Full-face photorejuvenation of photodamaged skin by intense pulsed light with integrated contact cooling: initial experiences in Asian patients.

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Abstract

BACKGROUND AND OBJECTIVES: For Asian skin, recent "non-ablative" skin rejuvenation techniques have become the focus of attention for darker complected patients. In our earlier research, we have shown that intense pulsed light (IPL) technology can be applied to Asian skin with a high degree of safety and efficacy. In this study, we performed full-face photorejuvenation using a new IPL device incorporating a 560 nm filter and integrated contact cooling system for the improvement of various symptoms associated with photoaging in Asian patients.

STUDY DESIGN/MATERIALS AND METHODS: A total of 73 patients were treated with a series of five or more full-face treatments at 3-4 week intervals using IPL with integrated contact cooling. One month after the third and fifth treatments, the patient and the treating physicians subjectively evaluated improvement in five areas—in pigmentation, telangiectasia, fine wrinkles, skin texture, and over-all improvement. In addition, histological changes were evaluated.

RESULTS: Pigmentation improvement, telangiectasia reduction, fine wrinkle reduction, smoother skin texture, and over-all improvement were evaluated according to five grades of percentage improvement. In addition, the subjective rating by the patients and the physicians was averaged, and the combined results were evaluated. After the fifth treatment, a combined rating of greater than 60% improvement was given to more than 80% of patients for pigmentation improvement, telangiectasia reduction or removal, smoother skin texture, and overall improvement. Histological evaluations showed strong staining of Type I and Type III collagen. Complications were minor and transitory, with burning sensations and erythema in only two patients.

CONCLUSION: Full-face photorejuvenation for Asian patients using this device is not only effective but is also associated with fewer post-treatment complications than other more invasive modalities. We conclude that IPL photorejuvenation can be the basis for safe and effective skin rejuvenation in Asian patients.

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