

Platelet Rich Plasma (“PRP”)

A [Regenerative Non-Surgical Treatment](#) for Tendon & Joint Disorders and Pain

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- ❖ **What is Platelet-Rich Plasma (PRP)?** PRP is a concentrated preparation of platelets and growth factors from the patient's own blood that is used to treat a variety of soft tissue and joint disorders.
- ❖ **How is PRP Obtained & Administered?** During a routine office visit the patient's blood is drawn, specially prepared in a centrifuge whereby the body's own healing factors are extracted and then injected into the injured area under ultrasound-guidance.
- ❖ **How Does PRP Work?** Wound healing is a complex process that involves multiple steps. Sometimes this healing process malfunctions, causing pain and dysfunction. PRP stimulates, or “kick-starts”, the natural healing process by mediating a *controlled*, inflammatory response. PRP has also been shown to improve joint pain / arthritis. Patients should avoid NSAIDs for 1-2 weeks before and after the procedure; NSAIDs counteract PRP's beneficial effects.
- ❖ **Is the Procedure Safe?** Yes. Since the patient's own blood is used, there is no risk of contracting a communicable infectious disease. Adverse effects of the procedure are no different from those of routine blood draws or injections at the same body locations. Side effects are rare and temporary (pain at procedure site).
- ❖ **What Conditions are Treated with PRP?** Various tendon, ligament, muscle and joint/cartilage injuries can be effectively treated with PRP. It is a safe option for patients who have not responded to proper physical therapy and other non-surgical treatments (e.g. cortisone injections).
- ❖ **Is the Procedure Effective?** Several studies on PRP and similar regenerative biologic therapies show significant reductions in pain and improvements in function. Countless anecdotal testimonies of PRP's benefits have been reported. Results vary, and some patients do not significantly improve. The Sports Medicine, Orthopedic, and Musculoskeletal Medicine communities are actively researching and publishing articles on PRP in leading journals; the medical community's understanding of this advanced treatment continues to grow. Dr. Mahooti encourages you to ask questions about PRP and research the procedure before deciding to proceed.
- ❖ **Are there any Contraindications to the Treatment?** Yes. Patients with certain medical conditions may be ineligible for PRP treatments: Low platelet count or platelet dysfunction, active infections or fever, anemia, and certain cancers.
- ❖ **How Long Before I Feel Better?** Pain and function typically improve significantly within a few weeks, depending on the underlying problem / injury. One treatment is oftentimes all that is needed. Sometimes a 2nd or 3rd injection is performed at ~6-12 week intervals, depending on the underlying condition and the patient's response.
- ❖ **How Long Does the Office Visit Take?** 60 minutes or less from start to finish. Patients are typically able to drive home after the procedure, however alternate transportation may be necessary, depending on the procedure performed.
- ❖ **Is PRP Covered by Insurance?** Currently PRP is not covered by insurances. If you are interested in learning more about this procedure or pricing, please ask Dr. Mahooti or his office staff.

Platelet Rich Plasma (“PRP”) Patient Instructions

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Pre-Injection:

- Increase fluid intake in the 24 hours preceding the procedure (to ensure easy blood draw)
- It is critically important that you not take any anti-inflammatory drugs/medicines/supplements for ~2 weeks before and after the PRP procedure. **Anti-inflammatories will directly counteract PRP's intended effects!**
 - Corticosteroids (e.g. prednisone) must not be taken for 2 - 3 weeks before the procedure. *If you had a cortisone injection in the same area recently, it is advised that you wait at least one month, ideally 3 months, before having a PRP injection*
 - Non-Steroidal Anti-Inflammatory Drugs (NSAIDs) include, but are not limited to, the following examples:
 - Aspirin, Ibuprofen (Advil, Motrin), Naproxen / Naprosyn (Aleve)
 - Celecoxib (Celebrex), Meloxicam (Mobic), diclofenac, etodolac
- If you are on a blood-thinning medication (“Anticoagulant”, such as warfarin, Coumadin, Lovenox, enoxaparin, dabigatran, rivaroxaban etc), please notify Dr. Mahooti
- You may take acetaminophen (Tylenol) prior to the procedure, as needed for pain. It is not an NSAID.

Post-Injection:

- Immediately after the procedure, ice may be applied, as needed for comfort. Limit use of the treated area for 2-3 days.
- The doctor may prescribe a pain medication to help with post-procedural soreness or pain. A walking boot or crutches may be necessary (for lower extremity procedures). You may need someone to drive you home after the procedure.
- Since the intention of the treatment is to stimulate a controlled inflammatory response, PRP injections are often more painful than other injections. You may feel the area has been reinjured. During this time, which can last for a few days up to a couple weeks, activities can resume as tolerated. Ice and acetaminophen may be used.
- After a period of time (days or longer), various exercises are introduced, as directed by Dr. Mahooti and your physical therapist
- It can take 4-12 weeks to experience pain relief; sometime symptoms continue to improve over several months
- Repeat injections may be performed after 4 weeks or so if symptoms have improved but not resolved.

What To Expect on the Day of Your Procedure:

At an appointment prior to the procedure date, the patient is evaluated by Dr. Mahooti. If PRP is a viable option and the patient chooses to pursue it, the patient will schedule a follow-up appointment for the procedure. At that follow-up visit:

- The Medical Assistant will draw some of the patient's blood and prepare it for injection. (See image and accompanying text)
 - The body area is cleansed to reduce the risk of infection
 - Under direct ultrasound guidance to ensure accuracy, the PRP is injected into the affected region
 - Total time in the office is typically 60 minutes or less
- a. A small volume of the patient's blood is drawn at the office
 - b. The blood is centrifuged to separate the various components and concentrate the platelets and healing factors
 - c. The PRP is prepared from the centrifuged blood.
 - d. The PRP is injected into the affected area.

