

Commentary: Comparison of posterior optic capture of intraocular lens without vitrectomy versus endocapsular implantation with anterior vitrectomy in congenital cataract surgery – A randomized prospective study

Visual axis opacification (VAO) is a major concern for pediatric cataract surgery for its amblyopiogenic nature in this tender age group. To prevent that, several techniques have been advocated in literature.^[1,2] This study has compared posterior optic capture of intraocular lens (IOL) without vitrectomy with in-the-bag IOL and anterior vitrectomy in congenital cataract surgery.

The major advantages of optic capture of IOL in pediatric cataract surgery are centration, prevention of herniation of vitreous anteriorly, and prevention of migration of Elschnig pearls on the vitreous face. So vitrectomy can be avoided. This reduces the incidences of VAO and postoperative inflammation. But it requires expertise and so a long learning curve. The results may be comparable, but success of a technique depends on how easily it can be replicated by other surgeons. On that front, probably this technique is at a disadvantage.

IOL with primary posterior capsulorhexis (PPC) and anterior vitrectomy is associated with less learning curve as PPC can be done with vitrectomy cutter (vitrectorhexis) instead of manual PPC and the size of PPC is not as crucial as like optic capture. But the main concern is more inflammation. This study has hypothesized that vitreous face disturbance is the main cause of this inflammation. But this is significant only in infant age group. Regarding VAO, there is no difference between the two groups.

Though IOL is a controversy in infant cataract surgery due to the facts of VAO, inflammation, and refractive surprises in growing eye, few current studies are favoring primary IOL implantation in infants for a better visual outcome.^[3,4]

Though this prospective study of its kind has definitely proved posterior optic capture to be a less traumatic, promising technique for preventing VAO along with less inflammation in pediatric cataract surgery especially in infants,^[5] it cannot be generalized. A study using three-piece acrylic and PMMA IOL is needed considering the economic aspect and more availability.

How the anterior and posterior capsulorhexis size was measured is not vivid from the methodology.

Lav Kochgaway, Merina Mandal, Sneha Jain, Rupak Roy, Sagar Bhargava, Maneesh Singh

B B Eye Foundation, Kolkata, West Bengal, India

Correspondence to: Dr. Lav Kochgaway, B B Eye Foundation VIP, Shree Tower 2, RAA 36, Raghunathpur, VIP Road, Kolkata - 700 156, West Bengal, India. E-mail: lav.kochgaway@gmail.com

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