



SURGICAL MANAGEMENT OF CONGENITAL CATARACT: THE CHALLENGES

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The authors have no financial interests.

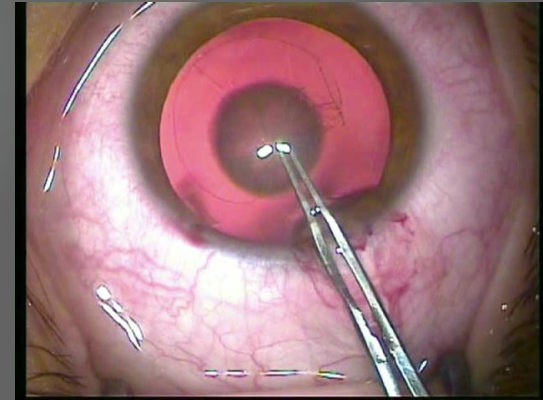


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INTRODUCTION

Surgical management of cataracts in children is different from adults:

- General anesthesia
- Smaller eyes
- Anterior capsule more elastic
- Lower scleral rigidity
- Increased vitreous pressure
- Unstable anterior chamber
- Higher rate of posterior capsule opacification
- Increased postoperative inflammation
- Difficult follow-up

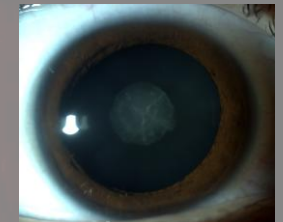
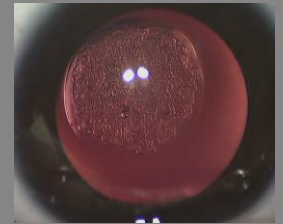


The younger the child the most marked are the differences.



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Patient	Age at Surgery	Sex	Laterality
1	1.5m	female	Unilateral
2	6m	male	Unilateral
3	4m	female	Unilateral
4	4	male	Bilateral
5	4	male	Bilateral
6	3m	male	Unilateral
7	3m	female	Unilateral
8	4	female	Unilateral
9	9m	male	Unilateral
10	7m	male	Bilateral





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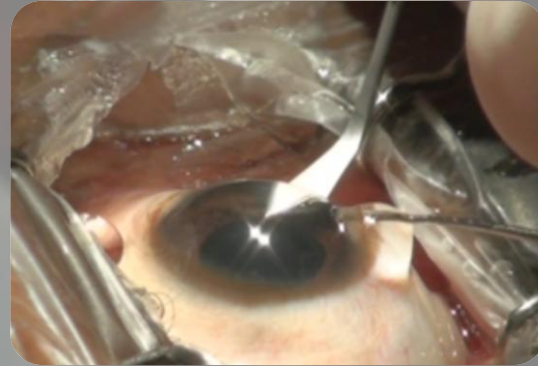
METHODS

Micro-incision Cataract Surgery

- ✓ Anterior chamber collapse and iris prolapse

Bimanual Surgery

- ✓ Anterior chamber instability





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METHODS

Anterior Capsule Management

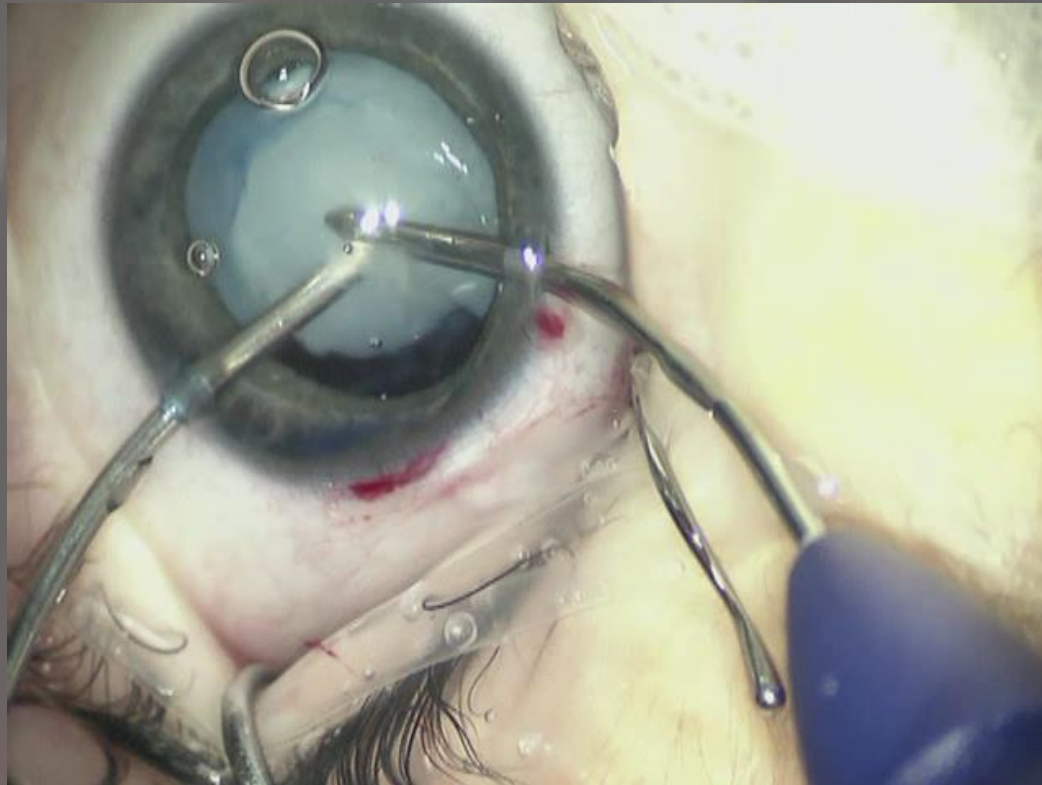




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METHODS

Lens Substance Removal

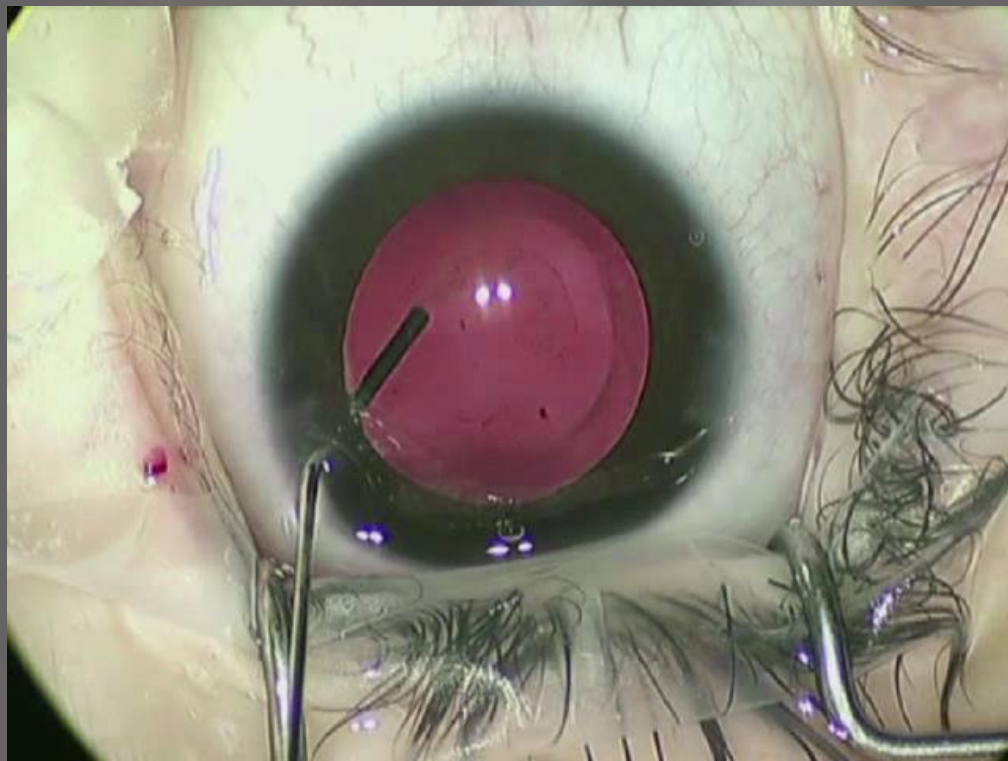




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METHODS

Management of the Posterior Capsule, Anterior Vitreous and IOL Implantation



Acrylic Hydrophobic

3 pieces IOL

12.5mm / 5.5mm



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RESULTS

Intraoperative Results

- ✓ 2 IOL implanted in the ciliary sulcus - insufficient capsular support in the bag
- ✓ No other major intraoperative complications



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RESULTS

Postoperative Results

- ✓ Immediate postoperative course uneventful, quiet eyes, no corneal edema
- ✓ Intracameral triamcinolone injection did not affect intraocular pressure
- ✓ No visual axis obstruction
- ✓ No other adverse postoperative results



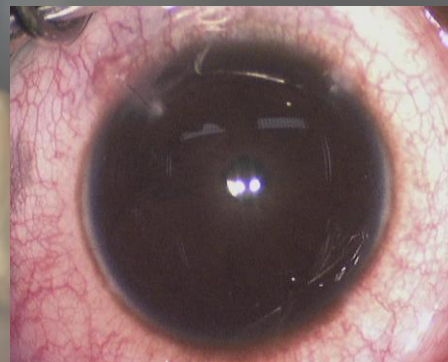
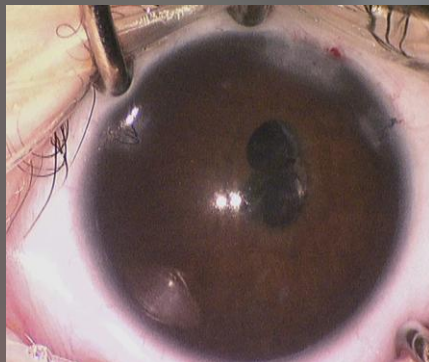


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RESULTS

Postoperative Complications

- ✓ Inflammatory reaction to the corneal suture in all cases, which resolved with the suture extraction
- ✓ Iris synechiae in 2 eyes, 1 with the need of synechiolysis





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CONCLUSIONS

- ✓ Several techniques reported to avoid major intra- and postoperative complications but there is still **no consensus**
- ✓ Our approach to pediatric cataract has shown good **surgical outcomes**
- ✓ **Longer follow-up** period is needed to further evaluate our options
- ✓ First step



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BIBLIOGRAPHY

- Lloyd IC, Ashworth J, Biswas S, Abadi RV. Advances in the management of congenital and infantile cataract. Oct;21(10):1301-9
- Ma F, Wang Q, Wang L. Advances in the management of the surgical complications for congenital cataract. Front Med. 2012 Dec;6(4):360-5.
- Liu X, Luo Y, Zhou X, Jiang L, Zhou P, Lu Y. Combined pars plana and limbal approach for removal of congenital cataracts. J Cataract Refract Surg. 2012 Dec;38(12):2066-70.
- Ventura MC, Ventura BV, Ventura CV, Ventura LO, Nosé W. Congenital cataract surgery with intracameral triamcinolone: pre- and postoperative central corneal thickness and intraocular pressure. J AAPOS. 2012 Oct;16(5):441-4.
- Dixit NV, Shah SK, Vasavada V, Vasavada VA, Praveen MR, Vasavada AR, Trivedi RH. Outcomes of cataract surgery and intraocular lens implantation with and without intracameral triamcinolone in pediatric eyes. J Cataract Refract Surg. 2010 Sep;36(9):1494-8.
- Cleary CA, Lanigan B, O'Keeffe M. Intracameral triamcinolone acetonide after pediatric cataract surgery.. J Cataract Refract Surg. 2010 Oct;36(10):1676-81.



THANK YOU FOR YOUR ATTENTION.