Synopsis of Original Research Paper

Efficacy of the Q-Switched Ruby Laser in the Treatment of Nevus of Ota

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Previous treatments for nevus of Ota have either been ineffective or have caused scarring. In this study, selective photothermolysis was employed for the treatment of this serious cosmetic problem.

A Q-switched ruby laser was used to deliver 6 J/cm^2 pulses at a wavelength of 694 nm and with a pulse duration of 30 ns. A total of 114 patients with nevus of Ota were treated, with treatment intervals ranging from 3 to 4 months. The clinical efficacy of laser treatment was evaluated by comparative photographic analysis. Five treatment response levels were defined based on the percentage of pigment lightening compared with the original color : "excellent" for 70 % or more lightening, "good" for 40 % to 69 % , "fair" for 10 % to 39 % , " unchanged" for 9 % or less, and "worsened" for darkening.

The efficacy rate (i.e., the percentage of patients in whom the treatment responses were good or excellent) was 13 % (3/23) in patients treated once, 72 % (18/25) in those treated twice, 97 % (30/31) in those treated three times, and 100 % (35/35) in those treated four or more times. No hypertrophic or atrophic scarring was observed in any of the patients. However, transient postinflammatory hyperpigmentation of 2 months' duration was noted in a few patients.

Selective photothermolysis using the Q-switched ruby laser appears to be a safe and effecitve method for lightening or eliminating nevus of Ota.