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Surgical Management of Glaucoma After Congenital Cataract Surgery.

Bayoumi NH.

Abstract

PURPOSE:

Cataract surgery in children is a difficult entity with possible complications, glaucoma being particularly common. The purpose of this study was to explore the results of surgical intervention for glaucoma after congenital cataract surgery in Alexandria University, Egypt.

METHODS:

The study was a retrospective chart review of 32 children with glaucoma after congenital cataract surgery between 2005 and 2012. Preoperative, operative, and postoperative data were collected. Complications were noted. Success was studied at the end of follow-up.

RESULTS:

The study included 41 (36 aphakic, 5 pseudophakic) eyes of 32 children undergoing 57 glaucoma surgical procedures. The mean ± standard deviation age at the time of surgery was 17.2 ± 21.6 months (range: 3.0 to 103.5 months) and the mean follow-up period was 39.1 ± 25.2 months (range: 1 to 75 months). The most common (78%) primary glaucoma surgical procedure was combined trabeculotomy-trabeculectomy with mitomycin C. The mean preoperative intraocular pressure, corneal diameter and thickness, cup-disc ratio, and axial length of the study eyes was 22.3 ± 6.1 mm Hg (range: 10 to 34 mm Hg), 11.4 ± 0.9 mm (range: 10 to 13 mm) and 617.6 ± 66.8 μm (range: 538 to 758 μm), 0.5 ± 0.3 mm (range: 0 to 1 mm), and 22.85 ± 2.75 mm (range: 18.55 to 29.17 mm), respectively, and postoperatively at last follow-up was 11.0 ± 7.3 mm Hg (range: 1 to 36 mm Hg), 11.5 ± 0.9 mm (range: 10 to 13 mm) and 576.8 ± 83.3 μm (range: 461 to 736 μm), 0.4 ± 0.3 mm (range: 0 to 1 mm), and 24.62 ± 2.81 mm (range: 19.70 to 32.81 mm), respectively. Success was reported in 34 (82.9%) eyes. Complications included endophthalmitis, hypotony disc edema, and retinal detachment.

CONCLUSIONS:

Glaucoma after congenital cataract surgery is a difficult entity, often requiring more than one surgical procedure to control it. Long-term follow-up is mandatory to detect any failure of treatment at any time point and manage accordingly.