

**EFFICACY OF PLATELET RICH PLASMA
COMBINED WITH FRACTIONAL LASER
THERAPY FOR SKIN REJUVENATION**

WONG SIEW YOON ANGELINE
1001231707

MASTERS OF SCIENCE
(ANTI-AGING, REGENERATIVE MEDICINE
AND MEDICAL AESTHETIC)

FACULTY OF MEDICINE AND HEALTH
SCIENCES

UCSI UNIVERSITY

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ABSTRACT

In the past decade, the concept of fractional photothermolysis revolutionized laser surgery by enabling delivery of dermal coagulative injury with minimal epidermal damage, thus decreasing the risk of scarring and delayed pigmentation associated with traditional ablative scarring. These laser treatments have the capacity to improve both pigmentary and structural changes associated with aging. Despite the efficacy of its treatment, its drawbacks, such as long periods of erythema and oedema, as well as delayed hyperpigmentation may cause discomfort, effecting patients daily lives, thus limiting its use. The risks fall along a full spectrum of severity that could be long lasting, especially in patients with darker skin types. The use of platelet-rich plasma to optimize healing response in tissues has sparked the interest in various medical fields. Activated platelet-rich plasma contains a variety of growth factors which are known to regulate wound healing processes. This study was aimed to evaluate the synergistic effects and the possibility of reducing the adverse outcomes of the fractional laser. This study was a structured review of 5 articles which met the inclusion and the exclusion criteria during literature search on the relevant databases. The findings reveal that the PRP treated side showed not only an improvement in the clinical results but less post treatment complications such as erythema and incidences of post inflammatory hyperpigmentation was less. There was also a comparison between PRP given with intradermic injections and PRP applied topically and it was shown that the clinical results were comparable. This summary can provide a platform for future research of platelet rich plasma in combination with laser therapies for skin rejuvenation therapies.