A Comparative Study between Dissociative Treatment and Binocular Interactive Treatment in Amblyopia

Thesis

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By

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STATISTICAL ANALYSIS PLAN

Using the SPSS (or the Minitab or Mega Stat) statistical software, the data will be examined using standard summary statistics which will include, where appropriate, 95% confidence intervals.

A one-way analysis of variance (ANOVA) will be performed on the visual acuity data to determine whether there appeared to be an effect of measurement time on visual acuity, and pairwise comparisons of mean will then be performed, examing the changes from baseline to 1 month, 3 months and 6 months after treatment start.

An improvement of ≥ 0.125 LogMAR units will be considered clinically significant. In addition, the proportion of change will be calculated at 1 month, 3 months and 6 months follow up as follows (using the formula described by Stweart et al)

Proportion of change $= VA_{as} - VA_{ae} / VA_{as} - VA_{fe}$

Where VA_{as} is the vision of amblyopic eye at baseline, VA_{ae} is the vision of amblyopic eye at the end of the treatment (i.e. 6months) and VA_{fe} is the vision of the non-amblyopic eye at the end of the treatment.

Also percentage of compliance with treatment in each group will be measured as a secondary outcome measure.