



ACNE, ROSACEA, AND RELATED DISORDERS (INCLUDING HIDRADENITIS SUPPURATIVA)

## **A STUDY COMPARING THE EFFICACY OF PLATELET RICH PLASMA VERSUS NORMAL SALINE INJECTIONS IN ACNE SCAR TREATMENT AND ASSESSING UTILITY OF ULTRABIOMICROSCOPIC SONOGRAPHY FOR TREATMENT RESPONSE**

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**Introduction:** Permanent scarring is an unfortunate complication of acne vulgaris. There is increasing evidence of efficacy of Platelet Rich Plasma (PRP) injections in the treatment of atrophic acne scars. But, an important question that arises is that - what actually is responsible for the effectiveness of PRP in atrophic acne scars? Is it the presence of growth factors or the effect of mechanical factors during the injection? Further, another major lacuna in acne scars treatment studies is the lack of simple, objective evaluation method for assessing treatment response as most of the studies use a subjective grading system for scar evaluation.

**Aims and Objectives:** 1. To compare the efficacy of intralesional PRP injections versus intralesional normal saline (NS) injections for the treatment of atrophic acne scars.  
2. To study the utility of Ultrabiomicroscopic sonography (UBM) for objective evaluation of treatment response.

**Materials and Methods:** 20 patients of acne scars were included in the study and received intralesional injections of NS and PRP in a split face pattern at 2 weekly intervals for five sittings. Clinically, response to treatment was assessed using standard Goodman And Baron qualitative grading system. Photographic evaluation was done by two blinded dermatologists. UBM assessment was used to objectively evaluate improvement in scar thickness, before and after treatment.

**Results:** There was significant and comparable treatment response in both the study arms. The findings of UBM sonography correlated well with the subjective evaluation.

**Conclusion:** In this study, both PRP and NS showed similar treatment response for atrophic





acne scars. Hence, the role of mechanical factors cannot be completely rejected in the final outcome of scar treatment. As far as ascertained, UBM has been used for the first time, for objective assessment of acne scar treatment.

