Pseudomonas aeruginosa endophthalmitis following cataract surgery

Dear Editor,

We read with interest the article "Bilateral *Pseudomonas aeruginosa* endophthalmitis following bilateral simultaneous cataract surgery" by Kashkouli *et al.*¹ It is without doubt that in today's modern fast-paced world, the relevance of bilateral simultaneous cataract surgery (BSCS) will inevitably become more prominent, with some centers conducting BSCS in 40% of their cataract patients.² We would like to add a few comments to the above article.

- 1. Although there has been much debate on BSCS, as alluded to by the authors in their report, we would like to highlight the proven viability of BSCS. Arshinoff *et al.*, reported the largest BSCS series with 2040 eyes operated on from 1996 to 2002.³ The results of their series were promising with few complications, none of which could have been attributed to the procedure being done bilaterally as opposed to one eye operated on in one session. In the United Kingdom, one of the earlier studies by Beatty *et al.* supporting the viability of BSCS also showed promising results with no cases of bilateral endophthalmitis.⁴ This study included 638 eyes with a final best corrected visual acuity of 20/40 or better seen in 82.1% of the patients, the remainder having preexisting ophthalmic conditions attributing to the poor visual acuity outcome.
- 2. We strongly affirm the authors' comment that "the surgeon needs to consider the other eye cataract surgery as a separate surgery." In the above studies which highlighted the viability of BSCS,²⁻⁴ each operation was considered as two separate procedures. The surgeons used different instruments and fluids (ophthalmic viscosurgical devices and balanced salt solutions) for each eye.
- 3. Should bilateral blindness result in a patient, the effect on the patient's quality of life (QoL) is clearly magnified, compared to a patient with unilateral blindness. Although in the Beatty et al. study there were no cases of bilateral endophthalmitis, one case of unilateral endophthalmitis was reported which necessitated enucleation of that eye.4 It is very fortunate that they did not encounter bilateral endophthalmitis, with the frightening possible outcome of bilateral enucleation. Obviously, the greatest risk in BSCS is the risk of bilateral blindness that has tremendous detrimental effects on the patient's QoL. Vu et al., showed that those with non-correctable bilateral vision loss were associated with an odds ratio of 5.81 in the perception of health and emotional problems arising from extreme interference with normal social activities (compared to those with normal vision), whilst those with noncorrectable unilateral vision loss were associated with an odds ratio of 2.33.⁵ They also showed that the odds ratio of a bilaterally blind patient (compared to a patient of normal vision) being placed in a nursing home was 14.8; in contrast, those with unilateral blindness were found to have an odds ratio of 2.92. The drastic effects of bilateral blindness on a patient's QoL must therefore prompt a surgeon considering BSCS to be very cautious in his decision to perform the operation, as well as ensuring that

the patient considering BSCS should be fully informed of the real (although small) risk of bilateral blindness and its significantly deleterious effects on their QoL.

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