

In reply: early phacoemulsification after acute angle closure in patients with coexisting cataract

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Moreover, the status of the fellow eye has not been mentioned which could have shed light on the probability of the patients having occludable angles or shallow anterior chamber.

Second, no mention of the glaucomatous disc changes has been made, thus rendering the differentiation between the primary angle closure (PAC) and PACG (as per European Glaucoma Society Guidelines) indistinguishable. As per these guidelines, PAC is defined as iridotrabecular contact resulting in peripheral anterior synechiae and/or raised IOP with no evidence of glaucomatous optic neuropathy. PACG is defined as iridotrabecular touch causing glaucomatous optic neuropathy.⁴

Third, in 4 of 35 patients, phacoemulsification has been combined with debulking procedures. The lowering of IOP in these patients could have been due to debulking rather than phacoemulsification. The inclusion of these patients in the analysis could have altered the postoperative results.

The authors have mentioned that because multiple tests were carried out on the data, only P -values $<0.05/25=0.002$ (Bonferroni) was considered significant. The results in Table 3 show that the IOP decreased from 17.0 ± 8.2 mm Hg preoperatively to 13.2 ± 3.9 mm Hg postoperatively at 3 months after the AAC event, the P -value of which was 0.008. This P -value is more than the Bonferroni P -value of 0.002, thus making the results of postoperative decrease in IOP insignificant.

We appreciate the authors' work on the recommendation of early phacoemulsification in patients presenting with AAC crisis with coexisting cataract. However, a prospective study with a larger sample size of these patients would give us more valuable information with regard to the efficacy of early phacoemulsification in these patients in terms of IOP, number of topical and systemic glaucoma medications and visual acuity.

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REFERENCES

1. Quigley HA, Broman AT. The number of people with glaucoma worldwide in 2010 and 2020. *Br J Ophthalmol*. 2006;90:262–267.
2. Weinreb RN. *Angle Closure and Angle Closure Glaucoma*. The Hague, The Netherlands: Kugler Publications; 2006.
3. Romkens HCS, Beckers HJM, Schouten JSAG, et al. Early phacoemulsification after

acute angle closure in patients with coexisting cataract. *J Glaucoma*. 2018;27:2711–2716.

4. European Glaucoma Society. *Terminology and Guidelines for Glaucoma*, 4th ed. European Glaucoma Society; 2014. Available at: 10.1136/bjophthalmol-2016-EGS-guideline.001.

In Reply: Early Phacoemulsification After Acute Angle Closure in Patients With Coexisting Cataract

In Reply:

First, we would like to thank Dr Jain and colleagues for their keen interest in our study and we feel pleased to respond to their input.

As a retrospective study, we acknowledged that it had some potential limitations. Patients in whom cataract was reported were included in our study. However, because of the retrospective nature of the study, no standard grading of the cataract was used. Three patients were reported to have a mature cataract. All others were mentioned as having cataract grade 1 to 3 with no further special remarks. The fellow eyes had similar morphology and were treated according to the guidelines for primary angle-closure (glaucoma) (PAC(G)).

As mentioned in our previous response,¹ PAC(G) was defined according to the definition of the consensus reading:² PAC is defined as angle closure in 3 or more quadrants with either raised intraocular pressure (IOP) and/or peripheral anterior synechiae, while in PACG there is also evidence of glaucomatous damage to the optic disc with corresponding visual field defects. In addition, the optic disc

was evaluated before surgery and was graded by an ophthalmologist to decide on the diagnosis PAC or PACG.

Lowering IOP can indeed be caused by debulking procedures. To further study this, we repeated the analysis without patients who underwent debulking. Although somewhat smaller, we still found a change in IOP (2.9 ± 6.6 , $P=0.019$, vs. 3.8 ± 7.9 , $P=0.008$, for all patients).

Finally, we agree with Dr Jain's suggestion for a prospective study with a larger sample, and we reiterate the need for further research.

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REFERENCES

1. Romkens HCS, Beckers HJM, Schouten JSAG, et al. Early phacoemulsification after acute angle closure in patients with coexisting cataract. *J Glaucoma*. 2018. Doi: 10.1097/IJG.0000000000001111. [Epub ahead of print].
2. Weinreb RN. *Angle Closure and Angle Closure Glaucoma*. The Hague, The Netherlands: Kugler Publications; 2006.

Prediction of Surgical Outcome After Trabeculectomy for Neovascular Glaucoma With Anterior Segment Optical Coherence Tomography: A Methodological Issues

To the Editor:

We read with great interest the study by Kokubun and colleagues. The aim of the authors was “to determine the

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