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Photoepilation Results of Axillary Hair in Dark-Skinned Patients by Intense Pulsed Light: Comparison between Different Wavelengths and Pulse Widths

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BACKGROUND:
Recently, intense pulsed light (IPL) sources have been shown to provide long-term hair removal.

OBJECTIVE:
This study examined the photoepilatory effects of different wavelengths and pulse width application in the same IPL device and compared their efficiencies in Asian skin.

METHODS:
Twenty-eight Korean women were treated using hair removal (HR) (600-950 nm filter) and 27 using HR-D (645-950 nm filter) in the axillary area. Four treatments were carried out at intervals of 4 to 6 weeks; follow-ups were conducted 8 months after the last treatment. Mean energy settings were 14.9 6 2.0 J/cm^2 for HR and 17.1 6 0.6 J/cm^2 for HR-D. Longer pulse widths were applied in case of HR-D treatment. Hair counts and photographic evaluation of skin sites were made at baseline and at the last follow-up. Final overall evaluations were performed by patients and clinicians.

RESULTS:
Average clearances of 52.8% and 83.4% were achieved by HR and HR-D, respectively. No significant adverse effects were reported after HR-D treatment. One case each of hypopigmentation and hyperpigmentation was reported for HR.

CONCLUSION:
An IPL source removing 45 nm of the emitted spectra and applying a longer pulse width was found to provide a safer and more effective means of photoepilation in Asian patients.