Proclear EP vs Placebo: Visual Outcomes and Symptoms of Asthenopia in Non-presbyopes and Early Presbyopes

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Purpose: To evaluate the ability of a new center-distance low-add soft contact lens (Proclear EP) to relief symptoms of asthenopia in non-presbyopes (30 to 40 years of age) and early presbyopes (age 40 to 45 years of age).

Method: Forty-one patients (66% women) were enrolled in the study and distributed among 4 clinical groups randomly assigned to a new multifocal low-add soft contact lens (Proclear EP; n=21) or a single vision (SV) lenses (Proclear Compatibles; n=20) as placebo. Accommodative function was recorded continuously while the patient was looking at a Maltese Cross placed at 66, 38 and 25 cms. LogMAR visual acuity (Precision Vision, USA) and subjective information regarding visual discomfort and symptoms of asthenopia associated to near vision tasks was obtained. Follow-up visits were scheduled at 1 week and 1 month after lens delivery.

Results: Visual acuity was comparable between Proclear EP and SV lens. End-of-day visual discomfort and tiredness was significantly ameliorated by Proclear EP compared with SV lenses in non-presbyopes while a similar trend, although not statistically significant was observed in the early presbyopes. Asthenopia symptoms improved by 8.33% and 9.38% in the non-presbyopes and early presbyopes wearing Proclear EP, respectively. The improvement with SV lenses was 5 and 2.5%, respectively.

Conclusions: Proclear EP produced a significantly higher relief of asthenopia and visual discomfort symptoms compared to control groups wearing single vision lenses acting as placebo. Visual acuity with Proclear was comparable under high and low contrast conditions to that of SV lenses.

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