

What is Platelet-Rich Plasma (PRP) Therapy?

Platelet-Rich Plasma, or PRP, is produced from your own blood. The platelets are the cells in our body that contain growth factors, which stimulate the normal wound healing process, e.g. the same way that your skin heals after a scrape. With PRP, you create a supra-therapeutic level of your own platelets (over 500% more platelets than normal blood) so that you heighten the healing of a chronically injured tissue. In most cases, we need to remove scar tissue from the injured site by performing a 'percutaneous needle fenestration or debridement'. This procedure allows platelets to work in the injured site. All PRP injections are done under ultrasound guidance to confirm placement of the PRP in the correct tissue.

Is PRP indicated for me?

PRP therapy is indicated for injuries that have failed to heal despite traditional treatment options. It can be performed in any musculoskeletal structure, including muscles, tendons, joints and ligaments all over the body. Some examples include: partial tendon tears, muscle strains, ligament sprains/partial tears, articular cartilage injury, and chronic tendon injuries. Ask Dr. Colberg if PRP is indicated for you.

How is PRP made?

To prepare PRP, blood is taken from your arm with a special kit similar to a normal blood test. It is then placed in a special centrifugation machine that separates the platelets from the blood in order to be extracted in a concentrated form called PRP. The entire PRP Therapy takes about 45 minutes.



How many treatments are necessary?

Most patients achieve successful outcomes with only one injection. In some cases, a series of three injections is required to achieve significant results. Each injection is spaced several weeks apart. There is no limit to the number of treatments you can have; however, literature has shown that about 15% of patients do not see improvement with more than three injections and should consider other treatments.

Are there any side effects?

Since your own blood is used, there is no risk for transmitted blood-infections. PRP has a strong antibacterial effect so risk of local infection is minimal. It is normal to have increased soreness or pain after the procedure for an average of three days. We will offer you a pain medication to help with this.

Will my insurance pay for this treatment?

Since this is a fairly new procedure, most insurance companies have not incorporated it yet to their list of approved procedures and do not consider this to be a reimbursable expense. There are various PRP packages to suit your needs. All packages include the PRP kit, blood draw, centrifugation machine, disposable equipment, ultrasound guidance, and the actual procedure. A splint for support may be indicated in some cases (additional fee).

What are the potential benefits of PRP?

PRP stimulates healing of the injured tissue by activating your body's natural healing capacity. Patients on average report more than 50% improvement in 6 weeks and up to 100% improvement in 12 weeks. This may eliminate the need for more aggressive and expensive treatment options such as long-term medication or surgery. In addition, PRP Therapy is a minimally-invasive procedure that is done in the clinic; therefore, you go home the same day.



Images of the PRP Therapy



Needle tip in a partial tendon tear with associated tendon swelling

Pre-Procedure Instructions



Same tendon with healed tear and no swelling at 3 months

1. Stop anti-inflammatory (NSAIDs) medications 5 days prior to procedure (e.g. ibuprofen, naproxen, celebrex, etc.). If you have questions, please call Jeanetta Ford at 205-939-3699.

2. In some cases, you may need to stop blood thinners (e.g. Aspirin, Plavix, Coumadin, etc.) 7 days prior to procedure. You must discuss this with Dr. Colberg, as well as your cardiologist or primary doctor and obtain approval. Other daily medications may be taken normally as directed.

3. Arrange for a friend or family member to provide transportation for you on the day of the procedure. Post-procedure pain may interfere with your ability to drive.

Post-procedure Instructions

1. We recommend having someone drive you home after the procedure.

2. Blood thinners (e.g. Aspirin, Plavix, Coumadin, etc.) may be resumed 24 hours after the procedure.

3. Avoid anti-inflammatory medications for six weeks after the procedure (e.g. ibuprofen, naproxen, celebrex, etc.).

4. Increased irritation in the affected area may occur after your PRP injection. This is part of the healing process. Ice the affected area three to four times per day for 15 minutes for the next three days. You may take Extra Strength Tylenol as needed for pain or the prescribed pain medication.

5. If you develop fever, persistent redness and swelling at the site of injection, call Dr. Colberg's office at 205-939-3699. These may be a sign of infection.

6. The most important part of the PRP Therapy is that you follow the Post-procedure instructions in order to optimize the healing of the tissue and decrease the risk of causing further damage. Limit any movement of the treated area for the first three days after the procedure. Avoid lifting or any strenuous activity for the first seven days. If a splint was provided, you should wear it during the first 7 days. A **post-PRP rehabilitation program will be provided to you to complete with your physical therapist.** On average, sports-related drills are begun at 8 weeks from the procedure, and return to play of sports without restrictions usually occurs at 12 weeks from the procedure.



POST-PRP REHABILITATION PROTOCOL

PHASE	LENGTH OF TIME	RESTRICTIONS	REHABILITATION
Phase I Tissue protection	Days 0-7	 Consider NWB, especially if in pain No weight training Avoid NSAIDS Limited Ice 	 Relative rest Gentle AROM May wear sling May take pain medication
Phase II Early Tissue healing; facilitation of collagen deposition	Days 8-14	 Progress to FWB without protective device Avoid eccentric exercises Avoid NSAIDS Limited Ice 	 Aerobic exercise, avoiding loading of the treated area Provide motion to area treated with gentle stretching Begin treatment on kinetic chain through adjacent regions Ex. Core strengthening
	Weeks 2-6	 Avoid eccentric exercises Avoid NSAIDS Avoid Ice 	 Progress weight bearing activities Low weight, high repetition isometrics (pain scale <3/10) with open kinetic chain exercises Soft tissue work to area treated with CFM, IASTM, and "Dynamic" stretching
Phase III Collagen strengthening	Weeks 6- 12	Avoid NSAIDSAvoid Ice	 Eccentric exercises as long as pain scale <3/10 2 sets of 15 repetitions Closed kinetic chain exercises Plyometrics, proprioceptive training and other sport-specific exercises
	Months 3+	Reassess improvement . If not > 75 % improved consider repeat injection and return to Phase I.	 Progress back to functional sport specific activities with increasing load on area treated as pain allows. 'Max out' on Eccentric Exercises May return to sport if pain <3/10