



NAIL DISORDERS

# INTRAMATRICEAL PLATELET RICH PLASMA THERAPY: A NOVEL TREATMENT FOR REFRACTORY IDIOPATHIC TRACHYONYCHIA

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**Introduction:** Platelet rich plasma (PRP) is essentially an increased concentration of autologous platelets (growth factors) suspended in small amount of plasma. These factors have a proliferative and regenerative effect on a number of tissues in body and have been extensively used in dermatology, surgery, orthopedics and dentistry.

**Objective:** To study the efficacy and safety of intramatrixial platelet rich plasma therapy in idiopathic trachyonychia.

**Material and methods:** Ten patients with idiopathic trachyonychia refractory to other conventional modalities were treated with intramatrixial injections of platelet rich plasma. 0.1 ml of platelet rich plasma was injected into the nail matrix at two points. Injection was given at a point 2.5 mm proximal and lateral to the junction of proximal and lateral nail fold so that the PRP spreads both distally as well as laterally. The sessions were repeated at 3 weekly intervals for a total of 4 sessions or complete resolution, whichever was earlier. Follow up was done at each sitting and thereafter at 16 and 20 weeks. Assessment was done with clinical photography and dermoscopy.

**Results:** Eight patients (M:F = 1:0.6)) completed the study. The mean age of the patients was  $12.4 \pm 2.7$  years. Six patients showed marked improvement at 3 weeks while 2 patients showed mild improvement. Complete resolution was observed in 7 patients, while one patient showed partial improvement. Average number of sessions required were 3. No relapses were seen at 16 and 20 weeks of follow up. Pain during the injection was the only side effect noted.

**Conclusion:** Intramatrixial PRP is a safe and effective therapeutic modality in idiopathic trachyonychia refractory to other treatment options. Further studies with larger sample size and controls are required to validate the results.

