



HAIR DISORDERS

THE CLINICAL EFFICACY AND SAFETY OF AUTOLOGOUS ACTIVATED PLATELET RICH PLASMA INJECTIONS IN ANDROGENETIC ALOPECIA

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Introduction: Androgenetic alopecia (AGA) is a common, chronic hair losing disorder. Low patient compliance and satisfaction rate, as well as local and systemic adverse effects of the available therapeutic options has led to the search of new treatment options for AGA.

Objectives: Platelet rich plasma (PRP) is a potential therapeutic tool for hair loss. The aim of our study was to assess clinical efficacy and safety of Autologous Activated Platelet Rich Plasma injections in AGA.

Materials and Methods: Twenty four AGA patients were enrolled in the study. PRP was prepared using a standardised approved PRP preparation kit. Upon activation with calcium gluconate, it was injected (0.1ml/cm²) in the affected areas. Four treatment sessions were performed at baseline (T1), 3 weeks (T2), 6 weeks (T3), and at 14 weeks (T5).

We evaluated hair density (hair/cm²) at 6 time points [(T1-T3, T4 (9 weeks), T5 and T6 (7 months))] and patient satisfaction was assessed at T6. Hair count (hair/0.48cm²) was assessed using dermoscopic microphotographs and hair density (hair/cm²) was calculated accordingly.

Results: Twenty three men and one women were included with baseline hair density of 102.25 ± 18.463 . Hair density significantly increased at all time points with a $P < 0.001$ compared to the baseline. The highest hair density recorded was at 7 months. All 24 patients showed a significant increase in hair density, which varied from 30% to 99% at 7 months. Patients were satisfied with a mean result rating of 72.92 on a linear analogue scale of 0-100.

Other than mild pain felt during injections no remarkable adverse effects were noted.

Conclusions: Our data suggest that PRP injections may have a positive therapeutic effect on AGA without major side effects. Further randomized, vehicle controlled trials are needed to confirm its efficacy compared to potential stimulation by injection alone.

