



DERMOSCOPY AND SKIN IMAGING

## A COMPARATIVE STUDY BETWEEN ORAL TRANEXAMIC ACID VERSUS ORAL TRANEXAMIC ACID AND Q-SWITCHED ND-YAG LASER IN MELASMA TREATMENT, A CLINICAL AND DERMOSCOPIC EVALUATION

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**Background:** Melasma is a common acquired disorder of pigmentation, manifested as symmetrical hyperpigmentation, most commonly on the face. Determining the type of melasma is of diagnostic and prognostic value.

**Objective:** comparing the efficacy of oral tranexamic acid (TA) versus oral TA and Q-switched Nd: YAG laser (532-nm wavelength) in the treatment of melasma by clinical assessment using Modified Melasma Area and Severity Index (mMASI) and dermoscopic evaluation.

**Materials and methods:** This study was carried out on sixty females with melasma with a median age of 38 years recruited from the outpatient clinic of the dermatology department of Alexandria University Hospital. They were divided into two groups each comprises 30 patients: Group A: patients received oral TA only. While group B: in addition to oral TA, patients received Qs-Nd: YAG laser (532-nm) sessions. Both groups were subjected to clinical evaluation by calculating m MASI score and to dermoscopic examination before, after treatment sessions and three months after treatment sessions as a follow up.

**Results:** There were statistically significant differences between the two studied groups regarding change of m MASI after treatment and at end of follow (P=0.036). There were no statistically significant relation between % change of mMASI after treatment and each type of melasma according to dermoscopic examination in each group (P=2.777)

**Conclusions:** Low-fluence 532-nm Qs-Nd:Yag laser is effective and safe line of melasma treatment. Adding Oral TA may improve its clinical efficacy and decrease its side effects or complications. Dermoscopy is an important tool which indicates pigment depth and location





and thus type of melasma. It also allows the observation of significant vascular component in melasma.

