



PIGMENTATION

CLINICAL EFFICACY OF TOPICAL TRANEXAMIC ACID WITH MICRONEEDLING IN MELASMA.

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Introduction: Melasma is a common, recurrent and refractory cause of facial pigmentation resulting in cosmetic disfigurement. Several treatment modalities are available but none is satisfactory. Tranexamic acid (TA) has been used systemically and locally for clearance of pigmentation.

Objective: To assess the clinical efficacy of topical TA (10%) with microneedling in melasma.

Materials and Methods:

This is a split face, prospective, randomized, open-label, cross over study with a sample size of 40. The left or right side of the face was chosen randomly and microneedling was done on both the sides, followed by application of 10% TA solution on one side of the face (test side) and distilled water on the other side of the face (control). The procedure was done at 2 weekly intervals (0, 2, 4 and 6 weeks) and the improvement was assessed. After 4 sittings, the procedure was continued in 25 patients willing for further treatment but the sides were interchanged. 4 more sittings were repeated at 8, 10, 12, 14 weeks. Improvement in mean modified Melasma Area Severity Index (mMASI) was noted.

Results: On the test side, there was 65.92% improvement in the mean mMASI score compared to 20.75% on the control side of the face at the end of 8 weeks. After interchanging the sides in the 25 patients, there was further improvement of 12.5% at the new control side (previous test side) and 66.4% at the new test side (previous control side) at week 16. Both sides showed improvement of total 71.2% at 16 weeks. Subjective satisfaction scores showed more satisfaction with the combined therapy. No significant side effect of TA was noted.

Conclusions: TA can be used as an effective, promising and safe therapy in melasma alone or along with microneedling.

