

- 7 Callegan MC, Ramirez R, Kane ST, Cochran DC, Jensen H. Antibacterial activity of the fourth-generation fluoroquinolones gatifloxacin and moxifloxacin against ocular pathogens. *Adv Ther* 2003; **20**(5): 246–252.
- 8 Garcia-Saenz MC, Arias-Puente A, Fresnadillo-Martinez MJ, Carrasco-Font C. Human aqueous humor levels of oral ciprofloxacin, levofloxacin and moxifloxacin. J Cataract Refract Surg 2001; 27: 1969–1974.
- 9 Kampougeris G, Antoniadou A, Kavouklis E, Chryssouli Z, Giamarellou H. Penetration of moxifloxacin into the human aqueous humour after oral administration. *Br J Ophthalmol* 2005; **89**(5): 628–631.
- 10 Hariprasad SM, Shah GK, Mieler WF, Feiner L, Blinder KJ, Holekamp NM *et al.* Vitreous and aqueous penetration of orally administered moxifloxacin in humans. *Arch Ophthalmol* 2006; **124**(2): 178–182.
- 11 Fuller JJ, Lott MN, Henson NM, Bhatti AA, Singh H, McGwin Jr G *et al*. Vitreal penetration of oral and topical moxifloxacin in humans. *Am J Ophthalmol* 2007; **143**(2): 338–340; e-pub ahead of print, 23 October 2006.

G Kampougeris¹ and A Antoniadou²

¹Department of Ophthalmology, Athens Medical Centre, Athens, Greece ²Fourth Department of Internal Medicine, Athens University Medical School, University General Hospital 'ATTIKON', Athens, Greece E-mail: gkampougeris@yahoo.gr

Eye (2007) **21**, 1242–1243; doi:10.1038/sj.eye.6702915; published online 6 July 2007

Sir,

Reply to Kampougeris *et al*

I like to thank Kampougeris *et al* for their responses to our article.¹

The following are our responses to their comments:

- (1) Kampougeris *et al* mention that other publications have found majority of staphylococci to be susceptible to moxifloxacin. We too have noted this in our paper. In fact, this was the main reason that prompted us to design the study. The low intraocular concentrations found in our study in contrast to other publications surprised us as well, but we have given reasons that might explain the same in our paper.
- (2) Kampougeris *et al* state that we decided to test moxifloxacin because of its low minimum inhibitory concentrations (MICs) against pathogens implicated in endophthalmitis, which is contrary to the MICs in Table 1 that we had used for analysis. We had in fact mentioned that the MIC 90 of moxifloxacin was lower than that for the other fluoroquinolone antibiotics against the pathogens responsible for endophthalmitis and had quoted Table 1 as the reference.² Hence, we take issue with the statement that we are contradicting ourselves.
- (3) Kampougeris *et al* also mention about the wide variations in the moxifloxacin levels in our series. We

have clearly discussed about this in our study: 'Amongst the serum, aqueous, and vitreous concentrations, there appeared to be several values that were considered outliers. We chose to include all data obtained in the study, as the investigators could not explain these high or low concentrations and attributed them to variability of moxifloxacin pharmacokinetics in individual patients.'

- (4) Kampougeris *et al* also mention that these variations were not seen in other similar studies. Of note, similar outlier values were noted by Hariprasad *et al*³ in their series, and here too the authors attributed these to inter-patient variability of drug pharmacokinetics.
- (5) They also seem to suggest that certain sampling errors occurred owing to processing delay. We consider this speculation unfortunate and unwarranted and we are disappointed at the suggestion, as we had ensured that all the samples were processed appropriately. The processing was as per our previous publication.⁴
- (6) Kampougeris *et al* also mention that the results of our paper have to be interpreted with caution. We too have not claimed so and have mentioned the need for future studies in our paper.

References

- Vedantham V, Lalitha P, Velpandian T, Ghose S, Mahalakhsmi R, Ramasamy K. Vitreous and aqueous penetration of orally administered moxifloxacin in humans. *Eye* 2006; **20**: 1273–1278.
- 2 Blondeau JM. A review of the comparative *in-vitro* activities of 12 antimicrobial agents, with a focus on five new 'respiratory quinolones'. *J Antimicrob Chemother* 1999; 43(Suppl B): 1–11.
- 3 Hariprasad SM, Blinder KJ, Shah GK, Apte RS, Rosenblatt B, Holekamp NM *et al*. Penetration pharmacokinetics of topically administered 0.5%, moxifloxacin, ophthalmic, solution in human aqueous and vitreous. *Arch Ophthalmol* 2005; **123**: 39–44.
- 4 Talwar D, Kulkarni A, Azad R, Gupta SK, Velpandian T, Sharma Y et al. Intraocular ciprofloxacin levels after oral administration in silicone oil-filled eyes. *Invest Ophthalmol Vis Sci* 2003; 44: 505–509.

V Vedantham, P Lalitha, T Velpandian, S Ghose, R Mahalakhsmi and K Ramasamy

Retina-Vitreous Service Aravind Eye Hospital & PG Institute of Ophthalmology, Madurai, India E-mail: drvasumathy@yahoo.com

Eye (2007) **21**, 1243; doi:10.1038/sj.eye.6702916; published online 6 July 2007

Sir,

Acute post-operative infective endophthalmitis detected on first-day check Proprietary interests: none

Controversy exists as to whether routine first-day postcataract surgery reviews (FDRs) are required especially for uncomplicated cases. Some reports suggest that FDRs are unnecessary^{1,2} or that same-day examination is a satisfactory alternative.³ It has also been suggested that post-operative pressure spikes may require early intervention.^{4,5} We describe an unusual case of presumed post-operative infective endophthalmitis detected at FDR.

Case report

A 77-year-old man with a history of right herpes zoster ophthalmicus was admitted for day-case right cataract surgery. Visual acuity was count fingers; there were localised inferior posterior synechiae and corneal stromal scarring and thinning related to an anaesthetic cornea and previous infective keratitis. A superior scleral tunnel was therefore used by an experienced anterior-segment surgeon. The synechiae were easily broken and uncomplicated surgery was completed within 20 minutes.

Precautions to reduce the risk of infective endophthalmitis included iodine scrub of the lids before peri-bulbar block and surgery. Sterile instrumentation and aseptic protocols were adopted throughout. At the end of surgery, 1 mg of intracameral cefuroxime in 0.1 ml was used.

The surgeon requested FDR. The patient stated that his sight had improved and his eye was comfortable and only slightly red. Visual acuity was 6/36, the bulbar conjunctiva was very injected, and marked fibrinous uveitis with an organised 0.8 mm hypopyon was present. (Figure 1). No clear vitreous or retinal view was possible, but there was a uniform red reflex.

This was treated as post-operative infective endophthalmitis. An aqueous tap and vitreous biopsy were taken with subsequent intravitreal vancomycin 1 mg, intravitreal amikacin 0.4 mg, and intracameral vancomycin 1 mg (each in 0.1 ml). Topical and systemic antibiotics and steroids followed with resolution of the signs of infection and improvement of vision to 6/12 after 3 days .

Aqueous gram stain was clear, but mixed Grampositive cocci and bacilli were present in the vitreous,



Figure 1 Fibrinous uveitis and hypopyon 1 day after cataract surgery.

some of which were intracellular in pus cells. No pathogens grew on culture.

Comment

This was uncomplicated surgery using evidence-based methods for preventing infective endophthalmitis. ^{6,7} FDR resulted in the early detection and treatment with excellent outcome of a potentially devastating complication. The authors believe that this case demonstrates the need to be able to offer FDR in selected cases and be able to immediately deal with complications. All purchasers of cataract services need to take this into account in making informed decisions about quality service provision.

References

- 1 Whitefield L, Crowston J, Little BC. First day follow up for routine phacoemulsification? *Br J Opthalmol* 1996; **80**: 148–150.
- 2 Tinley CG, Frost A, Hakin KN, McDermott W, Ewings P. Is visual outcome compromised when next day review is omitted after phacoemulsification surgery? A randomised controlled trial. *Br J Opthalmol* 2003; **87**: 1350–1355.
- 3 Talks SJ, Rosen P. First day follow up for routine phacoemulsification? Br J Opthalmol 81: 421–422.
- 4 Tranos PG, Wickremasinghe SS, Hildebrand D, Asaria R, Mearza A, Ghazi-Nouri S *et al.* Same-day versus first-day review of intraocular pressure after uneventfaul phacoemulsification. *J Cataract Refract Surg* 2003; 29: 508–517.
- 5 Alwitry A, Rotchford A, Gardner I. First day review after uncomplicated phacoemulsification: is it necessary? *Eur J Ophthalmol* 2006; **16**: 554–559.
- 6 Barry P, Seal DV, Gettinby G, Lees F, Peterson M, Revie CW. ESCRS study of postoperative endophthalmitis after cataract surgery: preliminary report of principle results from a European multicenter study. J Cataract Refract Surg 2006; 32: 407–410.
- 7 Speaker MG, Menikoff JA. Prophylaxis of endophthalmitis with topical povidone-iodine. *Ophthalmology* 1991; 98(12): 1769–1775.
- J-S Barry, A Spiteri and NE Habib

Department of Opthalmology, Royal Eye Infirmary, Devon, UK E-mail: johnsbarry@doctors.org.uk

Proprietary interests: none

Eye (2007) **21**, 1243–1244; doi:10.1038/sj.eye.6702923; published online 6 July 2007

Bilateral endogenous endophthalmitis caused by *Aeromonas hydrophila*

We describe the first case of bilateral endogenous endophthalmitis caused by *Aeromonas hydrophila* following bowel surgery.

Case report

A 73-year-old woman suffered prolonged paralytic ileus requiring a central venous line (CVL) for total parenteral