



▼ POST GRADUATES ABSTRACTS

PG - 40: CLINICAL AND FUNCTIONAL OUTCOME OF ROTATOR CUFF TENDINOPATHY OF THE SHOULDER TREATED WITH PLATELET RICH PLASMA INJECTION

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Background: Rotator cuff tendinopathy is the leading cause of shoulder pain. Tendinopathy if untreated, leads on to cuff tear which needs surgical intervention. PRP is a cellular component, obtained by centrifuging whole blood and has high platelet concentration. PRP injection into lesion sites has gained popularity in the treatment of tendinopathies. Numerous clinical studies which have been published with favorable results with the use of PRP, a few randomised clinical trials have reported controversial results. We decided to study the effectiveness of PRP injection in the management of chronic rotator cuff tendinopathy.

Materials and Methods: In our interventional descriptive study .30 patients with rotator cuff tendinopathy, who presented to Dept. Of Orthopaedics, Mahatma Gandhi Medical College & Research Institute, Puducherry, were treated with Platelet Rich Plasma injection in subacromial space of the affected shoulder. Patients were selected based on inclusion and exclusion criteria. Inclusion criteria were 1) Rotator cuff tendinopathy as diagnosed by clinical examination, ultrasound and MRI. 2) Pain more than three months refractory to conservative treatment. 3) Age between 18 – 70 years 4) Normal complete blood count and

coagulation profile. 5) Patients who gave consent for treatment with PRP as per our protocol. And exclusion criteria were 1) Tendinopathy with Rotator cuff tear. 2) Arthritis and bony lesions of the Shoulder. 3) Patient with systemic inflammatory disease – Rheumatoid and Coagulopathy. 4) Local Pathologies – Skin lesion and infection. After preinjection evaluation, 5 ml of PRP was injected into the subacromial space and patients were followed up at 3rd, 6th and 12th week clinically. Pain and functional outcome was assessed using VAS, SPADI (shoulder pain and disability index) and Constant & Murley scores. Data obtained were arranged in tables and statistical analysis was done using mean, chi-square test, kruskal-wallis test.

Results : Majority of the patients were 30 to 50 years (43.3%). Most of the patients were male (56.7%). Mean VAS score improved from 7.4 to 1.9, the mean

SPADI score improved from 73.33 to 18.1 and the mean Constant & Murley score improved from 39.57 to 86.47. Which was statistically significant ($p < 0.001$). No complication like infection, inflammation, needle breakage seen except for pain in injected site in some patients for 24 to 48 hours. We had excellent results in majority of our patients.

Conclusion: Platelet Rich Plasma injections in our study showed good to excellent results, in patient with rotator cuff tendinitis with improvement in VAS, SPADI and CONSTANT & MURLEY scores. Platelet Rich Plasma can be recommended for patient with rotator cuff tendinopathy not responding to physiotherapy.

KEY WORDS: PRP, Rotator cuff tendinopathy, Functional outcome.