

# Combined Therapy Using Fractional Q-switched 1,064-nm Laser and Intense Pulsed Light for the Treatment of Japanese Photoaged Skin

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## **Abstract**

**Purpose:** Non-invasive skin rejuvenation treatments are preferred for Asians, who are particularly at risk of side effects; all population groups, however, require a series of treatments lasting for up to six months. We performed combined treatments using a laser and flash lamp to improve skin color and texture, while reducing side effects. We also evaluated the safety and effectiveness of these treatments.

**Subject and Methods:** A total of 25 patients, divided into two groups each with Fitzpatrick Skin Type classifications, were given a series of six treatments at 4 week intervals using a non-ablative fractional laser and flash lamp. Before and after receiving these treatments, patients were evaluated using a facial image analyzer and spectrophotometer: considered were skin tone and texture; spot number and size; pore number; and wrinkle fineness. Frequency of post-inflammatory hyperpigmentation was determined visually.

**Results:** Treatments significantly improved spots, skin texture, and pores; fine wrinkling was only slightly improved. There was almost no change of skin color in the unspotted areas. Four patients showed mild post-inflammatory hyperpigmentations.

**Conclusion:** Safety and effectiveness of these treatments, combined with its reduced side effects, makes it an effective skin rejuvenation treatment for Asian patients.

**Key words:** Skin rejuvenation, Skin aging, Fractional photothermolysis, Q-switched laser, Intense Pulsed Light