

Platelet Rich Plasma (PRP) as a treatment for androgenic alopecia in males

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Platelet Rich Plasma (PRP) is a solution enriched with platelets and it is derived from whole blood. Platelets serve as a reservoir of growth factors and cytokines. When platelets are activated in vivo, signaling molecules are released into the immediate microenvironment and activate receptors for various pathways. Recently PRP has been utilized for the treatment of male and female pattern of alopecia. Here we are hoping to evaluate the effectiveness of the PRP treatment in androgenic alopecia in male patients.

Male patients with androgenic alopecia were recruited to the study. Informed consent was taken from all the patients. To prepare PRP, blood was drawn using a butterfly cannula and acid citrate dextrose (ACD) was used as the anticoagulant (9:1) The centrifugation process was carried out with a standard laboratory practice in 2 steps as soft spin & hard spin. The patient was first anesthetized with a local anesthetic cream. Prepared PRP was injected into the affected bald area of scalp monthly for 3 months. Patients were monitored photographically.

A total number of 14 male patients were recruited. Their ages range from 22yrs to 40yrs and initial stage of baldness range from stage 2 vertex to stage 7 according to the Modified Norwood Hamelton (MNH) scale. At the end of the 3rd month, 4 patients showed 75% of improvement, 5 patients showed 50-74% improvement and 5 patients showed 25-49% of improvement. None of them got any other adverse effects.

Androgenic alopecia is a challenging condition to treat. PRP was introduced as a promising treatment modality and its popularity is increasing as a successful treatment. However, there is no gold standard method and each practitioner uses his/her own protocols. The advantage is lack of serious side effects, and disadvantages are pain at the injection site and high cost in preparation of the PRP. PRP can be considered as a safe & effective tool to treated male pattern androgenic alopecia.