

The Effect of Repeated Low-Level Red-Light Therapy on Myopia Control and Choroid

A prospective non-randomized controlled trial.

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Purpose:

To comprehensively assess RLRL-induced changes in choroidal parameters by measuring choroidal thickness, choroidal vascularity and choriocapillaris luminal area in the foveal and parafoveal regions before and after RLRL treatment.

Method:

1. Participants were assigned either to RLRL or control group based on willingness to receive RLRL treatment.
2. Participants were followed up at 3, 6 and 12 months measuring AL, SE, and OCT.

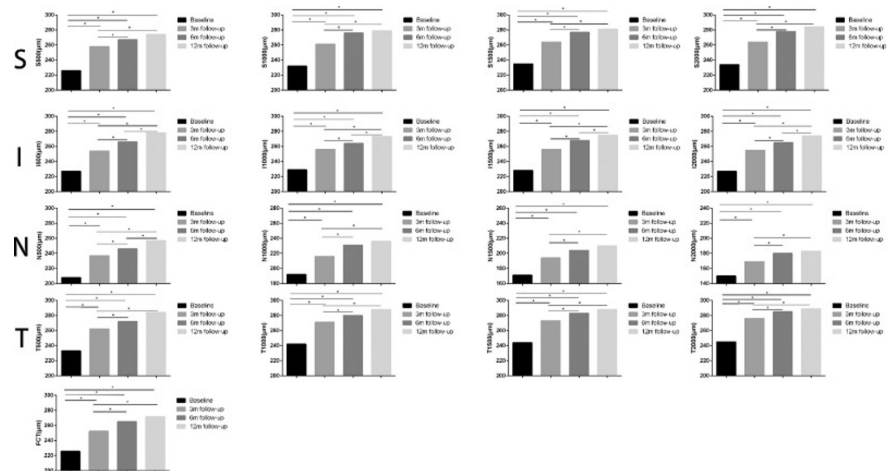
Results:

1. AL decreased significantly compared to baseline at 3 and 6 months with RLRL ($p < 0.01$) and returned to baseline at 12 months after therapy.
2. SE increased significantly compared to baseline at 3, 6 and 12 months with RLRL ($p < 0.001$)
3. Myopia control rate based on AL with was **64%**, **61%** and **43%** and based on SE was **68%**, **67%** and **62%** at 3, 6 and 12 months in the RLRL group.
4. All CT, CV and CLA parameters increased significantly across the 12 months in the RLRL group.
5. AL, SE and most choroidal parameters showed significant correlations between changes at 3 and 12 months.

Clinical trial outcome:

Myopia Control Rates in RLRL and Control Groups

	RLRL Group	Control Group	Effect Size of the Treatment
Axial length control rate at 3 months	64.00%	0.00%	142.86%
Axial length control rate at 6 months	61.00%	0.00%	125.00%
Axial length control rate at 12 months	43.00%	0.00%	104.65%
SE control rate at 3 months	68.00%	1.85%	226.67%
SE control rate at 6 months	67.00%	2.78%	160.98%
SE control rate at 12 months	62.00%	2.78%	168.29%



To find out more about the Repeated Low-Level Red-Light Therapy available via Eyerisign, get in touch with your local Eyerising International team today.