

Letter to the Editor

Predictors of visual outcome and the role of early vitrectomy in Streptococcal endophthalmitis: response

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We thank Grzybowski and Turczynowska (1) for their interest in our recent publication (2). The Endophthalmitis Vitrectomy Study (EVS) (3) is now over two decades old, and the criterion of early vitrectomy within six hours was strictly adhered to as part of this prospective, limited-time study. Our retrospective study exposes the limitations of such a strict criterion, even in the setting of a quaternary specialist eye hospital. The practicalities of access to care, logistics and fasting status often delay surgery beyond a six-hour window, and it was never our intention to perform a direct comparison. Instead, we present a practical, “real-world” perspective of early vitrectomy, which may be more useful in everyday settings.

While advances in vitrectomy technology and techniques, including those mentioned by Kuhn and Gini (4) have improved the safety profile of vitrectomy in endophthalmitis, it is still overwhelmingly the most difficult and risky procedures to perform, compared to other indications for vitrectomy. (5) It is for this very reason that Kuhn and Gini draw attention to the EVS protocol of limited vitreous removal, which possibly reduced the rate of retinal detachment in vitrectomised eyes compared to the nonsurgical group. The decision to perform vitrectomy in endophthalmitis is still difficult and continues to be debated. To justify an intervention that is highly risky for iatrogenic damage in our own hands, we often require a higher threshold of evidence for benefit against non-intervention. Such procedures should not be taken lightly and should be performed by expert hands.

Clinical assessment is vital in making treatment decisions in endophthalmitis. Microbiological information, when available, is a useful adjunct to decision-making. We acknowledge that whilst this is institution-dependent, there are many similar institutions, for whom gram stain results are readily available within 1-2 hours. We routinely use this information, as it is well within the time needed to admit a

patient, obtain vitreoretinal opinion, and prepare them for possible surgery. Therefore, we find that early microbiological results do not delay treatment decisions, but instead add to the clinical assessment of patients presenting with a potentially aggressive infection which is likely to lead to severe visual loss, blindness or loss of an eye.

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