Author’s response to reviews

Title: Changes in choroidal thickness and optic nerve head morphology after filtering surgery: nonpenetrating deep sclerectomy versus trabeculectomy.

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Version: 2 Date: 02 Oct 2018

Author’s response to reviews:

Response to reviewer 1:

Dear Sir,

Thank you for your time and recommendations. This version has been carefully revised according to your comments.

1) Reviewer comment: The authors must be congratulated for a well conducted, interesting study. My major concern is the small number of eyes in each group. Given the fact that the purpose of this study is to compare the changes in the lamina cribrosa and other morphological parameters of the ONH (including the choroidal thickness) between NPDS and Trabeculectomy, an statistical power calculation should have been done and stated in the methods section. It is possible that the power of the present study is low, so it might well be that even clinically relevant differences in some of the parameters studied (between NPDS and trabeculectomy) would have not been detected. Throughout the discussion, and in the conclusion, this fact (i.e. the power that the current study has, and the possibility that differences may exist but may be undetected) should be mentioned and discussed.

Author response: Unfortunately, as this was a pilot study, and we do not know the effect of both surgeries on choroidal thickness parameters, the calculation of the number of subject to include
was not performed prior to the study. This limitation has been emphasized in the discussion section as you suggested (Lines 289-291): “Nevertheless, some differences between NPDS and trabeculectomy groups might remain undetected because of a lack of power due to the small number of eyes included in each group.”

2) Reviewer comment: page 7, line 159. If the data distribution is not normal (as it seems) then it is not appropriate to show the results as the mean and the standard deviation. The median and the range should be used instead.

Author response: All results were changed to be shown as median (interquartile range)

3) Reviewer comment: page 11, line 270. The references are misquoted and do not support the statement that the current study is larger than three studies analyzing OCT parameters after trabeculectomy. reference 23 analyzes 23 eyes, ref 25 studies 20 eyes and ref 32 reports results on 14 eyes. The current study analyzes 11 trabeculectomies.

Author response: Thank you for this comment, the text of the discussion has been modified to become clearer (lines 285-287): “Although, the number of patients in the trabeculectomy group was smaller than previous studies, including NPDS population it is larger than three of the four studies analyzing these parameters after trabeculectomy23,25,32.”

Response to reviewer 2:

Dear Sir,

Thank you for your time and recommendations. This version has been carefully revised according to your comments.

1) Reviewer comment: One point needing clarification is the statistical analysis. The authors opted for a nonparametric test, but the reason for this choice is not explained. In my opinion, the best option could be an analysis of variance for repeated measures, as the same patients were investigated before and after the surgical intervention. Indeed, data are presented as mean and standard deviation instead of median and interquartile range values, as would be required for data not following a normal distribution. The same comment applies to the other
statistical analyses. In particular, why the Pearson instead of the Spearman correlation analysis?

Author response: As the data distribution was not normal, Spearman’s correlation was used to correlate any quantitative parameters. All results were changed to be shown as median (interquartile range)

2) Reviewer comment: As a minor point, the authors used several abbreviations that made it more difficult to read the manuscript. Some of them are not spelled out (as in the case of Spectral Domain Optical Coherence Tomography), and others seem to be redundant.

Author response: Changes concerning theses abbreviations has been made in the manuscript.

3) Reviewer comment: I think that figures and tables should be better arranged. Table caption and legend should be followed by the corresponding table. The figures' panels should be identified by letters.

Author response: Editorial Manager article submission procedure requires to send manuscript and tables/figures in separated files. Then we cannot handle figures/tables position in the article.