

Standalone Ab-Interno Canaloplasty in Severe Uncontrolled Glaucoma Eyes: A Case Series - 36 Months Results

Poster

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Purpose: To evaluate the safety and efficacy of ab-interno canaloplasty (ABiC), performed in severe and uncontrolled glaucoma eyes, in reducing intraocular pressure and medication burden.



Method: A case series of eyes diagnosed with severe glaucoma based on mean deviation (MD) less than -12dB. Inclusion criteria included a baseline IOP above 18mmHg on maximal glaucoma topical therapy. ABiC using the iTrack microcatheter (Nova Eye Medical, Fremont, USA) was performed in all eyes to catheterize and viscodilate 360° Schlemm's canal. Data was collated from 2 centers in the USA.

Results: Seventeen eyes were recruited in this study. Mean age was 72.4 ± 13.5 years while mean IOP (mmHg) and medication burden were 22.12 ± 9.6 and 3.06 ± 0.6 , respectively, at baseline. These were reduced at 12 months (n=16) to 13.88 ± 2.4 ($p < 0.001$) and 1.69 ± 1.1 ($p = 0.003$), respectively; at 24 months (n=11) to 13.91 ± 3.2 ($p = 0.005$) and 1.45 ± 1.0 ($p = 0.003$), respectively; at 36 months (n=12) to 13.67 ± 2.4 ($p = 0.002$) and 1.92 ± 1.4 ($p = 0.018$), respectively. All 12 eyes available at the 36-month follow up were IOP-controlled (below 18mmHg) except one (8.3%; 20mmHg) and no eye required an increase in the number of medications. No significant complications were recorded.

Conclusions: Severe glaucoma eyes, particularly when IOP is uncontrolled, are often candidates for filtration surgery, but ABiC seems to be an effective first line therapy for reducing IOP and number of medications before more invasive filtration surgery is required. More studies with a larger number of eyes are required to validate this observation.

Disclosures: The authors are consultants to Nova Eye Medical.