

**TISSUE REGENERATION USING PLATELET-  
RICH PLASMA FOR TREATMENT OF ATROPHIC  
ACNE SCARS**

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## ABSTRACT

Platelet-rich plasma (PRP) contains a high concentration of growth factors and cytokines, which can stimulate dermal fibroblast proliferation and activate their collagen-producing capabilities. Atrophic acne scarring is a skin condition in which there is a loss collagen fibre as a result of previous inflammation. A retrospective case series study was conducted to study the efficacy of PRP in treatment of atrophic acne scars. The case records of 10 patients who were treated with 3 sessions of PRP injections for atrophic acne scars were reviewed. These patients had received intradermal injections of 2ml of PRP over acne scars on their face at one-monthly intervals. Pre- and post-treatment photographs were analysed, and given a rating based on Global Aesthetic Improvement Scale by four assessors. All documented side effects were also reported. We found that 40% of study population had 10 – 50% improvement in scar depth, while 25% of study population had 51 – 80% improvement in scar depth. The remaining 35% of study population had less than 10% improvement in scar depth. Half of the study subjects commented that they were satisfied with the results of PRP treatment, while the other half were indifferent towards the treatment. The most common side effect of PRP injections was transient bruising, which resolved spontaneously after one week. In conclusion, PRP injections could improve the appearance of atrophic acne scars after 3 sessions in majority of subjects.

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