Functional Outcomes of Ultrasound guided Platelet Rich Plasma Injection in Recalcitrant lateral epicondylitis after Steroid Injection: Case Series

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Introduction

PRP contains several growth factors which can improve functional outcomes in tendinopathies especially for the Tennis elbow. However, there is no previous report on the clinical use of PRP injection in cases with previous corticosteroid injection.

Hypothesis

PRP injection can improve the elbow function of the elbow tendinopathy in patients who have a history of previous corticosteroid injection.

Material & Methods

Sixteen lateral epicondylitis (Tennis Elbow) patients who had a recurrent symptom or failure treatment from previous corticosteroid injection therapy were included into this study. Autologous PRP was injected to the ECRB origin for all patients under ultrasound-guidance in order to improve the accuracy of the injection to ECRB location. Means follow up time, VAS score, Quick DASH score, Mayo elbow score and patients’ satisfaction score were comprehensively collected both before and after PRP injection to evaluate functional outcomes.

Results

Three patients were loss of follow up, then only 16 patients were analyzed in this case series. Means follow up time was 16.94 months. VAS score, Quick DASH score, Mayo elbow score were significantly improved after treatment (8.78 and 1.78, 47.35 and 5.48, 65.42 and 96.25 respectively P<0.0001). All patients satisfied with treatment demonstrating by the patient satisfactory score. There was no complication from skin allergy after PRP injection. Interestingly, there was no patients underwent surgery at last follow up.

Discussion & Conclusion

Ultrasound guided PRP injection can improve functional outcomes in the lateral epicondylitis patients who had previous failure from corticosteroid injection.

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References