ABSTRACT BOOK ABSTRACTS



LASERS

## A PROSPECTIVE STUDY OF A NOVEL DUAL-WAVELENGTH, DUAL-PULSE DURATION LASER FOR THE TREATMENT OF LENTIGINES IN ASIAN SKIN

Wmm Chan<sup>(1)</sup> - Yns Shek<sup>(2)</sup> - Smc Wong<sup>(3)</sup> - Ck Yeung<sup>(4)</sup> - Hlh Chan<sup>(4)</sup>

The University Of Hong Kong, Queen Mary Hospital, Hong Kong, Hong Kong<sup>(1)</sup> - Hong Kong Dermatology And Laser Centre, -, Hong Kong, Hong Kong<sup>(2)</sup> - Queen Mary Hospital, Division Of Dermatology, Hong Kong, Hong Kong<sup>(3)</sup> - Hong Kong Dermatology And Laser Centre, The University Of Hong Kong, Hong Kong, Hong Kong<sup>(4)</sup>

Background: Lentigines are common pigmented lesions that pose a significant aesthetic concern for some patients. Treatments with lasers are effective but post-inflammatory hyperpigmentation (PIH) pose a risk especially in darker skin types.

Objective: To evaluate safety and efficacy of treatment with picosecond Nd:YAG 532nm laser for lentigines in Asian skin

Materials and Methods: This was a prospective, open-label cohort study, using a novel picosecond 532 nm laser for the treatment of lentigines. Subjects received up to 3 laser treatments every 4 to 6 weeks and were assessed at 4 and 12-weeks post-final treatment. Primary endpoint was degree of improvement at 12-weeks post-final treatment based on Physicians Global Assessment. Secondary end-points included degree of improvement in lentigines at 12-weeks post-final treatment assessed by Subject's Global Assessment, and change in mean relative Melanin Index (MI) value at baseline and 3-months post-final treatment by mexameter measurement.

Results: A total of 20 patients (3 male, and 17 female) of Asian-descent with Fitzpatrick skin type III and IV, with facial lentigines were included in this study. A total of 89 lesions were treated with the laser setting of 532-nm, 750 picoseconds, fluence of 0.2-0.5J/cm2, and spot size of 4 mm. 137 treatment sessions were given in total. 18 patients (90%) achieved a moderate to significant improvement at 12-week follow-up based on a 5-grade physician global assessment scale. The improvement rate of relative MI (MI in the lesion minus normal skin) was  $33.30 \pm 18.71$  and  $37.63 \pm 19.25\%$  at 4-weeks and 12-weeks follow-up. PIH occurred in 14 of 137 sessions (10.2%), and hypopigmentation occurred in 1 patient with 5 lesions (3.6%), all PIH and hypopigmentation resolved by 12-week follow-up.

Conclusions: This study demonstrates that using picosecond Nd:YAG laser 532nm for the











A new ERA for global Dermatology 10 - 15 JUNE 2019 MILAN, ITALY

removal of solar lentigines in darker skin type appears to be safe and effective.



24<sup>™</sup> WORLD CONGRESS OF DERMATOLOGY MILAN 2019



International League of Dermatological Societies Skin Health for the World

