

**Photorejuvenation by Intense Pulsed Light with Objective Measurement of Skin Color in Japanese Patients**

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**BACKGROUND AND OBJECTIVES** This study had two objectives: subjective evaluation of overall skin rejuvenation effects of relatively short-wavelength intense pulsed light (IPL) and objective changes in basic skin tone as measured by a spectrophotometer.

**STUDY DESIGN/MATERIALS AND METHODS** Twenty-five women selected at random received a series of three IPL treatments. Efficacy was evaluated over a 3-month follow-up period. Concurrently, a spectrophotometer was used to measure "lightness" ( $L^*$ ) to quantify the lightening effect changes to pre-treatment and post treatment basic skin tone.

**RESULTS** Subjective improvement of 50% or more was seen in 18 of 25 patients for pigmentation. One patient showed exacerbation of latent epidermal melasma as a complication. In the spectrophotometric analysis, the mean value of  $L^*$  increased from a baseline value of 60.86 to 63.22, at 3-month follow-up period, with statistical significance.

**CONCLUSION** IPL skin rejuvenation using relatively shorter wavelengths and pulse widths brought about significant macroscopic and quantitative improvements, especially in the treatment of epidermal pigmentation and improvement of basic skin tone.