



## **JUMPSTARTING HEALING: PLATELET RICH PLASMA (PRP) THERAPY**

*Star athletes such as L.A. Dodger's closer Takashi Saito, golfer Tiger Woods and Pittsburgh Steelers wide receiver Hines Ward have all had platelet-rich plasma therapy to help heal up sports-related injuries. They all responded fabulously. Some avoided surgery.*



It sounds almost magical. A doctor takes some blood from a patient and puts it through a filtering system or spins it in a centrifuge at high speed, which separates red and white blood cells from the platelets (Typically a 15 minute or so process.) He then injects the platelets along with the blood plasma they are floating in into an injured or diseased area, typically a torn ligament or tendon. The injury heals up.

How is this possible for platelets to pull off such a medical feat? Don't platelets just help blood clot normally? They do. But this isn't all they do. Platelets also release proteins and other compounds such as growth factors that encourage connective tissue, ligament and tendon repair, new blood vessel formation and step up wound healing.

And because Plasma-Rich Platelets (PRP) is typically injected in places where blood would rarely go otherwise, it can facilitate healing *without* triggering a clotting response. It can thus shorten rehabilitation time and even make surgery unnecessary in some cases.

### **DR. STEENBLOCK USES PRP TO TREAT THESE BODY SITES**

Spine ■ Middle & Lower Back ■ Neck ■ Shoulders ■ Elbows ■ Wrist & Hand ■ Hip/Pelvis ■  
Knee ■ Ankle & Foot ■ Arthritic Joints

## PRP AT WORK: TENDONS & LIGAMENTS

Tendons are composed of fibrous tissue and connect muscle-to-bone, while ligaments are similarly composed and connect bone-to-bone. When a tendon or ligament is damaged swelling and other changes occur that can cause pain, discomfort and thus great difficulty in using the afflicted area. When they don't heal up sufferers can wind up hobbled if not disabled. This can not only make using the affected area or joint difficult, but can in some instances can transform a physically active and agile person into a couch potato or "desk jockey."

When a person with a ligament or tendon injury is treated by Dr. Steenblock, blood is drawn and centrifuged to obtain the PRP. He then injects the damaged area which almost immediately causes a mild inflammatory response that sets off a chain of biological changes that facilitates healing and restoration. Among the things that take place in a damaged tendon or ligament is the creation of new (collagen) tissue that tightens and strengthens it with the passage of time.

**NOTE: Patients typically need 1-3 and as many as six PRP injections spaced out 4-6 weeks apart to bring about a successful resolution of their problem.**



## WHY NOT JUST GET A CORTISONE INJECTION INSTEAD OF PRP?

Cortisone injections will reduce inflammation and pain, yes, but may actually weaken tissue and fail to bring about long term healing. PRP therapy on-the-other-hand heals and strengthens damaged ligaments and tendons.

## A WORD ABOUT PRP & STEM CELLS

Your body contains stem cells in its tissues including bone marrow which participate in healing up injuries, wounds and such. And PRP injections actually stimulate the migration and proliferation of a very versatile class of stem cells called "mesenchymals." However, as we age stem cells are less responsive to injury or disease; in-a-word they become sluggish and old. Thankfully, Dr. Steenblock has figured out ways to get them working properly again. He has also found ways to get bone marrow to create new, vibrant stem cells. And when PRP therapy is combined with an intravenous (IV) drip infusion of a patient's own stem cell-rich bone marrow, the "healing response curve" can go up dramatically.

## WANT TO KNOW IF PRP IS RIGHT FOR YOU?

Call  1-949-367-8870  or toll Free 1-800-300-1063 to arrange for a consultation with Dr. Steenblock.

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