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## **Safety and Efficacy of Ab-interno Canaloplasty using the iTrack in Angle Closure Glaucoma: 12-month results**

**Purpose:** Report the safety and efficacy of ab-interno canaloplasty using the iTrack™ device (Nova Eye Medical, Fremont, USA) in patients with primary angle closure glaucoma (PACG).

**Setting:** Data was retrieved from the International Glaucoma Surgery Registry.

**Methods:** Prospective multicenter (Australia, USA, Canada, United Kingdom) case series of 47 eyes in 47 patients with PACG undergoing canaloplasty via an ab-interno technique, with or without cataract extraction. Data was retrieved from the International Glaucoma Surgery Registry. Outcome measures included intraocular pressure (IOP), number of glaucoma medications and adverse events. 12-month results are presented.



**Results:** Mean IOP (mmHg) and number of medications decreased from  $20.9 \pm 6.3$  and  $2.02 \pm 1.5$  at baseline ( $n=47$ ) to  $13.7 \pm 3.5$  ( $p<0.001$ ) and  $0.84 \pm 1.2$  ( $p<0.001$ ) at 6M ( $n=32$ ), and to  $12.9 \pm 3.2$  ( $p<0.001$ ) and  $0.59 \pm 0.9$  ( $p<0.001$ ), respectively, at 12M ( $n=22$ ). The 5 eyes operated with canaloplasty as a standalone procedure had baseline IOP of  $21.6 \pm 6.4$  and required  $2.40 \pm 1.7$  medications, which reduced to  $14.8 \pm 1.8$  and  $1.00 \pm 1.4$ , respectively, at 6M postoperatively. 21.3% and 46.8% of the eyes had an IOP  $\leq 15$ mmHg and  $\leq 18$ mmHg at baseline, respectively, vs 62.5% and 93.8% at 6M postoperatively; 63.6% (14/22) of the eyes were medication-free at 12M from 17.0% (8/47) at baseline. One eye had a hyphema ( $>10\%$  anterior chamber) that resolved without late sequela.

**Conclusion:** Canaloplasty, with or without phacoemulsification, performed on PACG eyes resulted in significant IOP and medication reductions, with most eyes medication-free at 12 months.

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