

**The IMPROVEMENTS OF REFRACTORY
DERMAL MELASMA IN RESPONSE TO
INTRADERMAL PLATELET RICH PLASMA
INJECTION: RETROSPECTIVE STUDY OF TWO
CASE REPORTS**

Yew Chak Hua

1001128235

MASTER OF SCIENCE (ANTI-AGING,
REGENERATIVE MEDICINE AND MEDICAL
AESTHETIC)
FACULTY OF MEDICINE AND HEALTH SCIENCES
UCSI UNIVERSITY

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ABSTRACT

Melasma especially mixed type melasma is difficult to be treated with combination of various therapies due to its recurrent and resistant nature. Recently Platelet Rich Plasma has drawn attention for the treatment in the aesthetic field owing to its release of various growth factors and cytokines. In this pilot study, platelet rich plasma therapy was evaluated for the clinical efficacies and safety in adjunct to the combination conventional treatments for melasma. This is a retrospective case series of 2 female patients, with refractory mixed type melasma, were analyzed using medical records. They were treated with intradermal platelet rich plasma injection at monthly interval for at least 2 sessions in adjunct to the combination of monthly low fluence Q-switched Nd Yag laser and daily application of topical alpha arbutin. At each visit, digital photographs were taken under the same condition. Modified melasma area and severity index (MASI) scores were evaluated by 2 blinded dermatologist using digital photographs. The modified MASI score has decreased by mean 33.5% for case 1 and by mean 20.1% for case 2 respectively. There were no clinical aggravations observed during the follow-up period (mean 3 months duration) for case 1. However recurrence of melasma was noted in case 2 by worsening of the MASI score mean 53.1% at three months follow-up periods. In conclusion, intradermal platelet rich plasma injection therapy in adjunct to the conventional combination therapy of low fluence Q-switched Nd Yag laser and topical alpha arbutin may elicit a clinical improvements in the mixed type melasma with long term benefits. Further similar larger sample studies are needed to evaluate the efficacy and safety of platelet rich plasma therapy in the treatment of melasma in the future.