

Pain and Activity Levels Before and After L-PRP Treatment of Patellar Tendinopathy: A Prospective Cohort Study and the Influence of Previous Treatments

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Summary:

After PRP treatment, patients with patellar tendinopathy showed a statistically significant improvement, especially in patients who were not treated before with ethoxysclerol, cortisone, and/or surgical treatment showed the largest improvement.

Abstract:

Purpose:

The aim of this study was to evaluate the outcome of patients with patellar tendinopathy treated with Platelet-Rich Plasma injections (PRP). Furthermore, this study examined whether effectiveness is associated with certain characteristics, such as activity level or whether patients were treated before.

Methods:

Patients (n = 36) were asked to fill in the Victorian Institute of Sports Assessment – Patellar questionnaire (VISA-P) questionnaire and Visual Analogue Scales (VAS), assessing pain in daily life (ADL), during work and sports, before and after treatment with PRP. Of these patients, 14 were treated before with cortisone, ethoxysclerol, and/or surgical treatment (Group 1), while the remaining patients were not treated before (Group 2).

Results:

Overall, Group 1 and Group 2 improved significantly on the VAS scales ($p < .05$). However, Group 2 also improved on VISA-P ($p = .003$), while Group 1 showed less healing potential ($p = .060$). Although the difference between Group 1 and Group 2 at follow-up was not considered clinically meaningful, over time both groups showed a clinically meaningful improvement.

Conclusion:

After PRP treatment, patients with patellar tendinopathy showed a statistically significant improvement. In addition, these improvements can also be considered clinically meaningful. However, patients who were not treated before with ethoxysclerol, cortisone, and/or surgical treatment showed the largest improvement.

Keywords:

Patellar tendon, Jumpers' knee, Platelet-rich plasma, Tendinopathy, Pain, Disability