

Evaluation of the Efficacy and Safety of a Novel Picosecond Alexandrite Laser for the Treatment of Melasma

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Study Design:

- Subjects ranging in age from 18-65 with Fitzpatrick Skin Type I-IV and a Melasma Severity Scale score of 2 or greater could be enrolled
- Melasma Severity Scale:
 - Score 0 = CLEAR; color of melasma approximately equivalent to normal skin
 - Score 1 = MILD; color slightly darker than the surrounding normal skin
 - Score 2 = MODERATE; color moderately darker than surrounding normal skin
 - Score 3 = SEVERE; color markedly darker than surrounding normal skin
- Subjects were treated with the standard optic followed by the diffractive lens array
- Standard optic: 2.9 to 4.8 mm; 0.91 to 2.65 J/cm²; 2-5 Hz, 1-2 passes, 118-1694 pulses
- Diffractive lens array: 6 mm, 0.57 J/cm², 10 Hz, 1-6 passes, 2686-5758 pulses

Results:

- 32 subjects were enrolled; 23 have completed a minimum of 2 treatments
- 27 improved, 3 had no change, 1 had rebound after initial improvement, and 1 worsened



Before



After 3 Tx

Courtesy of R. Weiss, MD



Before

After 3 Tx

Courtesy of R. Weiss, MD

Conclusion:

- Our study demonstrates the safety and efficacy of the alexandrite picosecond laser using the standard optic plus a diffractive lens array for the treatment of melasma.

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