



HAIR DISORDERS

MICRONEEDLING VERSUS AUTOLOGOUS PLATELET- RICH PLASMA IN TREATMENT OF ALOPECIA AREATA

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Background: Many therapeutic modalities have been used to treat alopecia areata (AA), with variable efficacy and safety profiles.

Objective: To compare the efficacy and safety of microneedling (Derma Pen) versus platelet-rich plasma (PRP) in treatment of alopecia areata.

Patients and methods: Thirty patients with patchy AA attending outpatient clinic of Department of Dermatology, Venereology and Andrology, Assiut University Hospital, Egypt, were enrolled in this randomized non-placebo controlled prospective clinical trial. Patients were divided to receive both microneedling and intradermal injection of PRP (group I), intradermal injection of PRP only (group II), microneedling only (group III). Four sessions were given for each patient, with an interval of 4 weeks in group I and group II, and 2 weeks in group III. The evaluation of improvement was assessed by Severity of Alopecia Tool (SALT) score, dermoscopy and digital photography for each patient both at the baseline and one month after the last session, along with patient satisfaction and adverse effects were also reported. Patients were followed up for 2 months after last session to detect relapse.

Results: Dermoscopic evaluation, digital photography of AA after treatment revealed that combination of PRP and micro-needling was found to increase hair regrowth significantly and to decrease hair dystrophy (p-value < 0.001) compared with PRP alone or microneedling alone; with 70% of group I patients achieved complete regrowth of hair (no dystrophic hairs) at study end point. SALT score was decreased after treatment in the three groups, However, there was no statistically significant difference in SALT score between the three groups.

Minor side-effects were noted during treatment as slight pain after the session. Relapse was reported in only one patient of group II.

Conclusion: combination of PRP with microneedling may serve as a safe and effective





treatment option in AA.

