

## Characteristics of Children With Primary Congenital Glaucoma Receiving Trabeculotomy and Goniotomy.

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### Abstract

#### *PURPOSE:*

To describe the groups of patients who received trabeculotomy or goniotomy for the treatment of primary congenital glaucoma (PCG) regarding age at treatment, intraocular pressure (IOP) outcome, and medication burden.

#### *METHODS:*

A retrospective chart review of patients with PCG seen at Rutgers New Jersey Medical School, Newark, New Jersey, from 1998 to 2012 was conducted. Inclusion criteria were patients who received trabeculotomy or goniotomy with at least 9 months of follow-up. Presenting examination, surgical intervention, IOP, and number of medications at 1 and 2 years postoperatively were recorded. Absolute and qualified success, defined as IOP greater than 5 and less than 21 mm Hg without and with medications, respectively, was determined.

#### *RESULTS:*

Fifty eyes of 29 patients were diagnosed as having PCG. Of those, 25 eyes received trabeculotomy or goniotomy, with 19 fulfilling inclusion criteria. Average age at the time of trabeculotomy was 8 months versus 21 months for patients undergoing goniotomy. Mean IOP was significantly reduced ( $P < .001$ ) for both trabeculotomy and goniotomy by 29.5% at 1 year and 33.3% at 2 years. There was no significant difference in IOP control between trabeculotomy and goniotomy groups. Patients in the goniotomy group were treated with significantly more medications before and after surgery compared to patients receiving trabeculotomy ( $P < .01$ ), resulting in a greater rate of absolute success in trabeculotomy at 1 and 2 years.

#### *CONCLUSIONS:*

Patients with PCG who underwent trabeculotomy had higher IOP and were treated at an earlier age than those who had goniotomy. Both effectively lowered IOP up to 2 years with greater medication burden in patients receiving goniotomy.