

Authors: Karl Mercieca (Germany);
David Lubeck (USA); Keith Barton (UK);
Nathan Kerr (Australia)

Monday, 09 September 2024
5:42 - 5:48 PM
Free paper podium 3

Canaloplasty performed with the iTrack microcatheter to reduce IOP in uncontrolled glaucoma eyes

Purpose: To evaluate intraocular pressure (IOP) control and medication reduction in uncontrolled glaucoma eyes.

Setting: International Glaucoma Surgery Registry - IGSR

Methods: Eyes which received canaloplasty performed with an ab-interno approach with the iTrack microcatheter (Nova Eye Medical) with a preoperative IOP above 18mmHg (defined as uncontrolled IOP) were collated from the International Glaucoma Surgery Registry - IGSR. Primary endpoints were IOP reduction, control of IOP equal or below 18mmHg, and medication reduction.



Results: 162 eyes with a mean preoperative IOP (mmHg) of 23.8 ± 5.5 and on 1.8 ± 1.2 medications were recruited. IOP and medications were reduced to 14.7 ± 4.3 and 15.5 ± 4.8 and 1.2 ± 1.4 and 1.0 ± 1.3 at the 6- (n=82) and 12-month (n=54) follow-ups ($p < 0.001$), respectively. 81.5% of the eyes were controlled (IOP equal or below 18 mmHg) at the 12-month follow up. Mean IOP decreased in 94.4% of the eyes, while the number of medications decreased in 59.3% of the eyes, stayed the same in 31.5%, and increased in 9.3% of the eyes. Potentially related adverse events were: cystoid macular edema (2/162); hyphema >10% anterior chamber (3/162), and intraocular inflammation/uveitis (1/162).

Conclusion: Canaloplasty performed via an ab-interno technique resulted in a generic decrease of IOP in uncontrolled glaucoma eyes. The majority of baseline uncontrolled glaucoma eyes were IOP controlled following the canaloplasty procedure.

Financial disclosure: K. Mercieca Consultant with: Speaker fees, D. Lubeck Consultant with: Speaker fees and research support, K. Barton Grant / Research support with: Registry support, Consultant with: Speaker fees, N. Kerr Grant / Research support with: Registry support, Consultant with: Speaker fees