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## **PRP INJECTION APPLICATION SITES**

**What is Platelet Rich Plasma?** Platelet Rich Plasma, or PRP, is the blood plasma with concentrated platelets. The concentrated platelets found in PRP contain huge reservoirs of biologically active proteins, including growth factors that are vital to initiate and accelerate tissue repair and regeneration. The “bioactive proteins” (growth factors) initiate (or RE initiate) connective tissue healing, bone and possibly joint surface regeneration and repair, promote development of new blood vessels, and stimulate the wound healing process.

### **What are Tendons and Ligaments?**

- Tendons connect the muscle to the bone making it possible for you to do many everyday physical activities. Overuse or damage to the tendon over a long period of time causes the collagen fibers in the tendons to form small tears, and may cause tendinitis. Damage to tendons most often occurs in the knee, ankle, shoulder, wrist, biceps, calf, and Achilles tendon.
- Ligaments are composed of collagen fibers that hold one bone to another, stabilizing the joint and controlling the range of motion. When a ligament is damaged, it is no longer able to provide support, weakening the joints.
- Tendons and ligaments have poor blood supply. Combined with the stress of day-to-day activities, they do not easily heal from damage. As a result, the tendons and ligaments “under-recover” becoming inefficient and may cause chronic pain and weakness. Medical intervention may then become necessary to lesson pain or otherwise improve the condition.

### **How does PRP therapy work?**

- To prepare for PRP, a small amount of blood is taken from the patient. The blood is then placed in a centrifuge. The centrifuge spins and automatically separates the blood components allowing the collection of the PRP. The entire preparation takes less than 30 minutes and increases the concentration of platelet and growth factors up to 900%.
- When PRP is injected into the damaged area, it stimulates the tendon or ligament (which may cause mild inflammation) that triggers the healing cascade. As a result a new collagen matures, it begins to shrink causing the tightening and strengthening of the tendons and ligaments of the damaged area. A similar process may occur at the joint surface.

**I have heard of cortisone shots; is this the same?** Studies have shown that cortisone injections may actually weaken tissue. Cortisone shots may provide temporary relief and stop inflammation but may not provide long-term healing. PRP therapy is healing and strengthening these tendons and ligament; thus strengthening and thickening the tissue up to 40% in some cases.

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**What are the potential benefits?** Patients can see a significant improvement in symptoms. This may eliminate the need for more aggressive treatments such as long term medication or surgery as well as often producing remarkable return of function.

**What can be treated?** PRP injections can be performed on tendons, ligaments, and joints in many regions of the body. Sports injuries, arthritic joints, lower back, and more specific injuries including tennis elbow, partial ACL tears, certain forms of shin splints, rotator cuff partial tears, plantar fasciitis, bursitis of the hip, knee, elbow, Achilles tendon, and shoulder as well as iliotibial band syndrome may all be effectively treated with PRP.

**How many treatments & how often is this therapy?** While responses to treatment vary, most people (80-85%) will require only one treatment per problem, but may rarely need two-to-six sets of injections to get the desired result. Each set of treatments is spaced approximately 4-to-6 weeks apart. There is no real limit to the number of treatments you can have. The risks and side effects do not change with the number of injections.

**Is PRP right for me?** If you have a tendon or ligament injury and traditional methods have not proved to be adequately beneficial, then PRP therapy maybe a solution. The procedure is less aggressive and less expensive than surgery. It will heal tissue with minimal or no scarring and alleviates further degeneration of the tissues. There will be an initial evaluation with you doctor to see if PRP is right for you.

### **Are there any special instructions?**

- You are restricted from the use of non-steroid anti-inflammatory medications (NSAIDs) one week prior to and five weeks after the procedure and throughout the course of treatments.
- Initially, the procedure may cause some localized soreness and discomfort. Most patients only require some extra strength Tylenol to help with the pain. Ice and heat may be applied to the area as needed.
- The first week after the procedure, patients will sometimes start a rehabilitation program with physical therapy; however, aggressive physical activity is discouraged.

**How soon can I go back to regular physical activities?** PRP therapy helps regenerate tendons and ligaments but it is not a quick fix. This therapy is stimulating the growth and repair of tendons and ligaments, requiring time and rehabilitation. Through regular visits, your doctor will determine when you are able to resume regular physical activities.