Author's response to reviews

Title: Assessment of Stereoscopic Optic Disc Images using an Autostereoscopic Screen. Experimental study.

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Author's response to reviews: see over
Covering Letter

Dear Sir,

We are hereby resubmitting our article, the aim of which is to assess the new technology of autostereoscopic screens in stereoviewing of stereoscopic optic disc images.

The study compared an example of this new technology to the existing technique of stereoviewing using the liquid crystal shutter goggles synchronised with switching screens.

The study introduces this promising technology into the field of glaucoma care. The autostereoscopic screens carry also potential clinical usability benefits in other areas of ophthalmic practice.

We have responded to the reviewers’ comments and corrected and modified the manuscript as recommended.

Our response to the reviewers’ comments is detailed as follows:

Reviewer 1:

Comment to the authors:
1. As a reader, I can not clearly figure out the so-called "Autostereoscopic screen" from the method part. Is it a device (new instrument) or a software? Are this device available now?
2. If possible, please provide the picture of this device in the text? I believe that will help the reader to understand the new device.
3. Is it possible to show one glaucoma case using autostereoscopic screen? How to measure the C/D ratio?

Reply

Many thanks for the reviewer’s valuable comments; we have added Figure 1 to the manuscript, to describe the concept of the technology of the autostereoscopic screens used in this study.

The autostereoscopic screens are currently commercially available, and have different applications in the computer science research and other areas such as the oil industry.

The technique for measuring the Cup/Disc ratios is described in the methodology section.
Reviewer 2:

This is a good paper and I am glad to see more work being done in this area. However, I don’t feel that the subjective assessment of stereopsis achieved with each modality can be published as a research. It would be impossible to remove observer bias when evaluating each modality, and as such the subjective differences noted cannot be accurately attributed to the stereoscopic capability of each device; there are simply too many confounders to make an accurate conclusion. However, if that part were removed, the remainder of the paper, in which the correlation of LCD goggles to the autostereoscopic display was assessed, is worthy of publication.

- Minor Essential Revisions
There are a few of these: a period out of position on page 5, spacing errors (pg 5 etc.) and a few spelling errors (eg (steteoscopic) on page 9).

- Discretionary Revisions
I liked the explanation of the technologies but felt this could be simplified a little. It gets a little too technical and this might turn off readers who have limited technical expertise (ie older ophthalmologists).

Reply

Many thanks for the reviewer’s constructive comments. We agreed and comply with the reviewer’s opinion concerning the subjective assessment of the quality of stereopsis assessment as it was practically impossible for the observers to be blinded to the device used, thus the observer’s bias can not be excluded completely when evaluating each modality. We have thus removed this experiment from the methodology and results sections.

We have made the minor corrections and spelling checks have been applied.

We have retained the technology explanation so that the article can be of interest to the general ophthalmologists as well as other ophthalmologists or technology experts who could be interested in the technical details behind this newly presented device to the field of ophthalmology.

We would be grateful if you would consider the revised manuscript for publication

Many thanks

Yours Sincerely
Maged Habib