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Evaluation of 70% glycolic peels versus 15% trichloroacetic peels for the treatment of photodamaged facial skin in aging women.

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BACKGROUND: Chronic solar irradiation results in both morphological and functional changes in affected skin. Superficial peels have been shown to improve all symptoms of photodamaged skin.

OBJECTIVE: This study was designed to compare the efficacy and tolerability of glycolic acid (GA, 70%) with trichloroacetic acid (TCA, 15%) for the treatment of photoaging.

MATERIALS AND METHODS: Twenty female patients affected by photodamage were treated with graded concentrations of 70% GA and 15% TCA peel. Each patient was submitted to 5 sessions of these peels, with an interval of 14 days between each session. Four clinical parameters of surface evaluation of the living skin (hydration, elasticity, melanin, and erythema) were measured. The records were made before each treatment and 3 months after the last application. RESULTS: The statistical significance in each group of patients was observed with elasticity and hydration. Decrease in melanin content in the skin occurred significantly after the application of a series of treatments with GA. Increase in severity of erythema showed statistical significance after the treatment with TCA.

CONCLUSION: Superficial peels, such as 70% GA and 15% TCA, proved to be an effective treatment modality for photodamaged facial skin. Both acids contribute to improvement of the photodamaged skin's parameters. Glycolic acid increases skin's hydration faster.

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