

# ***INTRODUCTION***

The management of cataract in children and especially the successful rehabilitation of the paediatric aphakic patient remains one of the biggest challenges. Adequate data exist to suggest that early and alternative management of visually significant paediatric congenital and traumatic cataracts can result in normal or nearly normal visual acuity, even in patients with monocular cataracts (Morgan et.al.1988).

Cataract surgery in infants has been performed with greater ease and fewer complications by many ophthalmic surgeons since the advent of Scheie's small limbal incision, aspiration procedure and its many modification ,including phacoemulsification (Scheie's 1960). However, the main obstacle is not always the surgery itself, but rather the rehabilitation of these often traumatized or congenitally malformed eyes (Kelman ,1967).

Trauma to the lens after perforation or blunt injury to the anterior segment poses a special problem among the young patients. Surgical removal of the cataract, followed by correction with a contact lens often does not prevent amblyopia or strabismus, there are fitting difficulties associated with corneal scarring, and there is poor tolerance over extended periods of wear. With an intraocular lens, the child has a better chance to achieve and maintain optimum visual acuity, fusion and stereopsis (Blumenthal et. al. 1983).

The implantation of intraocular lens (I.O.L.) in a child by Choyce in 1958, opened a new era of aphakic correction in children with congenital cataracts. Then, many ophthalmologists have tried various techniques of I.O.L. implantation in children with favourable results (Binkhorst & Gobin 1972 ).

Before the early 1980s, the child with a monocular congenital cataract was considered a virtually hopeless clinical problem with successful visual rehabilitation practically unknown (Beller & Hoyt 1981).

There were some studies which showed that such patient may benefit from early cataract extraction and intensive occlusion therapy initiated during the critical period for development of visual perception (Birch & Stager 1988).

The major obstacles confronting the ophthalmologist and the family of an infant with cataracts are not surgical, rather, they are related to the long-term problems involving the aphakic correction and occlusion therapy. Some surgeons have advocated the use of intraocular lenses in the aphakic child, and good visual acuities have been reported even in patients with monocular congenital cataracts. In selected cases the implantation of an intraocular lens is an alternative and encouraging results have been reported in patients with traumatic cataract (Ben Ezra & Paez 1983).

Some ophthalmologists disagreed about the implantation of intraocular lens in children. Hiles and Watson(1979), have stressed their usefulness but, other ophthalmologists considered them impractical. This difference of opinions arises from the additional risk of intraocular lens surgery, the effect of I.O.Ls. on the growth and development of the young's eye, and the unknown long-term risk benefit ratio in a child with many remaining years of life (Hiles,1980).

I.O.L. implantation is considered the ideal optical solution of aphakia, but the use of the I.O.L. implantation in children is not widely practised because of the uncertainties of the long term effect on the eye (Reynold et.al.1982). However, I.O.L. implantation in children has many advantages over contact lenses and spectacles in aphakic correction. An I.O.L. can achieve iseikonia and binocular vision in unilateral aphakia. The disadvantages of spectacles and contact lenses will be avoided (Binkhorst, 1975).