Reviewer's report

Title: Ketorolac topic. A therapeutic possibility in the Retinopathy of Prematurity? Retrospective cohort study

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Reviewer: David K Coats

Reviewer's report:

This is a very interesting paper and a very interesting concept attempting to identify another means to prevent retinopathy of prematurity, a very common cause of severe visual impairment and blindness in premature infants. The study suffers from a number of obvious flaws, some of which the authors point out themselves. First, the study was conducted on non-concurrent patient groups. This is really problematic in diseases such as ROP where changes in the systemic care patients receive may have a significant impact on disease development and progression. These authors, for example, note that the mortality rate decreased by 20% in the latter part of the study, suggesting that very significant differences in systemic care were present during this period of time. Additionally, the sample size is extremely small and conclusions drawn from such a small sample, especially when examiners were not masked and the patient groups were not concurrent, are of questionable validity. A disease such as ROP is very complex to study, even for experienced examiners such as the authors. Strict criteria must be established for diagnosis of “threshold ROP” and confirmatory examinations are useful to minimize bias. The differences found between the study groups was too small to make any meaningful comments in light of the design issues outlined above. The paper has very significant language issues and a professional, English language, editor is recommended.

What next?: Reject because scientifically unsound

Level of interest: An article of limited interest

Quality of written English: Not suitable for publication unless extensively edited

Statistical review: No