

## Retrospective Study of Comparison of Complications of Paediatric Cataract Surgery with Change in Technique of Surgery During Past 5 Years in Dmch Darbhanga

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**Abstract:**

**Purpose:**To study the comparative pattern of postoperative complications following cataract surgery with intraocular lens (IOL) implantation in pediatric eyes with different technique of surgery done during past 5 years. This study helps reducing the complication and improves the visual outcome and economicburden of patient.

**Objectives:**To study the comparative pattern of postoperative complications following cataract surgery with intraocular lens (IOL) implantation in pediatric eyes with different technique of surgery done during past 5 years. This study helps reducing the complication and improves the visual outcome and economical burden of patient.

**Material And Methods:**Study Design- A retrospective analysis of 40 eyes of 28 children aged between 5-15 years for complications after cataract surgery done with different technique during past 5 years at dmch.

Follow up period-6 months. Exclusion criteria were ocular trauma, infection, congenital glaucoma, anterior segment dysgenesis, Lowe syndrome, maternal rubella syndrome, trisomy 13, optic nerve or other fundus abnormalities, and prematurity.Comparison of complication of SICS without posterior capsulorhexis (20 eyes) and SICS with posterior capsulorhexis +ant. Vitrectomy (20 eyes).

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### I. Result Early complications

	SICS WITHOUT POSTERIOR CAPSULORRHEXIS Group1- %(number of eyes)	SICS WITH POSTERIOR CAPSULORRHEXIS+ANT. VITRECTOMY Group2-%(number)
	5%(1)	
Fibrinous reaction	5%(1)	15%(3)
Hyphema	60%(12)	5%(1)
Anterior uveitis	10%(2)	40%(8)
Striate keratopathy	0	5%(1)

#### Late complications

Vitreous Haemorrhage	10%(2)	0
Glaucoma	5%(1)	0
Posterior synechiae	10%(2)	5%(1)
Macular oedema	0	0
Lens subluxation and dislocation	0	15%(3)
Retinal detachment	0	1%
Posterior capsular opacification	70%(14)	15%(3)

### II. Conclusion

Most common postoperative complications were PCO and anterior uveitis.PCO was more common in surgery done without posterior capsulorhexis.Inference-PCO and Anterior Uveitis are most common complications associated with different technique of surgery done during past 5 years but incidence of PCO reduced with newer technique Of Surgery that is SICS+posterior capsulorhexis+ anterior vitrectomy

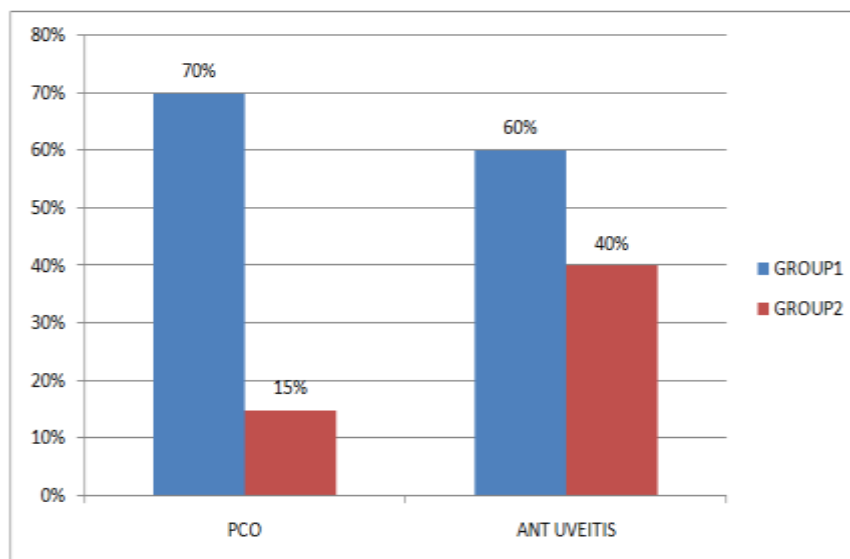
### III. Discussion

This study was based on reviewing the record of paediatric cataract surgery done during past 5years (Aug 2009 to Aug 2014) in DMCH Darbhanga.

Age group-5 years to 15 years.

Review the complication of surgery from day of operation to 6 months after operation

In our study, the major postoperative complications were PCO and anterior uveitis. In our study PCO was present in 70% of eyes in group 1 whereas it was 15% in group 2



In a study conducted by Abhay Vasavada, PCO was compared between PPC with or without anterior vitrectomy in congenital cataract and it was noted that the incidence of PCO was 62.5% in children who underwent PPC without vitrectomy and 10% in children who underwent PPC with vitrectomy. A study conducted by O'Keefe M and associates showed that PPC reduces the incidence of PCO.

**Therefore our study is accordance to above study.**

Limitation of Study

Small study sample size

Short follow-up period

Surgical facilities and skills required in pediatric cataract surgery are at subspecialty level.

### **Bibliography**

- [1]. Wilson ME, Pandey SK, Thakur J. Pediatric cataract blindness in the developing world: Surgical techniques and intraocular lenses in the new millennium. *Br J Ophthalmol* 2002;87:14-9.
- [2]. Gimbel HV, DeBroff BM. Surgical Management of Pediatric Cataracts. In : Steinert RF. *Cataract surgery techniques, complications and management*. 2nd ed, Saunders 2004;
- [3]. Shamanna BR, Muralikrishnan R. Childhood cataract: Magnitude, Management, Economics and Impact. *Community Eye health*, 2004
- [4]. Spencer TS, Mamalis N. The pathology of cataracts. In: Steinert RF, ed., *Cataract surgery techniques, complications and management*. 2nd edn. Saunders; 2004
- [5]. Jakobeic. *Principles and practice of ophthalmology*
- [6]. Vasavada A, Chauhan H. Intraocular lens implantation in infants with congenital cataract. *J Cataract Refract Surgery*.
- [7]. O'Keefe M, Mulvihill A, Yeoh PL. Visual outcome and complication of bilateral intraocular lens implantation in children. *J Cataract Refract Surgery*.

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