Re: Long-term results after primary intraocular lens implantation in children operated less than 2 years of age for congenital cataract

Sir,

We appreciate the interest shown by the authors in our article long-term results after primary intraocular lens (IOL) implantation in children operated < 2 years of age for congenital cataract.^[1]

In reply to the first comment, the preoperative and last follow-up axial length values were inadvertently exchanged (corrigendum has already been submitted). However, during statistical analysis, the correct values were only chosen and computed. We used contact A-scan for all measurements. Contact A-scan measurements are easier to perform and largely used in children. Doing immersion scan in children can be tedious. There are conflicting reports of the error induced in refractive errors by erroneous contact A-scan values. Ben-Zion et al. compared prediction errors of 138 pediatric eyes measured by the contact A-scan technique with a group of 65 children measured with the immersion technique. [2] They found no significant difference in absolute prediction error of the two techniques. We made sure that the tip of the A-scan probe did not indent the cornea, and all measurements were performed by the same experienced ophthalmologist. Axial length measurements are not that predictable as adults as children under 2 years do not fixate. These have to be done under general anesthesia in most cases. In our series, in the five patients that had immediate myopic refraction, the axial length measured preoperatively was appropriate for the age of the child. IOL position also affects the refractive error, which depends on the amount of vitrectomy done and also the placement of IOL (sulcus/bag). Four out of these five eyes in our series had polymethyl methacrylate (PMMA) IOL with resulting astigmatism. The refractive error mentioned in the table is the computed spherical equivalent. At present, there is not enough evidence that contact A-scan should not be used in children.

We have clearly written in the methods that we based our IOL power on Dahan's guidelines.^[3] Various IOL formulae designed for adult eyes have been used in pediatric eyes, which have shown varying degree of accuracy. The best formula is dictated by the surgeons experience with his cases. SRK II has been shown to give favorable results.^[4] There is yet no consensus for the best formula in children.^[5,6] The myopic shift in patients with the final refraction of –3 to –11 diopters ranged from 3 to 4 diopters (which is acceptable myopic shift) except in one patient. The one patient with exceptionally large myopic shift had ocular hypertension.

In reply to the fifth comment, the computed spherical equivalent remained unchanged at the last visit. The two patients with posterior capsule opacification had single piece square edge PMMA IOL implanted. We routinely perform pachymetry in all pediatric patients pre-and post-operatively. The patient with IOP of 32 mm had a central corneal thickness (CCT) of 542 microns. However, it has been shown that CCT does not change significantly after pediatric cataract surgery.^[7]

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Access this article online	
Quick Response Code:	Website: www.ijo.in
	DOI: 10.4103/0301-4738.159900