



**Abstract Id:** Paper 4

**Abstract Title:** Treatment of Elbow Partial Ulnar Collateral Ligament Tears With Platelet Rich Plasma

**Authors**

**Scott A. Crow MD<sup>1</sup>**; Luga Podesta MD<sup>2</sup>; Lewis A. Yocum MD<sup>3</sup>

<sup>1</sup> Kerlan-Jobe Orthopaedic Clinic Program Los Angeles, CA

<sup>2</sup> Podesta Orthopedic & Sports Medicine Institute Thousand Oaks, CA

<sup>3</sup> Kerlan-Jobe Orthopaedic Clinic Los Angeles, CA

**Objectives:** Studies have demonstrated the potential of platelet rich plasma (PRP) to heal damaged tissue. To date, there are no published reports of clinical outcome of partial ulnar collateral ligament (UCL) tears of the elbow treated with PRP. The purpose of this study is to evaluate the clinical outcome of patients who have undergone PRP injection for treatment of a partial ulnar collateral ligament tear.

**Methods:** Seventeen athletes with a partial thickness ulnar collateral ligament tear confirmed on MRI were prospectively followed. All patients had failed conservative treatment, including rest and physical therapy. Baseline questionnaires, including the Kerlan Jobe Shoulder and Elbow Score (KJOC Score) and Disability of the Arm, Shoulder, and Hand Score (DASH Score) were completed for each patient prior to injection. Baseline ultrasound measurement of the medial elbow joint space was assessed with 10 pounds of valgus stress on the elbow. Each patient underwent a single PRP injection at the ulnar collateral ligament under ultrasound guidance. All injections were performed by the same treating physician at a single institution. The same system for PRP preparation was used with each of the injections. Patients completed a course of guided physical therapy and were allowed to return to play based on their symptoms and physical examination. Outcome scores, including KJOC and DASH Scores, were collected after return to play and were compared with baseline scores. Ultrasound measurements were collected at final follow-up and compared with pre-injection values.

**Results:** At an average follow-up of 19 weeks (range 12-46 weeks), 16 of 17 athletes had returned to play without any complaints. The average time to return to play was 12 weeks (range 10-15 weeks). The average KJOC Score improved from 47 to 93,  $p=.0001$ . The average DASH Score improved from 24 to 3,  $p=.003$ . The Sports Module of the DASH questionnaire improved from 74 to 6,  $p=.0001$ . Medial elbow joint space with valgus stress decreased from 3.1 mm prior to injection, to 2.1 mm at final follow-up,  $p=.0004$ . One player sustained a complete tear of the ulnar collateral ligament at 31 weeks after injection and required ligament reconstruction.

**Conclusions:** The results of this study indicate that PRP is an effective option to successfully treat partial ulnar collateral ligament tears of the elbow in high demand athletes.

**Relevant disclosure for all authors**

Nothing to disclose