EFFICACY OF A NEW VITAMIN C WITH HYALURONIC ACID SERUM TO IMPROVE SKIN PHOTOAGING

Introduction: Production of reactive oxygen species induces skin photoaging that has many manifestations such as wrinkles, dryness, hyperpigmentation, and a decrease in collagen and hyaluronic acid. Vitamin C as antioxidant represents a promising strategy for improvement of clinical features, once it can reduce oxidative damage. However, the efficacy of Vitamin C and hyaluronic acid association in a topical serum to treat the signs of aging has not yet been demonstrated.
Objectives: This study aimed to assess the efficacy of a novel vitamin C with hyaluronic acid (HA) serum to reduce signs of photoaging.
Materials and Method: 10 healthy subjects applied studied serum containing L- ascorbic acid, ethyl ascorbic acid, HA, *Green tea* extract, *Kakadu plum* extract and ferulic acid twice daily for 56 days. Clinical grading, biophysics measurements of moisturizing, skin viscoelasticity, ultrasound, and self-assessment questionnaires were conducted after 28 and 56 days of use, to evaluate product efficacy.
Results: Statistically significant improvements were observed in all clinically graded efficacy parameters, it could be highlighted improvements on skin texture and homogeneity. The studied serum significantly increased the stratum corneum water content after 28 days of use, and maintained after 56 days showing that it was able to increase skin moisturizing. Benefits on dermis were also showed by the significant increase on skin elasticity and ultrasound echogenicity after 56 days of study. Also, improvement of skin moisturizing, firmness and soft touch was perceived by the volunteers.
Conclusions: New Vitamin C with HA serum could be a good option to improve skin conditions mainly linked with photoaging, as shown by statistically significant improvements in multiple clinical and biophysics parameters and patient reported outcomes. This study presented important information about the association of vitamin c and hialuronic acid to improve skin conditions mainly focus on photoaging.