THE EFFICACY AND SAFETY OF PERIOCULAR ACUPOINT STIMULATION ON MYOPIA PROGRESSION IN CHILDREN

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Purpose: Considering high prevalence of myopia in Asian countries, social cost paid for myopia may gradually increase in Korea. However, studies for developing myopia treatment are deficient. The study was to evaluate whether the periocular acupressure with a medical massager is effective for suppressing myopia progression.

Methods: This study was an investigator-sponsored, prospective, open-labeled, and superiority pre and post single-armed study. 14 myopia children aged 7-12 years wore a medical massager for 15 minutes to stimulate periocular acupoints. For 24 weeks, the participants used the device twice a day. Based on prior studies, the refraction change of naturally proceeded myopia was set as -0.38 D. The axial length change of naturally proceeded myopia was set as 0.228 mm. To assess the safety, we performed vital sign check, physical examination, visual acuity test, slit lamp examination, IOP measurement, and fundus examination.

Results: The refraction and axial length of the participants increased. For 24 weeks, the change in refraction was -0.38 D at the right eye and -0.40 D at the left. The change in axial length was 0.21 mm at the right and 0.22 mm at the left. In the safety assessment, any adverse event did not occur.

Conclusions: There was no significant difference between the control group and the intervention group. The effect of growth may have more contributed to our result than that of acupressure. Based on our result, a full-scale study will not be conducted.