservative free PE is available, we continue to recommend our preparation.

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Sir,

Treatment of macula-on retinal detachments

We have read with concern two articles published in *Eye* recently that advocate delay in the treatment of macula-on retinal detachments.^{1,2} In a letter, Prasad¹ asserts that 'best evidence indicates that there is no benefit in urgent surgery as long as scheduled surgery can be performed within 7–10 days'. We are concerned that he has misread his supporting references, which are concerned with visual recovery in macula-off retinal detachments, including one entitled 'visual recovery in macula-off retinal detachments'.³

We agree that once the macula is off, a delay of 7–10 days will not affect visual outcome. If the macula is on, the body of evidence suggests that visual outcomes are better when operations are performed before the macula detaches. Salicone *et al*⁴ demonstrated macular detachment as the most important prognostic factor for anatomical ($P = 0.031$) and visual success ($P \leq 0.001$) in detachment surgery.

The second article by Ho *et al* seeks to establish the likelihood of, and risk factors associated with, the progression of macula-on retinal detachments.² The authors qualify their results with a number of study weaknesses that render meaningful conclusions virtually impossible, apart from the finding that if the macula is just about to come off it may well do so in the very near future. That the majority of patients with macula-on retinal detachments do not become macula-off before surgery does not mean that it is acceptable for some patients to lose vision because of undue delay.

In a recent survey, a majority of vitreoretinal surgeons stated that they would not support in a court of law the actions of a colleague who did not operate on macula-on retinal detachments in a timely fashion and whose patients lost vision as a consequence.⁵ Even if supporting opinion could be found, judges can and do disregard expert evidence that appears to them to be unreasonable. We recommend that any ophthalmic surgeon without the facility to operate at a weekend on macula-on retinal detachments should refer such patients to a unit that has appropriate facilities.

References

- 1 Prasad S. The urgency and site of retinal detachment surgery. *Eye* 2006; **20**: 1105–1106.
- 2 Ho SF, Fitt A, Frimpong-Ansah K, Benson MT. The management of primary rhegmatogenous retinal detachment not involving the fovea. *Eye* 2006; **20**: 1049–1053.

- 3 Ross WH, Kozy DW. Visual recovery in macula-off rhegmatogenous retinal detachments. *Ophthalmology* 1998; **105**: 2149–2153.
- 4 Salicone A, Smiddy WE, Venkatraman A, Feuer W. Visual recovery after scleral buckling procedure for retinal detachment. *Ophthalmology* 2006; **113**: 1734–1742.
- 5 Frimpong-Ansah K, Kirkby GR. Arrangements for the management of urgent retinal detachments in the United Kingdom and Eire in the year 2000: results of a survey. *Eye* 2002; **16**: 754–760.

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Sir,

Reply to Scott and Kirkby

I agree with Scott and Kirkby that current opinion among UK ophthalmologists favours emergency surgery for macula-on detachments. However, there is little, if any, scientific evidence to support this widely held 'mantra'. Published studies overwhelmingly support the view that there is no detrimental effect in delaying re-attachment surgery for a few days of presentation of a macula-on detachment, even if the macula does detach for a short while before surgery is undertaken.

Scott and Kirkby contend that I have misread my references.^{1,2} If they read beyond the title of the article I supposedly misquoted,² it would become clear that this report specifically addresses macula-off detachments where the macula was determined to have come off within the last 7 days. This is exactly what we are trying to address here. In other words, if the macula does come off for a day or two while awaiting surgery for a detachment that presented with the macula-on, does this lead to a worse outcome? Ross and Kozy² conclude that if surgery takes place within seven days of the macula coming off, there is no adverse effect on visual outcome. Scott and Kirby subsequently quote Salicone *et al*'s³ publication purporting that this supports the need for emergency surgery. This report actually concludes that emergency surgery does not influence visual outcome. The concluding paragraph of their report states that 'This study reaffirms the prognostic importance of macular detachment on final visual acuity, but supports the hypothesis that a few days' margin until repair has no impact on visual acuity.'

It is possible to operate out of hours, but it is arguable whether the quality of surgery in this setting would be as good as that performed as an urgent but scheduled event, for reasons I have stated before. In the absence of credible evidence, Scott and Kirkby marshal opinion and the threat of litigation as reasons to advocate emergency surgery. Surely scientific evidence must take precedence over opinion and threat of litigation in guiding clinical

practice, especially where evidence clearly contradicts opinion.

References

- 1 Prasad S. The urgency and site of retinal detachment surgery. *Eye* 2006; **20**: 1105–1106.
- 2 Ross WH, Kozy DW. Visual recovery in macula-off rhegmatogenous retinal detachments. *Ophthalmology* 1998; **105**: 2149–2153.
- 3 Salicone A, Smiddy WE, Venkatraman A, Feuer W. Visual recovery after scleral buckling procedure for retinal detachment. *Ophthalmology* 2006; **113**: 1734–1742.

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Sir,
Reply to Scott and Kirkby

The authors agree with Kirkby and Scott that in the management of macula-on retinal detachment, there should not be 'undue delay' and that the surgery should occur in a 'timely fashion'. But of course these are very vague terms. Undue delay in one case might be reasonably timely in another.

The whole point of the MORD (macular-on retinal detachment) study¹ was to try to determine what degree of surgical delay is acceptable in these cases, and what interval to surgery would be considered 'timely'.

It is the authors' contention that immediate surgery may not be indicated in all cases.

The MORD study has limitations because it was not constructed as a randomised controlled trial, but it might be considered as paving the way for such a trial, and that would then answer the concerns of vitreoretinal surgeons regarding what is 'timely' and what actually constitutes 'undue delay'.

Reference

- 1 Ho SF, Fitt A, Frimpong-Ansah K, Benson MT. The management of primary rhegmatogenous retinal detachment not involving the fovea. *Eye* 2006; **20**: 1049–1053.

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Sir,
Orbital cellulitis associated with combined retinal and choroidal detachments

Orbital cellulitis may have sight- and life-threatening consequences.¹ We report an atypical manifestation of this condition. A 56-year-old woman with Down syndrome was referred for assessment of OD choroidal detachment. This was detected on a computed tomography (CT) scan carried out for evaluation of worsening periorbital swelling, purulent discharge, and chemosis of 4 days duration while on topical tobramycin and dexamethasone. Patient had malaise; however, there was no history of maxillofacial infections, fever, chills, trauma, or recent surgeries. There was no history of epiphora. Besides history of bilateral cataract surgeries a few years earlier, ocular history was unremarkable.

On examination the vital signs were normal. OD was proptotic with limited lateral gaze, inability to fix and follow, and a relative afferent pupillary defect. Sensation at CN V1 and V2 distribution was decreased but present. She was able to fix and follow by OS. The intraocular pressures were 32 mmHg OD and 23 mmHg OS. There was significant pain with retropulsion, right eyelid erythema, swelling, chemosis, and purulent discharge. The right lacrimal apparatus was difficult to assess given severe periorbital swelling. The right cornea, anterior chamber, and iris were unremarkable. She was pseudophakic OU. Funduscopy examination OD revealed an exudative retinal detachment, optic nerve head swelling, and an annular, opposing choroidal detachment. Ultrasound confirmed the choroidal detachment. No masses were noted by ultrasound. OS was essentially normal. No ocular bruits were detected. The patient was admitted and placed on intravenous ceftriaxone, vancomycin and metronidazole. Topical moxifloxacin and timolol were initiated. Topical prednisolone q.i.d. was used to relieve chemosis. Orbital CT scans with contrast revealed right choroidal detachment, retro-bulbar fat stranding extending to the orbital apex, and enhancement of the optic nerve sheath. The head CT was normal. The cavernous sinus filled normally, the superior ophthalmic vein calibres were normal, and the sinuses were clear (Figures 1 and 2). Within hours of admission, the patient developed lethargy, cool, clammy skin and a right pupil-involving cranial nerve III palsy. The patient was unable to complete magnetic resonance imaging of the head. Heparin was initiated to prevent a cavernous sinus thrombosis. Conjunctival and blood cultures were negative but they were done after antibiotic use. The right eyelid culture grew heavy *Staphylococcus aureus* sensitive to the administered antibiotics. Symptoms improved by the 4th day of treatment. Her complete blood counts were normal initially; however, the white count components and haemoglobin level gradually decreased. The hemoglobin and absolute neutrophils were below normal levels but eventually normalized. The anticoagulation was maintained and intravenous ceftriaxone was continued for the next 5 weeks coincident with the resolution of the retinal/choroidal detachments. The patient was able to fix and follow with no afferent pupillary defect or ophthalmoplegia. The optic nerve

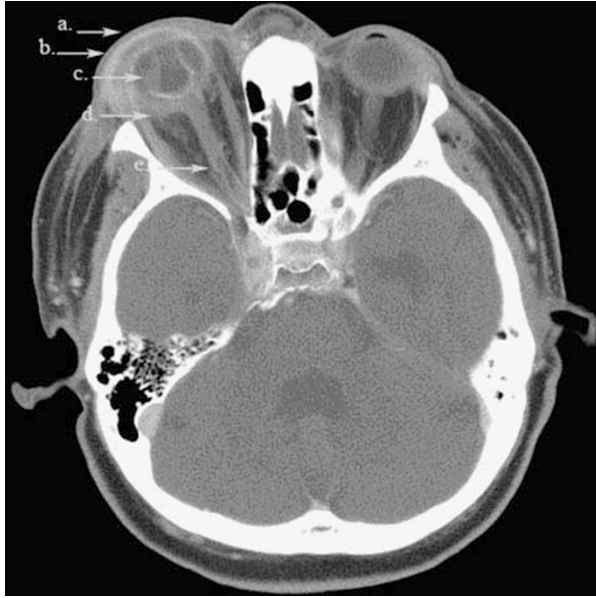


Figure 1 Orbital cellulitis: CT scan demonstrating OD (a) proptosis, (b) soft tissue inflammation, (c) choroidal detachment, (d) retrobulbar inflammation, and (e) optic nerve sheath enhancement. Figure has been digitally changed to incorporate arrows.



Figure 2 Choroidal detachment: CT scan demonstrating OD choroidal detachment and periorbital inflammation.

head appeared normal and the retina and choroid were grossly attached.

The differential diagnoses included orbital cellulites leading to orbital apex syndrome, idiopathic orbital inflammation, uveal effusion syndrome, lymphoproliferative disease, and cavernous sinus thrombosis or fistula.² Although the source of this infection remains unclear, it was our impression that the clinical course and CT scan findings were most consistent with orbital cellulitis with orbital apex involvement causing inflammatory vortex venous drainage impedance. This diagnosis was further supported by

resolution of retrobulbar inflammation within the first 4 days of antibiotic use with only q.i.d. topical steroids. To our knowledge, there is only one report of retinal/choroidal detachment associated with orbital cellulites.³ Orbital cellulitis may have to be considered in relevant situations, after choroidal detachment. Treatment of the underlying infection may result in resolution of the detachments.

References

- 1 Ferguson MP, McNab AA. Current treatment and outcome in orbital cellulitis. *Aust NZ J Ophthalmol* 1999; 27(6): 375–379.
- 2 Brubaker RF, Pederson JE. Ciliochoroidal detachment. *Surv Ophthalmol* 1983; 27(5): 281–289.
- 3 Malhotra M. Orbital cellulitis with exudative retinal detachment. *Br J ophthalmol* 1957; 41(5): 317–319.

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Sir, Severe radiation retinopathy and optic neuropathy after brachytherapy for choroidal melanoma, treated by hyperbaric oxygen

A 63-year-old woman was diagnosed with choroidal melanoma under the macula of the left eye. The visual acuity in the affected eye at the time of diagnosis was 6/15. Although the tumour was only 2.3 mm in maximal thickness, there was obvious evidence of growth, and she was treated by ruthenium-106 brachytherapy, receiving 10 000 cGy to the tumour apex and 22 200 cGy to the tumour base. The melanoma responded well to the treatment, but because of the tumour location, the visual acuity deteriorated to finger counting at 10–40 cm.

Four years after the brachytherapy the patient complained of visual deterioration and visual flashes. Fundus examination revealed marked retinal exudation with infiltrates, in areas confluent, around the optic nerve with some blurring of the optic nerve head borders (Figure 1a). Fluorescein angiography showed total blurring of the optic nerve head margin and peripapillary hyperfluorescence (Figure 1b). Visual field examination (24–2) showed 'viable' areas only in the upper and lower margins (Figure 1c). There was no change in the remnants of the melanoma. Diagnosis of irradiation optic neuropathy and retinopathy was made.

Since the patient previously exhibited significant side effects to steroid administration, she was referred for hyperbaric oxygen treatment (HBOT), receiving a course of 20 sessions, 2 h each, of 100% O₂ at 2 atmospheres absolute (ATA). Two months after the treatment, the patient felt marked visual improvement, although the