

## The efficacy and safety of combined phacoemulsification and trabeculectomy in late advanced stage of primary glaucoma: A 12 months follow up

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**Purpose:** To evaluate the efficacy and safety, described in Intra-Ocular Pressure (IOP) and vision-threatening complication, respectively, after combined phacoemulsification and ab interno trabeculectomy in adults with late-advanced stage primary glaucoma in Indonesia.

**Methods:** The medical records of selected patients were retrospectively reviewed. Data collection included IOP, visual acuity, visual field, optic disc ratio, retinal nerve fiber layer thickness and IOP lowering medication used preoperatively and through up to 12 months posts operatively. Complications, if any, were also noted. Paired T test and Wilcoxon tests were utilized to analyze the result.

**Results:** Data from 47 eyes of 40 subjects were analyzed. Majority of the subjects were male (52.5%/47.5%) with mean age of  $62.60 \pm 9.95$  years and most had primary open angle glaucoma compared to primary angle closure glaucoma (62.5% vs. 37.5%).

The mean visual field deviation (dB) was  $-22.68 \pm 6.90$  at baseline and  $-23.32 \pm 7.04$  post operatively. Mean IOP (mmHg) was  $29.08 \pm 11.39$  at base line and  $15.11 \pm 6.40$  after mean follow up of 12 months. IOP reductions of  $\geq 20\%$  were achieved in 41/47 eyes (87.2%) with mean IOP reduction of 43%. Mean medication use declined from  $3.91 \pm 1.25$  medications per eye at baseline to  $1.38 \pm 1.21$  at last follow-up ( $p < 0.0001$ ) and mean IOP lowering medication reduction of 66% after mean follow-up of 12 months. Sixteen out of 47 eyes (34%) were medication-free at last follow-up. No vision-threatening complications were observed.

**Conclusion:** Combined phacoemulsification and ab interno trabeculectomy is a safe procedure to perform in late-advanced stage of primary glaucoma. This procedure provides statistically and clinically significant reduction of IOP and medication use with no wipe-out complication has been reported.

### Biography

Widya Artini Wiyogo is currently Head of the Glaucoma Center at JEC Eye Hospital & Clinics Jakarta, Indonesia and Professor of the Department of Ophthalmology, Faculty of Medicine, University of Indonesia. She has completed residency in ophthalmology and doctoral degree at University of Indonesia. She has also taken fellowship in glaucoma at the Lion Eye Institute, Perth, Australia and National University of Singapore, also fellowship in cataract and glaucoma at Boston University, USA. She has written numerous publications and books on ophthalmology, both as first author and co-author. Some of the awards she has received were the Editorial Board of Glaucoma Award Certificate and the Presidential Doctor Team in 2014. She is a member of IDI, PERDAMI, AAO, ASCRS, APAO, APGS, IGS.

**Received:** January 06, 2023; **Accepted:** January 11, 2023; **Published:** May 02, 2023