



Randomized, placebo-controlled, double-blind study of oral tranexamic acid in the treatment of moderate-to-severe melasma in an Australian Cohort.

Background: Melasma is a common pigmentedary condition that is challenging to treat. Oral tranexamic acid (TA) has emerged as a useful agent showing promising results in studies conducted both in the Asian and Latin American populations. To date no Australian data exists in the form of a randomised controlled trial to assess the efficacy of TA in a diverse Caucasian population.

Objective: To determine the efficacy of low dose oral TA of 250mg twice daily in patients with moderate-to-severe melasma in an Australian cohort.

Methods: Patients were randomised into two arms. The control arm were treated with a placebo pill twice daily with the regular use of sunscreen for 3 months followed by 3 months of sunscreen only. The treatment arm were treated with 250mg of TA twice daily with the same regimen as sunscreen. The primary endpoint measure was the modified Melasma Area and Severity Index (mMASI) score.

Results: 17 patients satisfied the inclusion/exclusion criteria and were randomized to the 2 treatment groups. In the treatment group a 67.8% reduction was noted in the mMASI score at 6 months. In the placebo group a 44.8% reduction was noted at 6 months. No serious side effects were noted in this trial.

Conclusions: Oral TA appears to be an effective treatment for moderate-to-severe melasma with minimal side effects in a diverse Australian population. This trial also highlighted the importance of regular photoprotection in the treatment of melasma especially in Australia which has significantly higher ultraviolet radiation indices.

