A COMPARATIVE STUDY ON EFFICACY OF
Q SWITCHED NEODYMIUM-DOPED YTTRIUM ALUMINIUM
GARNET (Nd:YAG) LASER VERSUS 15%
TRICHLOROACETIC ACID (TCA) PEEL
IN THE TREATMENT OF MELASMA

ABSTRACT

Introduction

Melasma is an acquired, circumscribed, pigmentary disorder. It is characterized by more or less symmetrically distributed, dark brown macules with well defined geo-graphic borders. It mostly affects the sun exposed areas, particularly forehead, cheeks, temples and upper lips. Melasma is a common disorder of fascial hyperpigmentation that is often resistant to treatment.

Aim:

The aim of the study is to compare the therapeutic efficacy of Q switched Nd-YAG laser versus 15% TCA peel in the treatment of melasma.

MATERIALS AND METHODS :

50 patients in the age group more than 18 years were enrolled in the study.

Group 1 : Melasma Patients treated with 15% TCA Peel

Group 2 : Melasma patients treated with lowfluence Q switched Nd-yag laser

- Number of patients in group 1 = 25
- Number of patients in group 2 = 25
TCA peeling was performed every 2 weeks up to 6 sessions, whereas laser treatment was performed every 3 weeks up to 12 weeks. Then followed up for 12 weeks in both groups. MASI score was used before and after treatment for evaluation.

Results:

In the 15% TCA peel group, mean MASI scores improved from 16.45 to 9.78 and in the laser group from 16.09 to 11.64. MASI shows significantly reduction with 15% TCA than Nd-YAG laser. Worsening of melasma was higher in the group treated with Nd-YAG laser with 16% of patients developing post inflammatory hyperpigmentation & 40% of patients developing rebound hyperpigmentation.

Conclusion:

15% TCA were better than Q switched Nd:YAG laser for the treatment of melasma. Post inflammatory pigmentation and rebound hyperpigmentation were the serious common side effects associated with Q switched Nd : YAG laser treated group particularly dark skinned people(Fitzpatrick skin type V).