Author’s response to reviews

Title: Comparison of face-down posturing with nonsupine posturing after macular hole surgery: a meta-analysis

Authors:

Song Xia (xs1342@126.com)
Xin-yu Zhao (1767105455@qq.com)
Er-qian Wang (624151194@qq.com)
Youxin Chen (cyx4168@126.com)

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Author’s response to reviews:

Dear Editors and Reviewers:

Thank you for your letter and for the reviewers’ comments concerning our manuscript entitled “Comparison of face-down posturing with non-supine posturing after macular hole surgery: a meta-analysis.” (ID: BOPH-D-18-00022). Those comments are all valuable and very helpful for revising and improving our paper, as well as the important guiding significance to our researches. We have studied comments carefully and have made corrections which we hope will meet your requirements. Revised portion are marked in red in the paper. The main corrections in the paper and the response to reviewer’s comments are as flowing:

Response to the reviewer’s SPECIFIC COMMENTS:

Reviewer reports:

Yoshiaki Shimada (Reviewer 1): A meta-analysis of comparison between face-down positioning (FDP) and nonsupine positioning (NSP) as a postoperative posture to treat macular hole.

A similar paper [17] has been published in 2016. In this analysis, authors included recent researches and assessed the influence of ILM peeling and prophylactic phaco- emulsifications and intraocular lens implantations. Their conclusion was unsurprising. "Based on all the available evidence, FDP after MH surgery could generally improve the overall MH closure rate than NSP. For MH larger than 400μm, ILM peeling combined with FDP could significantly increase MH closure rate. Combined cataract surgery might not influence the MH closure rate under any
circumstance." (p.6 L.2-4). While providing statistical evidence is somehow worthy, each surgeon expected those based on the experiences. Except the similarity to their previous work [17] this work to be published somewhere. Whether BMC Ophthal is the proper place or not is left to the editor's decision. A detail: A duplication mutation, "Using 12-item scale[19][19] [19]" (p.6 L.1).

Answer: Thank you for your suggest. We performed this meta-analysis, which includes all the available data and take all the influential factors in to consideration to evaluate the superiority between FDP and NSP following MH surgery, in order to provide a reference for the decision-making of ophthalmologists. We also have rechecked the reference numbers carefully. “Using 12-item scale[19][19] [19]” (p.6. L.1) has been changed to “Using 12-item scale[19]”

Makoto Inoue, MD, PhD (Reviewer 2): The authors performed the meta-analysis of postoperative posturing positioning on the anatomical and functional outcomes of macular hole surgery. The manuscript has been well-written. The authors used the cut off value of macular hole size in 400 micro meter, however the definition of macular hole diameter may be different among the literatures. The authors should describe how they evaluated the macular hole diameter in different articles.

Answer: Not all the authors shared that how they evaluated the macular hole diameter in all articles. We believe these data are reliable for OCT was used to measure the diameter.

RW Essex (Reviewer 3): It is unclear to this reviewer what the selection criteria for inclusion is.

In the methods it the following is stated:

"Inclusion criteria were {1}Participants: human with macular hole requiring surgical intervention; {2}Intervention: macular hole surgery; {3}Comparison: comparing FDP versus NSP ; {4}Outcomes: MH closure rate, best corrected visual acuity or more; {5} Methodological criterion: a prospective study, a case-control study or a cohort study. Exclusion criteria were {1}Other differences between case group and control group beside the comparison of post-operative face position; {2}Insufficient data to estimate a odds risk (OR) or weighted mean difference (WMD); ...
"
The largest published paper looking at this issue is Essex et al, 2016, Ophthalmology, which prospectively compared 628 eyes with no posture to 1806 eyes with face down positioning. This manuscript appears (to this reviewer) to fit the inclusion criteria. And yet the paper was not included nor referenced. I note the Essex paper was not a RCT, but nor were many of the included papers.

This I feel is a significant methodologic flaw, weakening the results and any conclusions drawn from them. Alternatively the authors need to explain why this paper was not included.

Answer: In our inclusion criteria, MH closure rate is necessary. We couldn’t obtain effective data in the paper (Essex et al, 2016, Ophthalmology) for further analysis. As the exclusion criteria: Insufficient data to estimate a odds risk (OR) or weighted mean difference (WMD). That is why the paper is not included.

Mark Alberti (Reviewer 4): 1. The article's biggest impediment is its use of the English language. The ideas presented in the article need to be communicated with a better command of the written language.

Answer: Thank you for your suggest. As a non-native English speaker, English is our weakness. We have tried our best to improve our written language.

2. In the discussion, the authors mention the upward mechanical force of buoyancy may explain a benefit for FDP. The authors should relate this statement to the publication: "The magnitude of the bubble buoyant pressure: implications for macular hole surgery" published in RETINA in 1998.

Answer: Thank you for your suggest. We have added the reference.

3. The authors seem to have selected articles comparing of FDP vs NSP, yet make conclusions with regards to a different question: the value of ILM peel. Because the authors are comparing FDP with NSP, many important publications examining the value of ILM peel are left out. The authors should at least mention this as a limitation.
Answer: The meta-analysis which includes all the available data and takes all the influential factors like the size of MH, ILM peeling and combined cataract surgery in to consideration to re-evaluate the superiority between FDP and NSP following MH surgery. Some important papers examining the value of ILM peel were left out for they didn’t compare FDP vs NSP. We drew the conclusion based on all the available evidence and further well-conducted RCTs are needed to verify our findings as we said in Conclusions.