

Primary congenital glaucoma outcomes: lessons from 23 years of follow-up

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PURPOSE: To determine in primary congenital glaucoma whether age of presentation influences surgical success, the degrees of angle surgery needed to achieve glaucoma control, and whether there are critical ages where glaucoma progresses, requiring further surgical management.

DESIGN: Retrospective cohort study.

METHODS: The medical records of patients with primary congenital glaucoma over a 23-year period were reviewed: 192 procedures were performed on 117 eyes (70 patients) . The number and age of angle procedures and final visual acuity was analyzed. Surgical success was defined as stable intraocular pressure and optic disc appearance.

RESULTS: Procedures involving 83 of the 110 eyes (75.5%) undergoing angle surgery were successful, with 2-, 4-, 6-, and 10-year success rates of 92%, 86%, 84%, and 75%, respectively. Subgroup analysis (6 months) comparing age of diagnosis to visual outcome (20/40) was significant ($P = .04$) . The age at first operation ($P = .94$) , the number of angle operations ($P = .43$) , and their effect on angle surgery success was not significant. Seven of 192 operations were performed after the age of 8 years (3.6%) . After the initial angle surgeries within the first year of life, the third procedure occurred at a median age of 2.4 years (interquartile ratio [IQR] 0.6-3.8 years) and the fourth procedure occurred at a median age of 5.3 years (IQR 2.5-6.1 years) .

CONCLUSIONS: Children diagnosed at <http://www.ncbi.nlm.nih.gov/pubmed/25634533>