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Corrected vision regularly in each eye. If one eye is two or more lines worse than the other, with no other apparent explanation, it is probably amblyopic and the child needs occlusion treatment of the preferred eye. The risk of amblyopia is greatest during the first year of life and declines rapidly after the age of five.

Providing optimum care is provided, the visual prognosis is good. In Kenya, 47% of eyes achieved 6/18 or better and only 5% were less than 6/60.1 Almost all these children will be able to attend a normal school (Fig. 1).

Complications

Every child who does not have a posterior capsulotomy will develop posterior capsule opacification. This can be treated by making an opening in the capsule with a Nd:YAG laser or a needle. Alternatively, the posterior capsule and anterior vitreous can be removed with a vitrector. If the capsule is opened without removing the vitreous, the opacification may recur on the anterior hyaloid face. Loss of vision in one eye from increasing capsule opacity will be asymptomatic and the only way to detect this is by regular examinations.

Glaucoma may occur after lensectomy, particularly if it is carried out in the first week of life. This glaucoma is very difficult to treat and frequently leads to blindness. Delaying surgery until after the child is 3–4 months old makes it unlikely that the eyes will recover 6/6 vision but it reduces the risk of glaucoma.

Retinal detachment is more common in eyes that have had surgery for congenital cataract. It often occurs very late, on average 35 years after the operation. If any patient complains of sudden loss of vision, even if it is years after their operation for congenital cataract, it should be assumed to be due to retinal detachment until proven otherwise.

Conclusion

The management of congenital cataract is complex, and should only be carried out in specialist centres. However, every eye worker can play a role by assisting with case finding and follow-up.

Reference

Evaluation of screening procedures for congenital cataracts

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Aims: To evaluate the efficacy of two different Swedish screening procedures for early detection of congenital cataracts in comparison with no screening. METHODS: Children born between January 1992 and December 1998 in Swedish regions with an established eye-screening routine were included in a retrospective study. RESULTS: Of 50 children who underwent lens aspiration with intraocular lens implantation, 28 had bilateral cataracts and 22 had unilateral cataracts. Cataracts were congenital in 28 cases, juvenile in 16, and traumatic in one case. The median age at surgery was 39 months (range 11-70 months). Follow up ranged from 12-64 months (median 36 months). Of 34 children with bilateral disease, 25 (73.5%) had a final best corrected visual acuity of 6/12 or better, while seven (20.5%) achieved 6/18 or less; in one child the vision improved from UCVSUM to CSM but another, who had only one eye operated on, was unable to fix or follow this eye preoperatively or 2 years postoperatively. CONCLUSION: From this series the authors suggest that, in children aged 5 years and under, lens aspiration with intraocular lens implantation is a safe procedure, with a good visual outcome in the short term. Further studies are needed to investigate these outcomes in the long term.


Outcome of lens aspiration and intraocular lens implantation in children aged 5 years and under

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Aims: To determine the visual outcome and complications of lens aspiration with intraocular lens implantation in children aged 5 years and under. Methods: The hospital notes of all children aged 5 years and under, who had undergone lens aspiration with intraocular lens implantation between January 1994 and September 1998, and for whom follow up data of at least 1 year were available, were reviewed. Results: Of 50 children who underwent surgery, 45 were eligible based on the follow up criteria. 34 children had bilateral cataracts and, of these, 30 had surgery on both eyes. Cataract was unilateral in 11 cases; thus, 75 eyes of 45 children had surgery. Cataracts were congenital in 28 cases, juvenile in 16, and traumatic in one case. The median age at surgery was 39 months (range 11-70 months). Follow up ranged from 12-64 months (median 36 months). Of 34 children with bilateral disease, 25 (73.5%) had a final best corrected visual acuity of 6/12 or better, while seven (20.5%) achieved 6/18 or less; in one child the vision improved from UCVSUM to CSM but another, who had only one eye operated on, was unable to fix or follow this eye preoperatively or 2 years postoperatively. Of 11 children with unilateral cataract, five (45.5%) had a final best corrected visual of 6/12 or better, and six (54.5%) 6/18 or less. A mild fibrinous uveitis occurred in 20 (28.2%) eyes in the immediate postoperative period, but resolved with topical steroids. One child had a vitreous wick postoperatively requiring surgical division. Glaucoma, endophthalmitis, or retinal detachment have not been observed so far in any patient postoperatively. Conclusion: From this series the authors suggest that, in children aged 5 years and under, lens aspiration with intraocular lens implantation is a safe procedure, with a good visual outcome in the short term. Further studies are needed to investigate these outcomes in the long term.


Is early surgery for congenital cataract a risk factor for glaucoma?

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Aims: To estimate the risk of aphakic glaucoma after lensectomy for congenital cataract and its association with surgery within the first month of life. Methods: A retrospective case notes review was conducted of all patients who had lensectomy for congenital cataract during their first year of life at Great Ormond Street Hospital between 1994 and 1997. Patients with pre-existing glaucoma, anterior segment dysgenesis, and Lowe syndrome were excluded. The risk of aphakic glaucoma after surgery was estimated using Kaplan-Meier survival analysis. Results: 80 patients, undergoing 128 lensectomies were eligible. Of these, six patients (nine eyes) were lost to follow up. Based on eye count, the risk of glaucoma by 5 years after lensectomy was 15.6% (95% CI 10.2 to 23.4). Based on patient count, the 5 year risk of glaucoma in at least one eye following bilateral surgery was 25.1% (95% CI 15.1 to 40.0). The incidence of glaucoma remained at a constant level for the first 5 years after surgery. After early bilateral lensectomy, within the first month of life, the 5 year risk of glaucoma in at least one eye was 50% (95% CI 27.8 to 77.1) compared to 14.9% (95% CI 6.5 to 32.1) with surgery performed later (log rank test, p = 0.012). There was no significant difference (Kolmogorov-Smirnov test: unilateral lensectomy p = 0.587, bilateral lensectomy p = 0.369) in 5 year visual outcomes between eyes operated before and after 1 month of age. Conclusion: Bilateral lensectomy during the first month of life is associated with a higher risk of subsequent glaucoma than with surgery performed later. The reason for this is unclear but it may be prudent, in bilateral cases, to consider delaying surgery until the infant is 4 weeks old. As the incidence of glaucoma is similar for each year after surgery, long term glaucoma surveillance is mandatory.