Author's response to reviews

Title: Outcome of Retinopathy of Prematurity (ROP) Patients Following Adoption of Revised Indications for Treatment

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Author's response to reviews: see over
May 20, 2008

Dear Dr. Marlee,

Please find, as requested, a point-by-point response identifying the corrections requested by the reviewers. Thank you again for reviewing our manuscript; if you have any questions, do not hesitate to contact me.

Sincerely,

Aaron Alme, MD  Eyal Margalit, MD, PhD
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Reviewer: Louise Allen
Reviewer’s report:
I enjoyed reading this paper and it provides further encouragement that we are on the right track in giving earlier laser treatment for ROP. I do not feel that there are any compulsory revisions to be made.

Method
Minor revision: Accepted terminology would reserve "estimated gestational age" for the number of weeks in utero, and "post-menstrual age" (PMA) for gestational age plus post-natal age.

A review of the literature suggests that EGA has been commonly (though perhaps incorrectly) used in most ROP literature.

It would be useful to know in the method how many screeners there actually were looking after these babies. It would also be useful to have the screening guidelines in the method for the international audience.

The screeners and guidelines have been added.

Results
Discretionary revision: I don't think that Figures 1-3 are necessary, the information they carry is simple and clear enough from the text.

Figures 1-3 have been removed at the request of the reviewer.

Minor revision: EGA is, by definition, at birth (para 2)
Discretionary revision: I am quite surprised that, when all RD (rather than just Stage 5) is taken into account, there was a relatively small reduction in frequency between pre-ETROP (13.8% of treated eyes) vs post-ETROP (12.3% of treated eyes) in this group. Although the comparison between pre and post-ETROP eyes is given in table 4, I would find it useful to look in more detail at the post-ETROP group itself to determine what the risk factors were in developing RD.

The inherent limitations of retrospective analysis preclude further assessment, though we agree further study is warranted.

Additional comments about the severity and aetiology of the cataracts would be helpful, eg how soon after laser did they develop, were they visually significant - I realise that there may be limitations getting this data retrospectively, but it would be interesting.

Agreed. As above, this is another limitation of the retrospective analysis.

By follow up time I presume the authors mean the time between first screening and final exam on the neonatal unit? I can't understand why the Post-ETROP babies have a shorter screening duration when they are of lower mean EGA? The authors don't comment on adverse medical outcomes following laser or any deaths from unrelated causes - were there really none - or is this the cause of the lower mean screening follow up time in this more vulnerable group?

These patients were not tracked in their entirety by ophthalmology once they had completed their hospital course. As the hospital serves such a large geographic area, many outpatient ROP follow-up exams are performed hundreds of miles from the NICU. As such, this data is not available.

Minor revision: Table 6 - mean days,
Title is not clear, should be "A comparison of follow up time between groups" rather than the current "Follow up time between groups"

Corrected – thank you.

Discussion
It should be stressed more that the absence of recorded plus in the notes of the pre-ETROP babies who progressed does not mean it wasn't present, just that the importance of its presence has become much better recognised with the new treatment guidelines. This is a limitation of any retrospective study.

Added – thank you.

In summary, I felt this was a good and well written paper which should be published but with the few changes mentioned above.

Reviewer: William V Good
Reviewer's report:
This is a well-written report and demonstrates in retrospective fashion that earlier treatment for ROP results in improved outcomes. I have a few suggestions:

1. It is interesting that the later cohort is actually at more risk than the pre ETROP cohort. I think a brief table showing baseline characteristics is in order. This is some trouble to retrieve, but if the authors could show not only bwt and GA, but also ethnicity and twin status, this information will indicate that the second half of the cohort is not special in any sense.

   While ethnicity is not available in this retrospective study, the twin status has been addressed and not found to be statistically significant.

2. RD is used without spelling out what it refers to.

   This has also been corrected – thank you.