

Sir,
Scleral buckling combined with vitrectomy for the management of rhegmatogenous retinal detachment associated with inferior retinal breaks

We commend Alexander *et al*¹ on their interesting paper and excellent results. However, information vital to the interpretation of the paper has been left out. This includes their definition of inferior retinal breaks, generally considered to be detachment from the 4 to 8 o'clock position. Variation in this definition would have a bearing on outcomes and our ability to compare with other series. Data in the paper on the number and distribution of retinal breaks are omitted. Comment would have been useful on lens status and visual acuity as well as information on proportions and decision algorithm used for buckling with a silicone sponge or encircling with a 240 band.

A paper from our institution in 2001² stimulated interest in the management of inferior detachment by PPV alone, and since then, several papers have reported on this topic.³ Techniques and results have advanced since and there are two papers by Martinez-Castillo *et al*^{4,5} we feel should have been considered in the discussion. In pseudophakic rhegmatogenous detachment, they demonstrated, with pars plana vitrectomy, laser retinopexy, air, and no posture, 90% primary success.⁴ In another pseudophakic series, they achieved 93.3% primary success⁵ and they have more recently confirmed good results with their technique. Both rates are comparable to the figure reported in this paper, and as they were achieved without buckling, it raises the question of its influence (with attendant risks) on outcomes and take us back to previous findings of no difference between groups managed by either method.³ This is where the missing information would aid analysis.

References

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Sir,
Reply to Mokete and Williamson: scleral buckling combined with vitrectomy

We thank Bataung Mokete and Tom Williamson for their interest in our paper and their comments. Inferior detachment was defined as detachment of the retina below the 3 and 9 O'clock meridian. At least one horseshoe tear was present between the 4 and 8 O'clock meridian in every case.

Our study¹ focused on this particular subgroup, as these patients have in our experience, the highest risk of recurrence and failure. We found a 95% primary success rate and in addition, our study was not restricted by the numbers of horseshoe tears present as was the case in the papers to which they refer.^{2,3}

Round or atrophic holes (included in the report by Martinez-Castillo *et al*²) can be safely managed without the need for vitrectomy or internal tamponade with a 98% success rate⁴ so that inclusion of these cases might be expected to result in a more favourable outcome. We did not refer to their smaller study as with only 15 cases, we considered the numbers insufficient for comparison.³

The study by Martinez-Castillo *et al*² reports an 'initial' success of 90%, after which 10% re-detached. An alternative interpretation of these figures would be an 80% primary success rate, if using the same outcome criteria as our own for comparison of the two studies. This does not therefore support the notion that this group of patients can be managed as effectively and successfully with vitrectomy alone, if primary success is used as the main outcome criterion.

Two of the key findings of our study were the lack of any significant buckle-related problems and that over 50% of fellow eyes exhibited or developed significant pathology. This figure surprised us and perhaps suggests that patients with retinal detachment and inferior horseshoe tears may be at greater risk of bilateral detachment than we had previously recognised.

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Sir,
Management of perforating globe injury from a nail gun with intraocular C3F8

Ocular trauma is the leading cause of monocular blindness worldwide¹ and intraocular foreign bodies (IOFBs) are a major contributor accounting for approximately 17–41% of cases.² We present an unusual trauma case, whereby C3F8 gas escaped into the orbit resulting in surgical emphysema.

Case report

A 37-year-old man had an accidental perforating injury while using a pneumatic nail gun in the left eye. Examination revealed hand movement (HM) acuity, a 3.8 mm corneal laceration, shallow anterior chamber with hyphema (0.5 mm), iris sphincter tear, and anterior lens capsule disruption with temporal dislocation of the lens. Owing to vitreous haemorrhage, fundus examination was not possible but retinal detachment was excluded on orbital ultrasound. Figure 1a (X-ray) demonstrates the close proximity of the IOFB to the superior orbital roof.

The patient underwent a three port pars planar vitrectomy (PPV) with lensectomy. The nail had perforated the retina inferotemporal to the disc and was pulled out through the corneal wound revealing a gaping round hole at the posterior pole. During IOFB removal, a self-limiting suprachoroidal haemorrhage (SCH) developed inferiorly. The eye was subsequently filled with 14% C3F8 gas to tamponade the posterior retinal defect and the patient was asked to posture face down.

At the first postoperative day, 60% gas fill was detected but on the third day only 10% gas fill remained with surgical emphysema evident on the left upper lid (Figure 1b). The surgical emphysema and SCH gradually resolved and a month later, his

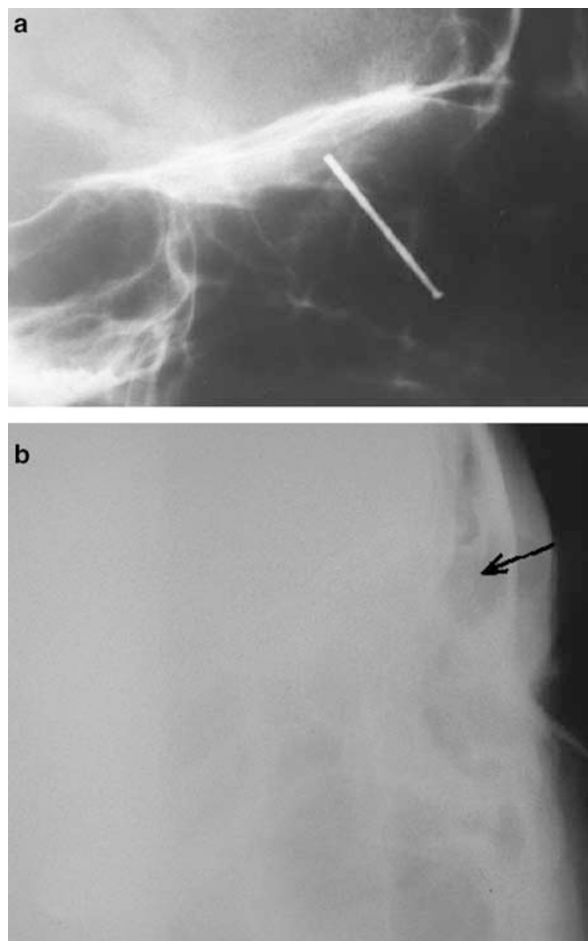


Figure 1 (a and b) Lateral orbital radiograph showing the nail in close proximity to the superior orbital roof (a) and surgical emphysema in the upper lid (b; arrow).



Figure 2 Fundus photograph showing a retinal defect inferotemporal to the disc with surrounding subretinal haemorrhage and retinal folds.

best-corrected acuity was 10/200 and a retinal defect was evident with surrounding subretinal haemorrhage and retinal folds due to retinal incarceration (Figure 2).