


“Anterior Chamber Depth After Phacovitrectomy” – Response to Letter to the Editor [Response to Letter]

Gabriel Katz ^{1,2}
Fidaa el Zhalka³
Ronel Veksler¹
Anfisa Ayalon³
Elad Moisseiev^{2,3}

¹Department of Ophthalmology, Sheba Medical Center, Ramat Gan, Israel; ²Sackler School of Medicine, TelAviv University, TelAviv, Israel; ³Department of Ophthalmology, Meir Medical Center, Kfar Saba, Israel

Dear Editor

We appreciate the interest of De Bernardo et al in our study. Some of the remarks made are interesting but most of them relate to simple limitations of the study. Here is our response to the issues that were presented by the authors:

1. The anterior chamber depth (ACD) increase is a well-known fact after cataract surgery. It was also shown that the ACD is slightly larger in vitrectomized eyes vs non-vitrectomized eyes.¹ The slightly lower accuracy of the predicted refraction after combined phaco-vitrectomy with a small myopic shift was also shown in previous studies.^{2,3}
2. The scope of this study was to look at the ACD after surgery as a post-surgery measurement of the effective lens position (ELP). We wanted to find whether it correlates with the post-surgical error in the targeted refraction or the use of gas during the surgery. This hypothesis was used in previous studies as well.^{4,5}
3. We do not think that a non-significant subclinical edema is a significant bias in our study as it was not considered in other studies. Additionally, it likely could not explain more than 50–100 μm , as a larger increase in corneal thickness would result in clinically significant corneal edema. Furthermore, in our studies the biometric measurements were performed prior to surgery and then at least a few weeks after it, and at both times even sub-clinical corneal edema is not likely to have been present.
4. Regarding the post-operative axial length (AL) we do not agree that an increased AL is necessarily expected. Vander Mijnsbrugge et al² measured postoperative AL and also did not find a significant difference.
5. We agree that the non-significant difference between groups could be explained by limited number of examined patients, and have noted this point as a limitation of our study. A larger number of patients and a comparison to non-vitrectomized eyes could provide more information.

Correspondence: Elad Moisseiev
Department of Ophthalmology, Meir Medical Center, 59 Tshernichovsky St, Kfar Saba 4428164, Israel
Email elad_moi@netvision.net.il

Disclosure

The authors report no conflicts of interest in this communication.

References

1. Falkner-Radler CI, Benesch T, Binder S. Accuracy of preoperative biometry in vitrectomy combined with cataract surgery for patients with epiretinal membranes and macular holes. Results of a prospective controlled clinical trial. *J Cataract Refract Surg.* 2013;39:942–947. doi:10.1016/j.jcrs.2013.04.012
2. Vander Mijnsbrugge J, Fils JF, Jansen J, Hua MT, Stalmans P. The role of the vitreous body in effective IOL positioning. *Graefes Arch Clin Exp Ophthalmol.* 2018;256(8):1517–1520. doi:10.1007/s00417-018-3994-9
3. Wagenfeld L, Hermsdorf K, Stemplewitz B, Druchkiv V, Frings A. Refractive predictability in eyes with intraocular gas tamponade – results of a prospective controlled clinical trial. *Clin Ophthalmol.* 2017;11:993–998. doi:10.2147/OPTH.S132644
4. Shiraki N, Wakabayashi T, Sakaguchi H, Nishida K. Effect of gas tamponade on the intraocular lens position and refractive error after phacovitrectomy: a swept-source anterior segment OCT analysis. *Ophthalmology.* 2020;127(4):511–515. doi:10.1016/j.ophtha.2019.10.021
5. Schweitzer KD, Garcia R. Myopic shift after combined phacoemulsification and vitrectomy with gas tamponade. *Can J Ophthalmol.* 2008;43:581–583. doi:10.3129/i08-135

Dove Medical Press encourages responsible, free and frank academic debate. The content of the Clinical Ophthalmology ‘letters to the editor’ section does not necessarily represent the views of Dove Medical Press, its officers, agents, employees, related entities or the Clinical Ophthalmology editors. While all reasonable steps have been taken to confirm the content of each letter, Dove Medical Press accepts no liability in respect of the content of any letter, nor is it responsible for the content and accuracy of any letter to the editor.

Clinical Ophthalmology

Dovepress

Publish your work in this journal

Clinical Ophthalmology is an international, peer-reviewed journal covering all subspecialties within ophthalmology. Key topics include: Optometry; Visual science; Pharmacology and drug therapy in eye diseases; Basic Sciences; Primary and Secondary eye care; Patient Safety and Quality of Care Improvements. This journal is indexed on PubMed

Central and CAS, and is the official journal of The Society of Clinical Ophthalmology (SCO). The manuscript management system is completely online and includes a very quick and fair peer-review system, which is all easy to use. Visit <http://www.dovepress.com/testimonials.php> to read real quotes from published authors.

Submit your manuscript here: <https://www.dovepress.com/clinical-ophthalmology-journal>

<https://doi.org/10.2147/OPTH.S324737>