Author's response to reviews

Title: Randomised controlled single-blind study of conventional versus depot mydriatic drug delivery prior to cataract surgery [ISRCTN 78047760]

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Author's response to reviews: see over
Revisions

Author: Vincent Dubois

Randomised controlled single-blind study of conventional versus depot mydriatic drug delivery prior to cataract surgery [ISRCTN 78047760]

Reviewer: John Siderov

Major Compulsory Revisions (MCR)

1. Statistical analysis has been repeated using the T-Test. Please see Abstract para 3, Results para 1, and Table 1.

2. Size of effect size is medium, i.e. 0.5. Please see Methods, para 2.

3. Time interval has been clarified. Please see Methods para 5.

Author's comment on change of MCR 3.

Due to the nature of cataract surgery, and that the anaesthetist removed the wick at the time of sub-Tenon’s injection, the time delay between instigation of mydriasis and measurement of pupil size was not uniform. However, both groups were subjected to this lack of uniformity, so given the significant numbers of patients in this study, their equal distribution between the study groups, and the randomization process, this does not affect the study’s findings of no statistical difference (although the scientific purity of the study could be improved).

4. Section rewritten to reflect the study’s findings. Please see Discussion para 1.

5. Section extensively rewritten to better reflect literature. Please see Discussion para 2.

6. Section extensively rewritten to explain the differences between this author’s study, and ours. Please see Discussion para 4.

Minor Essential Revisions

7. Figure 1 has been removed.

Reviewer: Giovanni Milazzo

Major Compulsory Revisions

1. Methods para 4: The wick is a BD visidrain™ eye fluid wick which is hyperabsorbent and immediately saturates. The text has been altered to contain this information. Please see Methods para 4.
‘The wick used in the WICK group had been soaked in an equal part mixture of the above drops.’

Author’s comment

This means that the ratio of drops is the same as the control group, which is described in the text. I have not changed this as I feel it is clear. Please tell me if otherwise.

2. The ocular residence time has been provided in response to John Siderov’s comments. Please see Methods para 5.

3. The wick was removed at the time of the measurement of the pupil diameter, so this is the same as for MCR 2. I have not changed this. Please see Methods para 5.

4. Author’s comment

Proparacaine was used as it was felt that there might be an unacceptable degree of discomfort to the patients if a wick was inserted without prior topical anesthesia.

The resulting reflex tearing may have diluted the mydriatic agents contained within the wick. Patients’ interference with their uncomfortable eye may have significantly affected the retention rate of the wicks. It is for these reasons that the authors used proparacaine.

We feel that the discussion reflects the potential effects of the proparacaine. If this practice is adopted in Eye units, some form of anaesthesia may well be used for reasons of patient comfort, so the study reflects clinical use.

5. Text altered to allow for use of topical anaesthesia. Please see Conclusions para 1.

6. No data was available on peroperative mydriasis. This was not the object of the study.

Minor Essential Revisions

7. The table of values has been altered in response to John Siderov’s comments, which are similar to yours. Please see table 1.

Reviewer: Anders Behndig

Discretionary revisions

a. Lack of intraoperative and postoperative effects of dilating methods mentioned. Please see Methods para 5.
b. method of measuring pupil size commented on. Please see Methods para 5.