Platelet Rich Plasma (PRP)

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Platelet Rich Plasma therapy, PRP, takes advantage of the body’s natural ability to heal itself. PRP therapy involves drawing a small amount of blood from the patient, similar to getting a blood test. The blood tube is then spun in a centrifuge, resulting in a layer of blood (PRP) that has a very high concentration of platelets and other growth factors that can trigger a cascade of healing in damaged tissue.

The use of platelet rich plasma (PRP) began in Europe over 25 years ago as a means to decrease post-operative blood loss in various surgical procedures particularly in cardiac and orthopedic surgery. The use of PRP was also found to decrease post-op wound infections particularly in sternal wound closures in open heart procedures. This was the impetus to begin using this technique in the United States about 15 years ago. The orthopedic community has been slow to adopt this technique to routine procedures, but some surgeons are using PRP in open bone operations such as total joint replacements and open fracture cases. It is also being used in tendon and ligament repair both surgically through incisions as well as percutaneously with injective treatment. It is being applied to the growing field of minimally invasive treatment of sports medicine injuries which include partial tendon and ligament injuries and other soft tissue problems which result in chronic inflammation and are refractory or unresponsive to non-invasive treatment. There is also current experimentation in attempting to curtail or reverse the effects of degenerative arthritis.

PRP is safe and inexpensive as the patient’s own blood is used. Injective treatment can be performed in an out-patient setting under local anesthesia. Further investigation of this technique in the basic science area should lead to more wide-spread use and it appears this will be a very valuable tool in helping to heal a myriad of musculo-skeletal problems in the future.