

Clinical Applications - Cutaneous - *Pigment*

SUCCESSFUL AND SAFE RESULTS IN THE TREATMENT OF COMBINED LESIONS OF MELASMA WITH BLEMISHES USING COMBINATION TREATMENT OF Q-SWITCHED 1064nm Nd:YAG LASER AND 755nm PICOSECOND LASER

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Background: In Asian patients with pigment disorders, there are much more patients who have a complicated mix of melasma and blemishes than melasma or blemishes alone. In these cases, a successful and safe treatment is very difficult to achieve because iatrogenic PIH is more likely to occur than separate blemishes or melasma cases. While treating pigmented disorders in Asian patients, safety is the most important factor. This study demonstrated safe and effective treatment for combined pigmentary disorder with melasma and blemishes with combination treatment with a Q-switched 1064nm Nd:YAG laser and a 755nm picosecond laser.

Study Design/Materials and Method: This was a retrospective chart review of 154 patients of melasma with blemishes which included lentigines(127), freckles(11), ABNOM(11) and others with unclear diagnosis(5). Patients were treated with Q-switched 1064nm Nd:YAG laser for melasma first, immediately followed by 755nm picosecond laser. The treatment parameters for Q-switched 1064nm Nd:YAG laser was 3.3-3.9 J/cm² fluence, 7.0-7.5mm of spot size, PTP mode with the endpoint of mild erythema and for the 755nm picosecond laser was 1.59 J/cm², 4mm spot size with one or two passes over the blemish lesions. The Q-switched 1064nm Nd:YAG laser treatment was performed weekly for ten to twenty sessions, and the 755nm picosecond laser was performed every two weeks.

Results: Assessment revealed excellent response (76-100% improvement) in 64% of patients and good to excellent response (51-100% improvement) in 87% of patients. Eight out of 154 patients had PIH.

Conclusion: The combination treatment of Q-switched 1064nm Nd:YAG laser and 755nm picosecond laser for combined lesions of melasma and blemishes in Asian skin of type IV through V is safe and effective.

