One Year Surgical Outcomes of Combined Cataract Surgery and Gonioscopy-assisted Transluminal Trabeculotomy (GATT)

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Introduction:

There a paucity of studies solely investigating combined cataract surgery and gonioscopy-assisted transluminal trabeculotomy (GATT). We conducted a retrospective observational clinical study to evaluate the efficacy, safety and complication rates of cataract surgery combined with GATT.

Methods:

This retrospective study included 50 patients who underwent combined GATT and cataract surgery and had at least 1 year follow-up. The primary outcome measures were intraocular pressure (IOP), number of glaucoma medications (NGM). Success was defined as IOP<21 mmHg and ≥20% reduction in IOP at 1 year.

Results:

The median IOP was reduced from 24 (21, 28.5) at baseline to 14 (12, 15.7) at 1 year (40.3%, p<0.0001). The median NGM was reduced from 3 (2, 4) at baseline to 1 (0, 2) at 1 year (p<0.0001). Two patients (4%) required further surgery to control the IOP. Also, two patients (4%) required anterior chamber washout and tissue plasminogen activator (tPA) injection. At 1 year follow-up, 88% of patients met the success criteria.

No evidence of sight-threatening adverse event, corneal decompensation, endophthalmitis, choroidal detachment, hypotony or rebound iritis was noted.

Conclusion:

GATT combined with cataract surgery provides a significant reduction in IOP and NGM, while maintaining a high safety profile.



