Low-fluence 1064nm Q-switched neodymium-doped yttrium aluminum garnet (1,064 nm) laser for the treatment of facial melasma in Fitzpatrick skin photo-type III

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Multiple treatment modalities have been employed for the management of melasma with minimal to no success. Recently the low sub-thermolytic fluence, 1064nm Q-switched Nd Yag laser therapy has been widely used because of its efficacy and safety even in Fitzpatrick skin type III-IV patients with darker skin tone. A 35-year-old female with a Fitzpatrick skin type III came with the complaint of having a few patches of brown pigmentation on both her cheeks for about 10 years, but worsening for the past few years. She had no known medical illness, did not take any oral contraceptive pill and was not undergoing hormone replacement therapy. There was no significant aesthetic and surgical history. Dermatology examination showed that a few patches of brown pigment macule on both malar and temporal area were suggestive of a mixed melasma. Modified MASI score showed 7.2. Started initially on low fluence 1064nm Q-switched Nd Yag laser at 10Hz, spot size of 8mm, at the fluence of 2.0-2.5J/cm² with multiple passes. Follow up in 1 month after single session was showed decreasing modified MASI score. Modified MASI scoring showed 4.8. Slight erythema was observed after the treatment, lasting for approximately 1 to 3 hours. A remarkable improvement of melasma after a single session of laser was achieved. Low fluence Q-Switched Nd:YAG lasers provide a method of targeting both the superficial melasma, and melasma that is rooted deeper in the dermis. Many studies have been published which demonstrate Q-switched Nd:YAG laser technology as a useful treatment modality.

Biography
Dhelya Widasmara has completed his PhD and Post-doctoral studies from Airlangga University School of Medicine. She has begun staffing the Dermatology and Venereology at Saiful Anwar General Hospital, Malang Indonesia in 2012. Until now she provides lectures for residents and medical students through the Dept. of Dermatology, the Dept. of Leprosy noon lecture series. She has been serving as member of PERDOSKI Malang and also member of study group International union against Sexually Transmitted Infections (IUSTI) Asia-Pacific region since 2011 and Internentional Leprosy association (ILA) since 2015.

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