

**A CASE STUDY:  
EFFICACY OF MELASMA TREATMENT  
WITH COMBINATION THERAPY  
( ALPHA ARBUTIN + VITAMIN C +  
VITAMIN E + TRANEXAMIC ACID + Q  
SWITCH ND:YAG LASER)**

**DR NORMAN BIN MOHD NORAWAI**

**ID: 1001128148**

**JAN 2011 BATCH**

**THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE  
REQUIREMENT FOR THE DEGREE OF MASTER OF SCIENCE  
(ANTI-AGING, AESTHETIC AND REGENERATIVE MEDICINE)**

**in the Faculty of Medicine and Health Sciences, UCSI University**

**MAC 2013**

## ABSTRACT

*Introduction:* One of the most common hyperpigmentation disorders in Asians is melasma. It is estimated that more than 50% of aesthetic consultations in Asian countries is due to melasma. *Methodology and Design:* This is a Retrospective Case Study to assess the effectiveness of combination therapy of Q Switch Nd:YAG laser, Vitamin C, Vitamin E, Alpha Arbutin and Tranexamic Acid in the treatment of melasma in a 48years old lady with mixed type of melasma. The study aim to evaluate the efficacy of Q Switch Nd: YAG laser, combine with topical treatment in treating Melasma patient in DNW clinic, Malacca The case was analyzed retrospectively by reviewing the medical record and serial photography of the patient. *Result:* There was a visual reduction in both epidermal and dermal hyperpigmentation of more than 70% after 8 treatments. *Conclusion:* There is no single effective treatment for melasma and combination therapy is better. Q Switch Nd: YAG laser appears to be useful in treating melasma combined with other modalities of treatment.

*Key words:* Q Switch Nd:Yag laser, melasma, post inflammatory hyper pigmentation(PIH)