Axial Shortening Effects of Repeated Low-level Redlight Therapy in Children with High Myopia

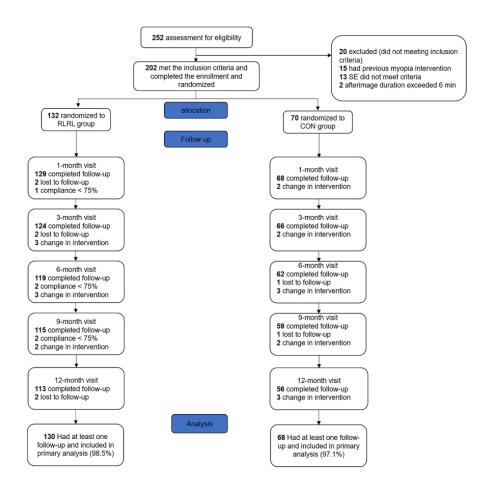
A Multicenter Randomized Clinical Trial

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Purpose:

To evaluate the efficacy and safety of RLRL in children with high myopia, and analyse the alterations in the retina and choroid following treatment in both the central and peripheral regions to investigate the factors that influence the RLRL outcomes.

Method:



Results:

- 1. Mean AL change at 12 months in the RLRL group was -0.11±0.25mm shortening, whereas the change in the control group was 0.32±0.09mm (p<0.001).
- 2. Mean SE change at 12 months in the RLRL group was $0.18\pm0.63D$ improvement, whereas the change in the control group was $-0.80\pm0.42D$ (p<0.001).
- 3. AL shortening greater than 0.05mm was seen in 63% of the RLRL group at 9 months and 59% at 12 months.
- 4. Choroidal thickness increased in all sectors at 12 months in the RLRL group, with retinal thickness increased in the parafoveal and perifoveal circles, compared to significant thinning of the choroid and perifoveal retina in the control group.
- 5. Three senior specialists in fundus diseases assessed the OCT findings and found no significant changes in fundus structure during the entire study.



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Outcome:

