

Category	Category 1: Occupational Disease, Injury and Health Services
Year Funded:	2011-2013
Budget:	\$69,525
Investigators:	Marni Wesner, University of Alberta (mwesner@ualberta.ca)
Funding Agency:	Workers' Compensation Board of Alberta (WCB)
Title:	Efficacy of Ultrasound Guided Platelet Rich Plasma Injection for Rotator Cuff Degeneration
Issue/Rationale:	<p>An emerging therapeutic procedure in North America is the use of platelet rich plasma (PRP) injections for the treatment of both acute and chronic soft tissue injuries. The rotator cuff is a vulnerable area of the body. Due to the tenuous vascular supply, the cuff tendons become degenerate and tear as sequelae of age, unrelated to injury. For some, the aging process in the cuff causes significant problems of pain and limited function, for which the traditional conservative treatment measures do not offer sufficient relief.</p> <p>Previous literature has documented favourable results using PRP for tendinopathy affecting the patellar and Achilles tendons. A review of the literature suggests that ultrasound guided intratendinous use of platelet rich plasma has not been studied to date. This study considers the effect of a single PRP injection on tendinopathy of the rotator cuff when applied using ultrasound guided methodology.</p>
Objectives:	-To evaluate the clinical and functional outcome as well as sustainability of results from a single, ultrasound-guided PRP injection into the degenerate rotator cuff
Anticipated Results/Impact:	Shoulder pain complaints are common in the WCB patient population and represent a significant factor in time loss from work and leisure activity. The frequency and volume of PRP required to effect change has not been conclusively determined. Similarly, the rehabilitation stress that is necessary to induce tissue development and repair is still incompletely understood. This work defines a specific volume and frequency of PRP with a consistent rehabilitation stress and will evaluate the outcome and sustainability of results. From this, a better understanding of necessary future refinement and alteration to the treatment technique may be concluded.
Keywords:	Platelet rich plasma, tendinopathy, rotator cuff, shoulder, treatment