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Pacific Orthopedics
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Platelet Rich Plasma

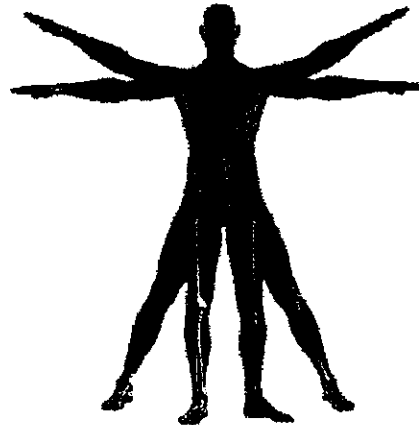
Platelet-rich plasma (PRP) is a component of everyone's blood. It is obtained by drawing blood from a patient and placing the blood in a centrifuge. The centrifuge separates the blood into components, primarily plasma and red blood cells. A portion of the plasma, PRP, contains a high concentration of factors known to be important in healing and pain relief.



Platelet-rich plasma works in at least 2 ways. First, the platelets and growth factors cause a signaling cascade that promotes new blood vessel growth and proliferation of healing cells (e.g. fibroblasts and tenocytes). Secondly, the PRP suppresses the release of factors responsible for inhibition of early healing. These mechanisms are particularly important in tissues in the body that have relatively poor

blood supply and a tendency towards degeneration, such as joint cartilage, the achilles tendon or the tendons responsible for tennis elbow.

Research has been ongoing into the best applications for PRP for many years now. In many cases it is still unclear how powerful an effect PRP treatment may have on certain diseases. There is excellent 'in-vitro' evidence that PRP has a positive effect on the healing of cartilage and tendon (1). Clinical studies have found positive effects of PRP in various diseases including knee arthritis (2), ankle cartilage lesions (3), ankle sprains (4), rotator cuff tears (5), achilles (6) or patellar tendinopathy (7), and tennis elbow (8) among others. Again, the research into PRP is still young and clarification with larger studies is necessary to further define the best applications of PRP in the clinical setting.



PRP has been shown in several recent studies to have a beneficial effect on knee

arthritis. PRP injection has been compared to the injection of hyaluronic acid (Synvisc, Durolane) with favorable results. In one recent study, PRP was found to be much more effective at improving outcomes than hyaluronic acid in patients with knee arthritis out to 6 months (9) and several other research papers also conclude that PRP improves symptoms and function better than other injection options such as corticosteroid or hyaluronic acid (10, 11).

We are pleased to offer PRP injection at POSM as part of the full compliment of orthopedic treatment options for musculoskeletal disease. We are happy to discuss whether PRP is an option for you.

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