

Sir,

Reply

We thank Cheung and Benson for their interest in our recent paper. The case they present in this issue highlights a problem described by Mansour¹ and also seen in one of the 21 patients treated by Ulbig *et al.*² These cases were treated at 3 and 5 weeks, respectively, and despite the presence of a visible hyaloidotomy no blood was drained. Gabel *et al.*³ suggested that this failure of drainage into the vitreous may be because of incomplete perforation or solid clotting of the haemorrhage. However, the viscosity and clotting properties may be difficult to predict and may not necessarily be related to the duration of the haemorrhage. The state of the vitreous may also play a role, with erythrocytes more likely to pass into a liquefied rather than a formed vitreous.¹

Three of the patients in our series were treated successfully after 3 weeks. Of interest is the series of six eyes successfully treated by Iijima *et al.*,⁴ in which five were treated after 1.5 months. During this long delay in treatment, the erythrocytes degenerate and decolorise as the cell membrane envelope breaks down, possibly allowing them to drain more easily.

Nd:YAG laser hyaloidotomy has been shown to be a safe and effective procedure that can prevent the need for a more invasive vitreoretinal procedure. This is an important consideration in the case presented where the risk of intraoperative haemorrhage would be high. A second attempt at Nd:YAG laser hyaloidotomy could have been considered in this patient. The evidence that delay makes treatment more difficult is limited. We successfully treated three patients after 3 weeks and Iijima treated five after as long as 1.5 months. However, we recommend early treatment primarily to allow rapid

patient rehabilitation, as well as early assessment of the macular and to prevent possible toxic damage to the retina from prolonged contact with haemoglobin and iron.⁵

References

- 1 Mansour A. Nd:YAG laser photodisruption of hemorrhagic detachment of the internal limiting membrane. *Am J Ophthalmol* 1989; **107**: 566–567.
- 2 Ulbig MW, Mangouritsas G, Rothbacher HH, Hamilton AMP, McHugh JD. Long-term results after drainage of premacular subhyaloid hemorrhage into the vitreous with a pulsed Nd:YAG laser. *Arch Ophthalmol* 1998; **116**: 1465–1469.
- 3 Gabel V-P, Birngruber R, Gunther-Koszka H, Puliafito CA. Letter of reply to: Mansour A. Nd:YAG laser photodisruption of hemorrhagic detachment of the internal limiting membrane. *Am J Ophthalmol* 1989; **107**: 567–568.
- 4 Iijima H, Satoh S, Tsukahara S. Nd:YAG laser photodisruption for preretinal haemorrhage due to retinal macroaneurysm. *Retina* 1988; **18**: 430–434.
- 5 O'Hanley GP, Canny CLB. Diabetic dense premacular haemorrhage. A possible indication for prompt vitrectomy. *Ophthalmology* 1985; **92**: 507–511.

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