



Ab-Interno Canaloplasty in Primary Angle-Closure Spectrum

Poster

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Purpose: To investigate the clinical outcomes of canaloplasty performed with the iTrack microcatheter (Nova Eye Medical, Fremont, USA) as a standalone procedure and in combination with phacoemulsification in patients with primary angle-closure glaucoma (PACG).



Method: A single-center, retrospective case series of eyes undergoing canaloplasty via an ab-interno technique with a diagnosis of PACG based on gonioscopy findings. Patients were excluded if they had previously undergone a glaucoma procedure other than selective laser trabeculoplasty (SLT) or cyclophotocoagulation (CPC). Eyes were also grouped by glaucoma severity (mild, moderate, severe) based on mean deviation preoperative values. Outcome measures included intraocular pressure (IOP) and number of glaucoma medications.

Results: 60 eyes (9 ABiC-standalone and 51 ABiC+phaco) were eligible. Mean preop IOP (mmHg) was 21.9 ± 7.3 ; medications was 1.95 ± 1.4 . At latest follow-up (mean 26 ± 9 months), IOP reduced to 14.6 ± 3.7 ($p < 0.001$) and meds to 0.96 ± 1.2 ($p < 0.001$) respectively. IOP reduction (preop vs postop) was significant ($p < 0.001$) for groups: ABiC-standalone, 22.8 ± 6.7 to 17.0 ± 3.4 ; ABiC+phaco, 21.7 ± 7.4 to 14.2 ± 3.7 ; mild glaucoma eyes, 20.8 ± 4.9 to 15.5 ± 3.6 ; moderate, 21.9 ± 8.6 to 13.9 ± 3.9 ; severe, 23.5 ± 11.3 to 12.4 ± 3.2 , with no postop difference between severity groups. Medication reduction was significant for ABiC+phaco group and in mild glaucoma eyes. No serious intraoperative or postop complications were reported.

Conclusions: Canaloplasty via an ab-interno surgical technique, performed as standalone or combined with phacoemulsification, is a safe and clinically effective treatment in primary angle closure glaucoma patients up to 2 years.

Disclosures: Dr. Khaimi is Chief Medical Consultant – iTrack, at Nova Eye Medical. The other authors have no financial or proprietary interest in any device, drugs, methods, or other subject matter mentioned.