



**Figure 3** Normal sclera (a) and sclera of the right eye in our patient (b) using Alcian Blue stain at pH 2.5 showing increase of irregular amorphous glycosaminoglycan-like material filling the interfibrillary spaces with disruption of collagen fibres. These features are consistent with UES. A full colour version of this figure is available at the *Eye* journal online.

quadrants may be necessary. This reinforces the global nature of UES, as the localised SRF is likely to be inferior due to dependency. We suggest that sclerotomies may be required in four quadrants to decrease the overall resistance to choroidal fluid outflow thus facilitating drainage of fluid from the suprachoroidal and subretinal space.

#### Conflict of interest

The authors declare no conflict of interest.

#### References

- 1 Andrijevic Derk B, Bencic G, Corluca V, Zoric Geber M, Vatauvuk Z. Medical therapy for uveal effusion syndrome. *Eye* 2014; **28**: 1028–1031.
- 2 Elagouz M, Stanescu-Segall D, Jackson TL. Uveal effusion syndrome. *Surv Ophthalmol* 2010; **55**: 134–145.

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*Eye* (2015) **29**, 588–589; doi:10.1038/eye.2014.291;  
published online 9 January 2015

Supplementary Information accompanies this paper on Eye website (<http://www.nature.com/eye>)

#### Sir, Reply to: 'Four quadrant sclerotomies for uveal effusion syndrome'

We read with great interest the recent correspondence by Wang *et al*<sup>1</sup> referring to our case series entitled 'Medical therapy for uveal effusion syndrome'.<sup>2</sup>

Wang *et al* suggested in their case report that even in cases of UES with localised subretinal fluid, a surgical intervention with sclerotomies performed in all four quadrants may be necessary to successfully manage the patient.

With UES being so rare in occurrence, evidence for treatment comes from case reports or case series. Until our case series, recommended therapy for the treatment of UES has been surgery.

As reported in our paper, we managed to completely resolve the UES with medical therapy alone in two patients, whereas the third patient had to undergo surgery in the left eye. We decided to perform the surgery in a stepwise manner; with two inferior sclerotomies initially, leaving the option of further two sclerotomies for subsequent procedure, should the first one fail to resolve the effusion. After the surgical procedure, UES resolved completely, his VA increased from 20/50 to 20/20 and no recurrence was observed until the present day.

The differences between our case and the one reported by Wang *et al* should also take into account the different findings in the histology of the sclera. In our case, even though the sclera was thickened, the histology did not show any abnormalities in connective tissue and there was no excessive accumulation of mucin. According to a study by Uyama *et al*,<sup>3</sup> final results of the surgery depend on the subtypes of UES (nanophthalmic eye *vs* eye with normal axial length; abnormal sclera *vs* normal sclera on histology).

From the reported case of Wang *et al*, it is not obvious whether medical therapy was introduced before the

surgery or not; however, we believe that initial medical therapy may be a good approach to UES patients proceeding to surgery in refractory cases using a stepwise surgical approach.

During initial surgery, two sclerotomies may be sufficient as was the case in our patient, but in other patients (different UES subtypes) four sclerotomies may be necessary, as suggested by Wang *et al* to achieve resolution of the disease.

### Conflict of interest

The authors declare no conflict of interest.

### References

- 1 Wang BZ, Clark B, McKelvie P, Matthews BJ, Buttery RG, Chandra A. Four quadrant sclerotomies for uveal effusion syndrome. *Eye* 2015; **29**: 588–589.
- 2 Andrijević Derk B, Benčić G, Corluka V, Zorić Geber M, Vatauvuk Z. Medical therapy for uveal effusion syndrome. *Eye (Lond)* 2014; **28**: 1028–1031.
- 3 Uyama M, Takahashi K, Kozaki J, Tagami N, Takada Y, Ohkuma H *et al*. Uveal effusion syndrome: clinical features, surgical treatment, histologic examination of the sclera, and pathophysiology. *Ophthalmology* 2000; **107**: 441–449.

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*Eye* (2015) **29**, 589–590; doi:10.1038/eye.2014.290; published online 9 January 2015

### Sir, Primary surgical posterior capsulotomy during phacovitrectomy

We read with interest the recent articles by Jalil *et al*<sup>1</sup> and Rahman and Stephenson,<sup>2</sup> describing good visual outcomes from combined phacoemulsification and pars plana vitrectomy. Posterior capsular opacification (PCO) is a common occurrence after phacovitrectomy and we note that the PCO rate in both papers was significant (5.8 and 8.3%, respectively). A previous study has estimated PCO incidence to be as high as 21.5% after phacovitrectomy.<sup>3</sup>

Primary surgical posterior capsulotomy at the time of phacovitrectomy prevents post-operative PCO and this has been our standard clinical practice for several years. In this technique, the capsulotomy is performed at the start of vitrectomy using the vitreous cutter, after the intraocular lens (IOL) is implanted into the capsular bag, and results in a circular, centred, 4-mm diameter capsular opening.<sup>4</sup>

Primary posterior capsulotomy ensures removal of the anterior vitreous and improves visualisation for intraoperative peeling of epiretinal or internal limiting membranes, and also improves the fundal view during the post-operative period. Primary capsulotomy with posterior optic buttonholing has been recently described but we have not found this to be necessary.<sup>5</sup> In our series of more than 1500 patients, we have not encountered IOL dislocation into the vitreous or IOL de-centration. This technique can be routinely used when implanting monofocal, multifocal, or toric IOLs. Our audited results have shown no difference in refractive outcomes between phacovitrectomy (with primary posterior capsulotomy) and phacoemulsification surgery alone.

We do not implant silicone lenses, but would advocate caution when such IOLs are used in a situation where silicone oil may be required. Silicone oil adherence to silicone IOLs is a well-recognised phenomenon that is notoriously difficult to treat.<sup>6</sup>

The only disadvantage of primary posterior capsulotomy is that during fluid–air exchange, condensation on the posterior IOL surface can obscure the view of the posterior pole. In this circumstance, application of hydroxypropylmethylcellulose to the posterior lens surface will rapidly restore the fundal view.

### Conflict of interest

The authors declare no conflict of interest.

### References

- 1 Jalil A, Steeples L, Subramani S, Bindra MS, Dhawahir-Scala F, Patton N. Microincision cataract surgery combined with vitrectomy: a case series. *Eye (Lond)* 2014; **28**(4): 386–389.
- 2 Rahman R, Stephenson J. Early surgery for epiretinal membrane preserves more vision for patients. *Eye (Lond)* 2014; **28**(4): 410–414.
- 3 Wensheng L, Wu R, Wang X, Xu M, Sun G, Sun C. Clinical complications of combined phacoemulsification and vitrectomy for eyes with coexisting cataract and vitreoretinal diseases. *Eur J Ophthalmol* 2009; **19**(1): 37–45.
- 4 Sato S, Inoue M, Kobayashi S, Watanabe Y, Kadonosono K. Primary posterior capsulotomy using a 25-gauge vitreous cutter in vitrectomy combined with cataract surgery. *J Cataract Refract Surg* 2010; **36**(1): 2–5.
- 5 Shin JY, Kim SE, Byeon SH. Primary posterior capsulotomy and posterior optic buttonholing in eyes with phacovitrectomy and gas tamponade. *Retina* 2014; **34**(3): 610–615.
- 6 Apple DJ, Federman JL, Krolicki TJ, Sims JC, Kent DG, Hamburger HA *et al*. Irreversible silicone oil adhesion to silicone intraocular lenses. A clinicopathologic analysis. *Ophthalmology* 1996; **103**(10): 1555–1561; discussion 1561–1552.

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*Eye* (2015) **29**, 590; doi:10.1038/eye.2014.300; published online 9 January 2015