Reviewer's report

Title: Glaucoma following congenital cataract surgery - the role of early surgery, posterior capsulotomy and intraocular lens implantation

Version: 1 Date: 1 July 2007

Reviewer: Rupal H Trivedi

Reviewer's report:

Major Compulsory Revisions:
• While evaluating impact of primary posterior capsulotomy and vitrectomy, age at surgery is very strong confounder. Glaucoma was developed in eyes operated in a range of 2 weeks to 7 months. I would like to see separate analysis of eyes operated before 7 months (OR 6 months) of age. What is the incidence of glaucoma in this subgroup in eyes with intact posterior capsule and in eyes with primary posterior capsulotomy. Is this statistically significant? If not, it is not fair to conclude that intact posterior capsule may be associated with lower rate of AG. Similar to figure 4, another survival analysis should be shown for eyes operated before 7 months of age (plot comparing PC versus no PC in this group). After reanalysis, if needed, authors’ need to change discussion and conclusion.
• While evaluating impact of IOL implantation, again age at surgery is a strong confounder. Patients who developed aphakic glaucoma, were in age range of 2 weeks to 7 months. Youngest child who received IOL was 8 months old. None of the child operated after 8 months of age in this series developed glaucoma, irrespective of presence or absence of IOL. As this series doesn't have patients receiving an IOL in 2 weeks to 7 months of range, it is not fair to conclude that IOL implantation may be associated with lower rate of glaucoma. Any discussion and conclusion related to IOL should be deleted.

Minor Essential Revisions:
None

Discretionary Revisions:
- Page 2. “To determine the rate of aphakic glaucoma” should be changed to “To determine rate of glaucoma” –You are also evaluating pseudophakic eyes.
- Page 3. Introduction: First paragraph can be deleted. Introduction should better introduce glaucoma in children after cataract surgery.
- Page 14. You note “We believe that our data provides support for the recommendation to delay congenital cataract surgery until after the age of 4 weeks of life” This series has not compared eyes without delaying surgery and with delaying surgery. I suggest not to use this sentence. I am not sure if cataract before 4 weeks of age is a risk factor or Cataract surgery before 4 weeks of age.
- Table 1. Please add cumulative incidence column.
What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

'I declare that I have no competing interests’