

### 107 Long-term Follow-up of Combined Phacoemulsification and Endoscopic Cyclophotocoagulation in the Treatment of Mild to Moderate Glaucoma



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#### Purpose/Relevance

To evaluate the long-term effects of combined endoscopic cyclophotocoagulation (ECP) and phacoemulsification (phaco) on intraocular pressure control and medication reliance in the treatment of mild to moderate glaucoma.

#### Methods

Retrospective chart review in a private practice setting by glaucoma fellowship trained surgeons. A total of 261 eyes in the combined phaco-ECP. Non-comparative study of the effects of phaco-ECP on intraocular pressure and medication reliance over 72 months.

#### Results

The mean pre-operative intraocular pressure in the combined phaco-ECP group was 17.23 mmHg. At 12 months the mean pre-operative intraocular pressure was 14.70 mmHg. At 48 months it was 15.56 mmHg, and at 72 months the mean intraocular pressure was 13.92 mmHg; a 19.2% reduction in intraocular pressure. Mean medication reliance was 1.26 pre-operatively and was reduced to 0.23 after 72 months. The mean pre-operative best corrected visual acuity (BCVA) was 20/40 at baseline and was 20/30 at 72 months.

#### Discussion

These results lead to an interesting discussion regarding the utilization of phaco-ECP as a means of lowering intraocular pressure in patients with mild to moderate glaucoma. Treatment for patients with coexisting glaucoma and cataracts remains challenging, with options varying from least invasive to the most invasive. Utilizing combined ECP and phacoemulsification more routinely in this patient population may offer a solution that allows patients to benefit from the long term intraocular pressure reduction as well as decreased financial burden and compliance issues associated with glaucoma medication.

#### Conclusion

Combined phaco-endoscopic cyclophotocoagulation effectively lowers or maintains intraocular pressure and results in ocular hypertensive medication reduction up to 72 months. Our study demonstrates that phaco-endoscopic cyclophotocoagulation has sustained long term results which may help to reduce glaucoma progression in mild to moderate glaucoma.

#### References

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