



PIGMENTATION

EVALUATING THE SAFETY AND EFFICACY OF COMBINING Q-SWITCHED ND:YAG AND COPPER BROMIDE LASERS IN THE TREATMENT OF FACIAL MELASMA IN SOUTHEAST ASIAN PATIENTS: A RETROSPECTIVE STUDY

Ting Song Lim⁽¹⁾

Clique Academy, Aesthetic Medicine, Kuala Lumpur, Malaysia⁽¹⁾

BACKGROUND: Melasma is a common pigmentary disorder in Asians. Existing energy based device treatments for melasma including Q-Switched Nd:YAG laser produce promising results but are commonly associated with unwanted adverse effects and high possibility of recurrence. Emerging studies have suggested a vascular component of melasma, and explores the potential for antiangiogenetic lasers such as copper bromide laser for the treatment of melasma.

OBJECTIVE: To evaluate the safety and efficacy of combining Q-Switched Nd: YAG and copper bromide laser in the treatment of melasma in Southeast Asian patients.

MATERIALS AND METHODS: Fourteen Asian patients with melasma were included in the study. All had undergone between four to nine sessions of a combination treatment using Q-Switched Nd:YAG laser (1064 nm) and bromide laser (511nm/578nm) treatments. Clinical photographs were taken before and after the laser treatments and assessed by experienced physicians. The severity of their melasma was assessed utilising the mMASI scoring system, and any unwanted adverse effects including hypopigmentation, hyperpigmentation, scarring, and erythema, were reported.

RESULTS: All fourteen subjects completed at least 4 sessions of the combination treatment utilizing QS Nd:YAG and copper bromide laser. Before and after photos of the subjects were compiled for evaluation by five experienced physicians utilizing the Modified MASI score system. The MASI scores were statistically analysed with SPSS. Results showed that there were statistically significant improvement based on physician's evaluation of the before and after treatment photos.

CONCLUSION: The combination of copper bromide laser and Q-Switched Nd:YAG laser has been shown to be safe and effective. However, further studies e.g. split face studies may be warranted to compare the effectiveness of combination treatment versus Q-





Switched Nd:YAG laser alone in the treatment of melasma.

