



AESTHETIC AND COSMETIC DERMATOLOGY (LASERS SEPARATE CATEGORY)

## TRADITIONAL PLATELET-RICH PLASMA VS PLATELET RICH PLASMA KITS IN TREATMENT OF POST-TRAUMATIC ATROPHIC SCARS: A COMPARATIVE STUDY

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**Background:** Post-traumatic atrophic facial scars are dermal depressions that result from surgery or other forms of skin trauma that associated with significant psychological distress. Platelet- rich plasma (PRP) is an autologous concentration of human platelets in a small volume of plasma.

**Objective:** To evaluate and compare the efficacy and safety of intradermal injection of traditional PRP versus PRP kits in the treatment of post-traumatic atrophic facial scars. To our knowledge, this is the first study comparing these two modalities in the management of post-traumatic atrophic scars.

**Materials and Methods:** Thirty patients with post-traumatic atrophic facial scars were randomly assigned to 2 equal groups; Group A received intradermal injection of PRP derived by traditional method and Group B received intradermal injection of PRP derived by PRP kits. Each patient underwent five sessions at 3-week interval. Patients were observed every three weeks and for six months following the last session.

**Results:** Both groups showed improvement of scars but improvement was significantly higher and earlier in patients treated by PRP kits. Side effects were minimal.

**Conclusions:** In conclusion, this is the first study to use intradermal injection of PRP either derived by traditional methods or by PRP kits for the treatment of post-traumatic atrophic facial Scars. The 2 modalities showed a promising efficacy and safety.

