UROLOGIC APPLICATIONS OF PLATELET RICH PLASMA: PATIENT PERCEIVED OUTCOMES AND ADVERSE EVENTS

R. Terlecki, M. Patel
Urology, Wake Forest University, USA

**Background:** Platelet Rich Plasma (PRP) is an injectable product derived from a patient's own blood containing numerous growth factors. PRP based injections have been used in orthopedics and plastic surgery as a method to improve angiogenesis and wound healing. We assess the safety and outcomes of PRP based interventions for uropathology.

**Methods:** Data was reviewed from patients treated between November 2012 and July 2013 with PRP as part of the Wake Forest Novel Therapeutics Program. Information was gathered on clinical pathology, patient demographics, patient questionnaires, procedural details, and subsequent outcomes. Whole blood was obtained from 11 adults with a variety of uropathology including stress urinary incontinence (SUI), Peyronie’s Disease (PD) and organic erectile dysfunction (ED). An activated autologous platelet rich fibrin matrix produced from blood was then injected based on the specific uropathology.

**Results:** 10 patients undergoing PRP injection for ED or PD underwent an average of 1.5 injections over the study period. Overall IIEF scores improved by 4.04 points, primarily in the erectile function domain. Patients mentioned specific improvements in rigidity of erections and improvements in satisfaction due to increased confidence. One patient underwent two urethral injections with 50% improvement in incontinence. 71.4% would be likely to undergo repeat injection. There were no complications noted by any patients.

**Conclusions:** PRP injections for uropathology are safe with additive properties of improvement in the management of SUI, PD, and ED in select patients. Future studies with larger cohorts are warranted to further examine the efficacy of this treatment modality.