

POSTER PRESENTATION ABSTRACT

ACOS24-P-007: The Efficacy of Combination Topical Hydroquinone with Oral Tranexamic Acid, Q-Switched Laser Monotherapy and the Combination of Such in the Treatment of Melasma Among Malaysian Males and Females with Fitzpatrick Skin Type III-IV

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Melasma is a skin condition typically occurring in the Asian population amongst the middle-aged group. Hence, this study aimed to evaluate the efficacy of oral tranexamic acid and topical hydroquinone combination therapy, monotherapy with the 1064nm Q-switched Nd: YAG laser, and the combination of both therapies in treating melasma among Malaysian males and females with Fitzpatrick skin types III-IV. A quasi-experimental, unblinded study was done among 30 participants. Participants were divided into three groups and treated over three months. Group 1 received oral Tranexamic acid with 4% topical hydroquinone; Group 2 was treated with laser only, and Group 3 was treated with a combination of those three modalities. The researcher collected the modified Melasma Area and Severity Index (mMASI) score and image pigmentation score using the JANUS-III machine at each follow-up. The mean mMASI score was 4.80 ± 3.17 for Group 1, 4.96 ± 2.10 for Group 2, and 7.43 ± 4.15 for Group 3. Meanwhile, the mean UV spot for Group 1 was -1.22 ± 16.75 , 2.09 ± 11.03 for Group 2 and -11.27 ± 5.83 for Group 3 respectively. The mean PL spots were 12.00 ± 12.073 for Group 1, 21.82 ± 10.19 for Group 2 and 9.36 ± 7.88 for Group 3. Both mean mMASI score and mean UV spot showed significant improvement after three months of treatment with a p-value <0.05 . However, the mean PL spot showed the most significant improvement with a p-value <0.05 . The study found that 1064nm Q-switched Nd: YAG laser monotherapy is a better treatment in treating melasma among Malaysian with Fitzpatrick skin types III-IV.

Keywords: Melasma, Oral tranexamic acid, Topical hydroquinone, Q-switched Nd: YAG laser