Pulse in pulse intense pulsed light for melasma treatment: a pilot study.
Chung JY, Choi M, Lee JH, Cho S, Lee JH.

BACKGROUND: A new type of intense pulsed light IPL with pulse-in-pulse (PIP) mode (multiple fractionated subpulses in one pulse width) has recently been developed.

OBJECTIVE: To evaluate the clinical efficacy and safety of PIP IPL in patients with melasma.

MATERIALS AND METHODS: Half of each patient's face was treated with IPL and six treatment sessions with a low-fluence quality-switched neodymium-doped yttrium aluminum garnet laser (IPL/T) every 2 weeks. The other half was treated with PIP IPL. Outcome assessments included photography, modified Melasma Area and Severity Index (MASI) score, and patient satisfaction. The melanin and erythema indices were used for objective evaluation. Patients were followed up for 6 months after the last treatment.

RESULTS: All patients completed the study successfully. On both treated sides, the melanin index decreased significantly after treatment. The modified MASI score also fell 54.4% on the PIP IPL side and 50.0% on the IPL/T side. No patients reported serious aggravation of melasma for 6 months after the last treatment. Patients favored PIP IPL due to less discomfort during and after treatments.

CONCLUSION: PIP IPL may be a safe and promising treatment for melasma.

© 2013 by the American Society for Dermatologic Surgery, Inc. Published by Wiley Periodicals, Inc.