

Endophthalmitis

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The need for high-quality monitoring of the incidence, management, and outcome of postoperative endophthalmitis is now even more important with the recent and continuing increase in the number of cataract operations performed in the United Kingdom. Kamalarajah *et al*¹ in this issue show a corrected incidence of endophthalmitis of 0.14%. The reported incidence of 0.085% was estimated to represent 62.5% of the total number of cases following external validation of case ascertainment. For the average district general hospital performing 2000 cataract operations this would represent 2–3 cases annually. The Royal College of Ophthalmologists in their 'Ophthalmic Services 2003' guidelines² reiterate that endophthalmitis following surgery is a critical incident and should be 'recognised, analysed, and reported'. As ophthalmologists we must ensure that there is honest collection of information and critical incident recording within every unit providing cataract surgery would enable this. A national cataract database, presently being worked on by the Royal College of Ophthalmologists and awaiting funding, should provide more robust information in the future.

A total of 81% of patients with endophthalmitis presented within 1 week of surgery, with blurred vision the commonest presenting symptom in 85% of patients and only 52% with a red eye. Pain, considered to be a major diagnostic symptom, was absent in 31% of patients. Similarly, the Endophthalmitis Vitrectomy Study also found pain to be absent in up to 25% of patients.³ With the increase in the number of cataract operations performed in the United Kingdom and in the number of providers of cataract surgical service, it is imperative that every patient has 24-h emergency access and that a patient with acquired blurring of vision postoperatively is seen as early as possible to rule out and treat suspected endophthalmitis, as the presenting visual acuity is a strong predictor of final visual outcome.⁴ It is, however, disappointing that 6% of patients had neither an aqueous nor

vitreous biopsy and that 8% had an aqueous biopsy only.

The final visual outcome of endophthalmitis is well documented by Kamalarajah *et al*¹. While 48% achieved a visual acuity of 6/12 or better, 13% had no perception of light following cataract surgery. This will represent about 46 patients blinded out of 250,000 operations per annum in the United Kingdom. These are the cases we must dwell on to ensure that cataract surgery does not become a blinding operation.

Although the importance of surveillance and good quality management of endophthalmitis must not be underestimated, the prevention of endophthalmitis remains the most important factor and is often the most overlooked. To date, the preoperative use of Povidone-iodine antiseptics has been shown to be the only prophylactic technique with a moderate evidence base⁵ and, although commonly practiced, the evidence supporting the use of antibiotics pre-, intra-, or postoperatively remains weak⁵ and controversial.⁶ More recently, the data on the use of intraocular antibiotics from a large series at St Eric's Hospital in Sweden⁷ appear promising and a randomised controlled trial on their use presently being carried out by the European Society of Cataract and Refractive Surgeons will hopefully provide the evidence that we require.

While prompt diagnosis and timely treatment of endophthalmitis remains central to any opportunity for successful outcome, every unit must have in place an established protocol⁸ for a vigilant and structured scrutinisation of perioperative events and factors surrounding every case of suspected endophthalmitis. This may enable early recognition and elimination of possible predisposing factors or practices, which would otherwise lead to more cases.

References

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