

〈報 告〉

シワ評価法に関する検討 第4報

——保湿クリーム連用によるシワ改善作用——

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Evaluation of Measurement Methodologies for Wrinkles on the Face Part IV

—The efficacy of daily treatment of a skin moisturizer for wrinkles on the face—

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Abstract

A split face, randomized clinical study was conducted to quantify facial wrinkles treated by a standard moisturizing cream for 2 weeks. A total of 56 volunteers was enrolled in this study who signed the informed consent and had moderate severity of wrinkles in the periorbital region (crow's feet) perceived by study investigators. Proportion of wrinkle area, mean depth of wrinkles, mean depth of the deepest wrinkle, deepest point of the deepest wrinkle, proportion of wrinkle area at different depth level and roughness parameters (R_a , R_z , R_y) were measured with several analysis systems by taking images of skin replica, and skin hydration was also measured with Skicon (conductance) or Corneometer (capacitance) at before treatment, 1 and 2 weeks during the treatment and 1 week after discontinuation of the treatment. Volunteers conducted self-questionnaires to evaluate the change of perceived their own wrinkles associated with the measurement period. It was found the moisturizer treated sites showed significant more hydration in stratum corneum than non-treated sites during the treatment period. The improvement of facial wrinkles treated by the moisturizer was partially observed by wrinkle measurements and questionnaire during the treatment period, and then those improvements have decreased after discontinuation of the treatment. Among measurement parameters, proportion of wrinkle area and deepest point of the deepest wrinkle by treated sites showed statistically significant less than those of non-treated sites in this study.

Key words: wrinkles, image analysis, area, depth, moisturizing cream.