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Response to Letter to the Editor

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We appreciate the interest in our paper (1) expressed by Drs. Sukhija, Ram and Kaur. The authors of the letter opine that the rate of secondary opacification of the visual axis, particularly in the intraocular lens (IOL) group, could have been decreased by more frequent administration of topical corticosteroids during the early postoperative period and used as evidence studies involving older children that showed lower rates of visual axis opacification. (2,3)

Inflammatory membranes are sequelae of excessive, even fibrinous, anterior chamber reactions. As the letter authors point out, these can often be ameliorated by appropriate (high) doses of steroids, administered topically, orally or by injection. Although it was perhaps not clear in the manuscript, the Infant Aphakia Treatment Study (IATS) protocol mandated that prednisolone 1% drops be used at least four times a day: investigators were free to increase the dosage to whatever level was needed to control the postoperative inflammatory reaction. More than 60% of patients were prescribed topical corticosteroids >4 times a day during the early postoperative period for both treatment groups.

However, the more common cause of visual axis opacification is due to proliferation of equatorial lens epithelial cells, which are almost invariably left behind after even very thorough lensectomy. Because these lens cells are still undergoing rapid proliferation during the first six months of life, this type of secondary visual axis opacification occurs almost exclusively in infants <7 months of age. This makes comparison of visual axis opacification rates between infants <7 mos of age (as in IATS) to children in older age groups not germane. In fact, a publication prior to the inception of the IATS showed visual axis opacification rates following IOL implantation at a single institution of nearly 80% in infants <6 mos of age vs. 0% in children >8 mos of age, when identical surgical techniques were

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used in each group (4). We feel that it is this normal lens epithelial cell growth, which is not a steroid-responsive process, that provides the explanation for why this form of visual axis opacification was found so much more often in the first postoperative year in the IOL group

Drs. Sukhija, Ram and Kaur also expressed concern that the rate of glaucoma was more than double in the contact lens group (16) compared to the IOL group (7), which they suggest may lend credence to the (inaccurate) theory that IOLs are protective against development of glaucoma. The numbers the authors cite were the number of patients diagnosed with glaucoma or as a glaucoma suspect only between the second and fifth postoperative year. The total numbers of glaucoma related diagnoses at age 5 years including the first post operative year were 20 in the contact lens group and 16 in the IOL group, a non-significant difference.

We agree with the authors that a blanket condemnation of IOL implantation in infants is not appropriate; there are many factors that must be considered before the surgeon and parents decide what surgical intervention is most appropriate for any individual infant with a congenital cataract.

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