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## **Efficacy, and Safety of Ab-interno Canaloplasty using iTrack Advance in Primary Open-Angle Glaucoma**

*E-Poster*

**Purpose:** To assess the safety and efficacy of ab-interno canaloplasty using iTrack Advance (Nova Eye, Inc., Fremont, USA) in reducing intraocular pressure (IOP) and glaucoma medications in patients with open-angle glaucoma (OAG).

**Methods:** A retrospective, single-center, consecutive case series. Patients with open-angle glaucoma, and no previous glaucoma surgery except for selective laser trabeculoplasty (SLT) were treated with ab-interno canaloplasty performed using the iTrack Advance microcatheter combined with phacoemulsification and followed for up to 12 months (no medications washout). The iTrack Advance was used to circumferentially catheterize and viscodilate 360° Schlemm's canal in one single procedure. Primary efficacy endpoints included IOP and number of glaucoma medications at 6 and 12 months postoperatively.



**Results:** Eighty-eight eyes of 54 patients (mean age 71.9±7.3 years; 48% females) were recruited. Five eyes had previous SLT. Mean IOP (mmHg) significantly decreased from 18.5±4.6 (n=88) at baseline to 13.5±2.6 and 12.6±2.5, at 6 (n=63; p<0.001) and 12 months (n=41; p<0.001), respectively. The number of glaucoma medications was significantly reduced from 1.86±0.9 (n=88) at baseline to 0.06±0.5 and 0.0±0.0, at 6 (n=68; p<0.001) and 12 months (n=39; p<0.001), respectively. At 12 months, 100% eyes were medication-free vs 1.1% at baseline; all eyes that reached 12 months of follow-up were ≤18mmHg and 38/41 eyes (92.7%) had an IOP ≤15mmHg. Mean IOP was reduced by 31.7% at 12 months. No serious complications were recorded.

**Conclusion:** Ab interno canaloplasty performed with the iTrack Advance proved to be safe and effective in reducing intraocular pressure (IOP) and the need for medications in OAG patients up to 12 months postoperatively. Moreover, the majority of patients were glaucoma-controlled (≤15mmHg) and medication-free 1 year following the procedure.

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