



**Figure 2** Distribution of laser spots treating the 'nonseeing' retina affected by the homonymous haemianopia.

effect of PRP. Heavy confluent burns or retreatment over previously treated areas, are more likely to have a detrimental effect on peripheral vision.<sup>3</sup>

Adequate control of patients' proliferative disease is of vital importance to prevent blindness. However, in a patient with a pre-existing visual field defect, treatment should be aimed not only at controlling the neovascular process but also at preserving the remaining functional visual field. We have been able to achieve this, by treating this patient's haemianopic field with significant confluent burns and avoiding the field of vision unaffected by the CVA. We therefore recommend applying PRP initially to areas of visual field loss (Figure 2). Obviously, if the angiogenic stimulus from the nontreated retina induces further new vessel formation, patients will require PRP to previously untreated areas. To the best of our knowledge, the tailoring of PRP for haemianopic patients has not been described in the past.

#### Acknowledgements

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#### References

- 1 The Diabetic Retinopathy Study Research Group. Photocoagulation treatment of proliferative diabetic retinopathy. Clinical application of Diabetic Retinopathy Study (DRS) findings, DRS Report Number 8. *Ophthalmology* 1981; **88**(7): 583–600.
- 2 Early Treatment Diabetic Retinopathy Study Research Group. Early photocoagulation for diabetic retinopathy. ETDRS Report Number 9. *Ophthalmology* 1991; **98**: 766–785.
- 3 Quinn MJ. Can altering the pattern of laser photocoagulation for proliferative diabetic retinopathy help retain visual fields for driving? *Eye* 1999; **13**: 495–496.
- 4 Laing SP, Swerdlow AJ, Carpenter LM, Slater SD, Burden AC, Botha JL *et al*. Mortality from Cerebrovascular disease in a Cohort of 23000 patients with insulin – treated diabetes. *Stroke* 2003; **34**: 418–421.
- 5 Gilhotra JS, Mitchell P, Healey PR, Cumming RG, Currie J. Homonymous visual field defects and stroke in an older population. *Stroke* 2002; **33**: 2417–2420.

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Sir,

#### Risk of solar retinopathy: evaluation of newspaper warnings prior to the 2004 Transit of Venus

On June 8, 2004, millions of people in Europe, Africa, and Middle East observed the Transit of Venus, when earth's closest planetary neighbour edged across the sun's disc over a period of 6 h.

Those who observe the sun directly risk permanent damage to their sight through solar retinopathy.<sup>1,2</sup> Thermal damage to foveal photoreceptors may cause a small defect in the centre of the visual field.<sup>3</sup> No treatment has been shown to be effective.<sup>2</sup> A preventative strategy by increasing public awareness of the risk of sun-gazing has been shown to be effective in reducing the risk of solar retinopathy during eclipses.<sup>2,4</sup>

We looked at newspapers to see whether they carried a warning about the dangers of sun-gazing. We surveyed 57 national and local titles from the United Kingdom (UK), evening newspapers from the 7th and morning newspapers on the 8th of June 2004 (Table 1).

Of the 23 UK newspapers which mentioned this solar event, only eight (33%) stated that it is dangerous to look directly at the sun, and only five (18%) suggested a safe alternative.

When drawing public attention to solar events, newspapers and other mass media must also give a specific warning that it is dangerous to look directly at the sun. They should suggest a safe method for observing

**Table 1** Results of newspaper survey

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Total newspapers, <i>n</i> = 57
No mention of Transit of Venus, <i>n</i> = 34
Mentioned Transit of Venus, <i>n</i> = 23
No warning against looking directly at sun, <i>n</i> = 15
Warning against looking directly at sun, <i>n</i> = 8
No safe viewing method suggested, <i>n</i> = 3
Safe viewing method suggested, <i>n</i> = 5
<i>Suggested safe viewing method</i>
Pinhole projection, <i>n</i> = 5
Other Image projection, <i>n</i> = 2
'Eclipse glasses', <i>n</i> = 4
Solar Filter, <i>n</i> = 2
Website referral, <i>n</i> = 1

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the event.<sup>2</sup> Safe methods for observing solar events include a pinhole or other image projection system, 'eclipse glasses', or other appropriate solar filter.

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#### References

- 1 Ewald RA, Ritchey CL. Sun gazing as the cause of foveomacular retinitis. *Am J Ophthalmol* 1970; **70**: 491.
- 2 Keightley S. Solar retinopathy. *Focus: Occasional Update from the Royal College of Ophthalmologists*. Royal College of Ophthalmologists: London, 1999.
- 3 Hope-Ross MW, Mahon GJ, Gardiner TA, Archer DB. Ultrastructural findings in solar retinopathy. *Eye* 1993; **7**: 29–33.
- 4 Juan-Lopez M, Pena-Corona MP. A strategy for preventing health injuries due to observing the solar eclipse in Mexico. *Salud Publica Mex* 1993; **35**(5): 494–499.

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Sir,

#### Acute irreversible diabetic cataract in adolescence: a case report

Acute metabolic cataract in patients with newly diagnosed Type 1 diabetes mellitus is a rare complication, which may develop within a few weeks or months after starting treatment.<sup>1,2</sup> It can affect visual acuity from slight visual impairment to complete blindness.<sup>1</sup> We report a case of acute bilateral irreversible metabolic cataract in a patient with recently diagnosed Type 1 diabetes mellitus.

#### Case report

An 18-year-old Caucasian female presented with a 4-week history of feeling unwell; a 2-month history of thirst and polyuria; and a 1-year history of weight loss. There was no significant past medical history. Her body mass index was 24.3. Urinalysis revealed moderate ketones and glucose but she was not acidotic. Her fasting plasma glucose level was 22.3 mmol/l (normal range: 3.3–5.5 mmol/l) and HbA1C was 10.5% (normal range: 4–6%). Urea, electrolytes and arterial blood gases were within normal limits. She was diagnosed as having Type 1 diabetes mellitus, and started on Novomix<sup>TM</sup> 30–26 U in the morning and 28 U in the evening.

After 1 week of treatment, she noticed blurring of vision in both eyes, which gradually worsened. She was referred to the Ophthalmology Department. There was no history of previous eye problems and visual acuity was 6/6 in both eyes at the start of treatment. On presentation visual acuity was only perception of light in both eyes. Slit-lamp biomicroscopy revealed dense intumescent cortical cataracts bilaterally (Figures 1 and 2). No fundal details were visible in either eye. She was diagnosed as having bilateral acute irreversible metabolic cataract and cataract surgery was planned. She underwent right phacoemulsification with an acrylic posterior chamber intraocular lens (PCIOL) implantation (Sensar<sup>®</sup> OptiEdge) under general anaesthesia (GA) and her visual acuity improved to 6/5 without glasses. After 2 months, left phacoemulsification and PCIOL implantation (Sensar<sup>®</sup> OptiEdge) under GA was performed and her visual acuity improved to 6/6 without glasses, although she required +2.5 for near vision. There were no changes of diabetic retinopathy seen.

After 3 months, left posterior capsular opacification developed and her visual acuity reduced to 6/9. Left YAG posterior capsulotomy was performed to improve visual acuity.

On her last visit the visual acuity in both eyes is 6/5 and there is no diabetic retinopathy.