Peer Review File

Relationship of MMP-2 and TGF-β2 levels in human vitreous with axial length

Reviewer: 1

The authors of this paper entitled “Relationship of MMP-2 and TGF-β2 levels in human vitreous with axial length” present a study in which they try to assess the possible relation existing between high myopia and vitreous levels of MMP2 and TGF beta. There are several issues regarding this paper:

1. First and most important, the classification of the patients may have altered their results. They selected patients suffering from macular holes or retinal detachments, but do not show the percentage of each disease in either of the groups (AL<26 and >26) and they made no distinction or sub-analysis whatsoever. This is a clear bias that probably alters the results obtained.

2. AL measured by IOL master in retinal detachment patients may be altered for evident reasons, as their retinas are closer to the anterior segment as they should be, modifying the AL data provided.

3. Contradictory conclusions are thrown, in possible relation with the low n: “in the first place, MMP-2 concentration of human vitreous in high myopia was statistically significant higher than non-high myopia group, moreover, there was no significant correlation between MMP-2 concentration and AL for all subjects, this was one bone of contention comparing with previous reports”.

4. The paper brings no real novelties to the current knowledge.

5. Introduction section: Abbreviated terms have to be explained prior to the use of their abbreviated form (MMP, TGF, AL).

6. Major English editing required.

Illustrations:

1. Early statistical analysis found that there was no statistical significance between the parameters of the macular hole and retinal detachment, and the results were not included in the article.

2. The problem of axis measure with IOL master: the patients of retinal detachment included in the study group were screened the peripheral detachment and did not involve the macular area.

3. For MMP-2 concentration, the study found that high myopia group MMP-2 concentration higher than non-high myopia group, but did not mean that MMP-2 concentration and axis length had statistical correlation.

4. The innovation of this paper lies in this was the first research that clearly illuminate the significant correlation of AL between MMP-2 and TGF-β2 levels of the human vitreous respectively.

Reviewer: 2

The practical use of these findings are not clear, however it is a good study - done well and may be of interest to doctors that deal with myopia and physiology of the eye.

Reviewer: 3

Accept as it is.