



Plasma Rich Protein: A New Treatment for Chronic Problems

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Over the past 10-15 years many advances have been introduced into medical practices and orthopedics. The field of Orthopedic Sports Medicine also has seen a rapid increase in new operative procedures. In addition, the use of biologic materials and growth factors have introduced the possibility of treating injuries without surgery and allowing for quicker healing times which allows athletes to return to play sooner than had been possible in the past. One such treatment involves the use of plasma rich protein (PRP) for the treatment of chronic tendonitis problems as well as, acute tendon injuries. (Tendonitis is an inflammation of the tendons, structures that attach muscle to bone.)

Lemak Sports Medicine currently uses PRP for a variety of orthopedic conditions.

PRP treatment takes advantage of a patient's own platelets, which contain growth factors. Platelets are a normal component of blood which comprise about 5-6% of the cells in whole blood. Platelets contain small particles (alpha granules) which contain multiple growth factors which are very important to a variety of healing tissues. Growth factors increase blood vessel formation, collagen and muscle healing and promote tendon healing. When platelets are concentrated the number of white blood cells can increase to 96% and the percent of growth hormones will increase.

PRP treatment is performed in the office setting and basically involves drawing a minimal amount of blood from the patient. This blood is then placed into a centrifuge machine which spins the blood to concentrate the platelets. The platelet layer is then placed into a syringe, and we utilize ultrasound image technology to localize the injection site. The PRP is injected under sterile conditions directly into the injured area. The whole process takes about 20 minutes and the patient can continue with any other treatment activity the same day. The injection is repeated weekly for the next two weeks. Generally there are no side effects as the patient is receiving their own cells.

PRP has been used by a variety of medical specialist for a variety of indications. The primary indication for orthopedic use of PRP has been for the treatment of chronic tennis elbow (lateral epicondylitis) and heel spurs (plantar fasciitis). Other uses have included improved wound healing in total joints, achilles tendonitis, muscle strains, and partial ligament tears. Although PRP is being used in a variety of clinical settings, long-term clinical studies are not yet available. Many short-term studies show promise in PRP use. Lemak Sports Medicine physicians are further studying the outcomes of PRP use.

At Lemak Sports Medicine, our physicians are excited about the use of PRP to help treat our patients. All of our current locations are capable of performing the procedure, and would be happy to discuss whether PRP would be of benefit to you.