

This report is the first to identify a potential source of the infection from the home tank water.

The treatment is challenging as the *Paecilomyces* species is resistant to the normally available anti-fungal treatments, such as natamycin and amphotericin-B. Voriconazole is a fungistatic triazole that acts by impairing synthesis of fungal cell membranes, leading to cellular lysis.² It is available in both oral and i.v. forms. It is not specifically available as a topical preparation for the eye; however, this can be readily made from the i.v. form into a 1% solution and is well tolerated by the ocular surface. Both renal and hepatic functions need to be monitored at baseline and during treatment.

Corneoscleral grafting is a technique that is used for end-stage disease. Fortunately, fungal clearance was obtained; however, there was the potential that if fungal seeding had occurred intraocularly, then endophthalmitis and loss of the eye would have occurred. An attempt was made at surgery to preserve as much limbal tissue as possible in order to minimize the risk of ocular surface failure. This was a compromise as there was a risk of leaving residual fungal elements. Intractable glaucoma is also a potential consequence of corneoscleral grafting, owing to the extensive damage to the trabecular meshwork. Fortunately, in this patient's case, the inferior 180° of her trabecular meshwork showed no involvement by the fungus. Lifelong follow-up will be necessary to monitor for any of these potential complications.

Acknowledgements

We thank Drs Lawrence Hirst and Michael Whitby for their clinical advice during the care of this patient.

References

- 1 Hirst LW, Sebban A, Whitby RM, Nimmo GR, Stallard K. Non-traumatic mycotic keratitis. *Eye* 1992; **6**: 391–395.
- 2 Marangon FB, Miller D, Giaconi JA, Alfonso EC. *In vitro* investigation of voriconazole susceptibility for keratitis and endophthalmitis fungal pathogens. *Am J Ophthalmol* 2004; 137: 820–825.

GA Lee^{1,2}, K Whitehead³ and R McDougall³

¹Department of Ophthalmology, Royal Brisbane Hospital, Brisbane, Australia

²University of Queensland, Brisbane, Australia

³Sullivan & Nicolaides Pathology, Brisbane, Queensland, Australia Correspondence: GA Lee, City Eye Centre, 10/135 Wickham Tce,

Brisbane Queensland 4000, Australia

Tel: +617 38316888; Fax: +617 38316883. E-mail: eye@cityeye.com.au

The authors have no financial interests in the techniques or medications mentioned in this article

Eye (2007) **21**, 262–264. doi:10.1038/sj.eye.6702503; published online 7 July 2006

Sir,

The influence of posterior capsule opacification on scanning laser polarimetry

We read with interest the article by Vetrugno *et al.*¹ The authors conducted an investigation regarding the effect that posterior capsule opacification (PCO) and subsequent Nd: YAG capsulotomy have on the results of scanning laser polarimetry (SLP) of retinal nerve fibre layer (RNFL) retardation measurements. Considering that pseudophakia in glaucoma is a relatively common condition, and that SLP has been shown to be a useful tool in the diagnosis and follow-up of glaucoma, the issue studied is clinically important.

Vetrugno *et al*¹ found no change in GDx parameters before and after PCO removal (only Symmetry, Inferior Ratio, Superior Nasal, and Tempora-Superior-Nasal-Inferior-Temporal SD showed any modification).

Recently, a preliminary small case series (including GDx maps and PCO photographs) was published, as there was a subsequent larger study with consecutive PCO-affected patients on the same subject.^{2,3} In contrast, we concluded that PCO removal is associated to remarkably significant changes in SLP measurements. Briefly, our results suggest that SLP examination with GDx VCC may overestimate RNFL retardation measurements in PCO-affected eyes.

The methods used by Vetrugno *et al*¹ and our group were similar. Nevertheless, some questions are raised that may help to understand the surprising differences in the results, at least in part.

As it is known, anterior segment birefringence (ASB) has to be compensated to ensure accurate RNFL assessment. In the referred paper, SLP was performed on each patient using GDx ACCESS, but there was no mention of whether variable corneal compensation GDx



version was used. In this case, the text adds no further details about the procedure. We are unaware whether the ASB was assessed only before capsulotomy, or before and after PCO removal. The latter strategy was chosen in our studies.

Authors can certainly enlighten us in these aspects.

References

- 1 Vetrugno M, Masselli F, Greco G, Sisto D, Maino A, Ficarelli S *et al.* The influence of posterior capsule opacification on scanning laser polarimetry. *Eye*, advance online publication, 7 April 2006. doi:10.1038/sj.eye.6702323.
- 2 Garcia-Medina JJ, Garcia-Medina M, Shahin M, Pinazo-Duran MD. Posterior capsular opacification affects scanning laser polarimetry examination. *Graefes Arch Clin Exp Ophthalmol* 2006; 244: 520–523.
- 3 Garcia-Medina JJ, Garcia-Medina M, Dorta SG, Pinazo-Duran MD, Gallego-Pinazo R, Zanon-Moreno VC. Effect of posterior capsular opacification removal on scanning laser polarimetry measurements. *Graefes Arch Clin Exp Ophthalmol*, advance online publication, 22 Mar 2006. doi:10.1007/s00417-005-0244-8.

JJ Garcia-Medina 1,2 , M Garcia-Medina 1,3 and MD Pinazo-Duran 1

¹Ophthalmology Research Unit 'Santiago Grisolia', University Hospital Doctor Peset, Valencia, Spain

²Department of Ophthalmology, Hospital Huercal-Overa, SAS, Almería, Spain

³Department of Ophthalmology, Torrecárdenas Hospital, SAS, Almería, Spain

Correspondence: JJ Garcia-Medina,
Ophthalmology Research Unit 'Santiago Grisolia',
University Hospital Doctor Peset,
Avenida Gaspar Aguilar 90,
Valencia 46017, Spain
Tel: +34 963 86 25 66.

E-mail: josegarciam@yahoo.com

Financial/Proprietary support: Nil

Eye (2007) **21,** 264–265. doi:10.1038/sj.eye.6702505; published online 28 July 2006

Sir, Reply to Dr Gracia-Medina

We thank Dr Garcia Medina for his interest in our article. In his study,¹ Dr Garcia Medina and his team conducted

a study using the same instrument, namely GDx Access with variable corneal compensation (VCC). Dr Garcia Medina enquired whether we used VCC in our study. The answer is yes. All measurements were taken using GDx Access using default setting, that is, with VCC enabled. As we did not modify the machine setting, we thought that specifying this in the text would have been redundant. However, we thank Dr Garcia Medina for giving us the possibility of clarifying this detail.

As far as the discordance between our results and his, we respectfully remind Dr Garcia Medina that no more than 28 eyes were included in his larger study. When we set up our study, we determined that the minimum sample size to have a statistical power of 80% with an alpha error of 0.05 and an effect size of medium magnitude (d=0.5) would have been 102 eyes. We would like to highlight how all these parameters are considered to be the norm in sample size calculations. Given the sample size reported by Dr Garcia Medina, the power of his study results to be less than 40%. While his methodology is faultless, perhaps his group might want to consider repeating the study with a larger sample in order to achieve a more robust analysis.

Reference

1 Garcia Medina JJ, Garcia Medina M, Dorta SG. Effect of posterior capsular opacification removal on scanning laser polarimetry measurements. *Graefe Arch Clin Exp Ophthalmol* 2006 March 22, doi:10.1007/s00417-005-0244-8.

M Vetrugno, F Masselli, G Greco, D Sisto, A Maino, S Ficarelli and C Sborgia

Department of Ophthalmology, University of Bari, Bari, Italy

Correspondence: M Vetrugno, Department of Ophthalmology, University of Bari, piazza G Cesare, 11, via Cardinale Mimmi, 24,

Bari 70124, Italy Tel: +39 080 5592525; Fax: +39 080 5478918.

E-mail: m.vetrugno@oftalmo.uniba.it

Eye (2007) **21,** 265. doi:10.1038/sj.eye.6702506; published online 28 July 2006