Journal of Clinical and Experimental Ophthalmology
ISSN 2155-9570
2020
Vol.11 No.6

CHOOSING AN IOL FOR A CHILD – It's not a child's play!!

Vinita Gupta
All India Institute of Medical Sciences, India

Abstract

Although dramatic advances have occurred in the field of paediatric cataract surgery over the last decade, calculating and selecting an optimum intraocular lens for the small eye of a growing child is a unique challenge. The need to implant a fixed power lens into the eye that is still growing makes it difficult to choose an optimum IOL power that best suits the child's eye. The younger the child, the more difficult it is.

What are the issues we encounter? Just as a child's body grows after birth through adolescence, so does the child's eye from infancy till adult life. Moreover, as regards the amount of myopic shift, just as some children grow faster than others, some eyes grow faster than others. And there are no factors that clearly indicate which eye will grow faster than others. So there is large variability in myopic shift and difficulty in predicting future (target) refraction for any given child.

Then comes the issue of measuring axial length and keratometry measurement in children, can be as difficult as unattainable in the office setting – most children need an EUA. Then the question – which IOL formula is to be used for children? Since these are short eyes, all the formulas are slightly inaccurate.

Then comes the influence of genetic behaviour of the refractive error in the parents, which can again not be predicted with accuracy. It has been noted that if both parents are myopic, 30-40% of children become myopic whereas if only one of the parents is myopic, 20-25% of children will become myopic. If none of the parents is myopic, then 10% of children become myopic, so it depends upon genetic influence, and it is therefore unpredictable.

The undercorrection guidelines and power calculation methods therefore vary according to the age of the child and there has been changing trends towards implanting IOL in even infants. Also methods for piggyback IOLs and secondary IOLs implantation have evolved, but with their own merits and demerits.

In summary, choosing an IOL for paediatric patients is not a child's play, and the surgeon has several considerations to keep in mind in order to give optimal vision children with pediatric cataracts.

Biography:

Vinita Gupta is working as an additional Professor in Department of Ophthalmology at All India Institute of Medical Sciences, Rishikesh, India. She also have published many article in reputed journals.

Speaker Publications:

1. British Thoracic Society guideline for diagnostic flexible bronchoscopy in adults: accredited by NICE IA Du Rand, J Blaikley, R Booton, N Chaudhuri, V Gupta, S Khalid, Thorax 68 (Suppl 1), i1-i44 457 2013
2. A new treatment for severe pulmonary embolism: percutaneous rheolytic thrombectomy R Koning, A Cribier, L Gerber, H Eltchaninoff, C Tron, V Gupta, R Soyer,Circulation 96 (8), 2498-2500

5th Global Pediatric Ophthalmology Congress March 02-03, 2020 at Rome, Italy

Abstract Citation:

Vinita Gupta, CHOOSING AN IOL FOR A CHILD – It's not a child's play!!, Pediatric Ophthalmology Congress 2020, 5th Global Pediatric Ophthalmology Congress March 02-03, 2020 at Rome, Italy

(https://pediatricophthalmology.ophthalmologyconferences.com/abstract/2020/choosing-an-iol-for-a-child-it-s-not-a-child-s-play)