



Platelet-Rich Plasma

What Is Platelet Rich Plasma (PRP)?

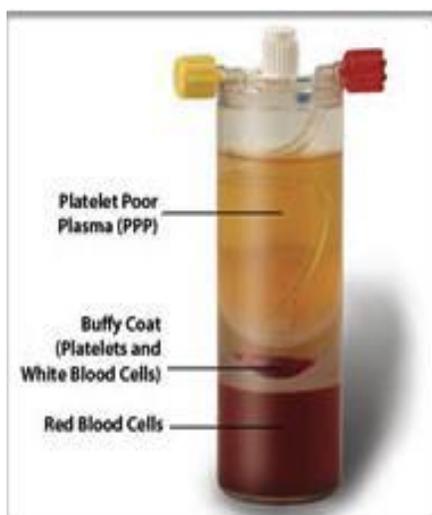
Definitions:

A.) *Platelets* are small cell-like bodies that are derived from a certain type of white blood cell that are formed in bone marrow. They promote blood clotting and wound healing. Platelets are the smallest of all of the blood cells and yet are rich in dense granules that are rich in several growth factors or cytokines that are involved in tissue healing.



B.) *Plasma* is the fluid component of blood that contains clotting factors and other proteins. It is made mostly of water (90%) and is responsible for transporting cells around the body.

C.) *Platelet rich plasma* is a concentrate from blood that contains approximately three to five times more platelets than the normal concentration of platelets in human blood. PRP promotes several types of cell activity, including inflammation, proliferation and remodeling, all of which are necessary in wound healing.



How is Platelet Rich Plasma Prepared?

Blood is first drawn from a patient with a syringe using sterile technique and then centrifuged (spun) and separated out into three parts. One part is made up of red blood cells, another part consists of platelets and white blood cells and the final part is plasma. The PRP is then injected directly to the area of injury, and often times used with the assistance of an ultrasound machine.

What is PRP Used For?

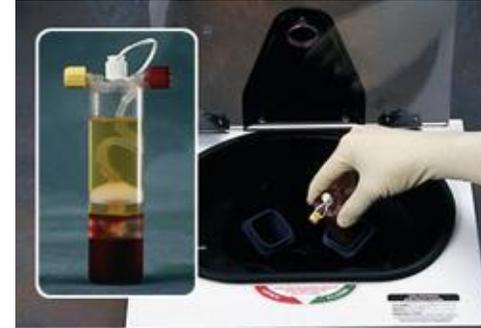
PRP was originally studied for its use in general surgery and maxillofacial surgery, yet has now been shown to be highly effective in muscle, tendon and possibly cartilage injuries in the fields of orthopedics and sports medicine. PRP has been made publicly aware because of its use to treat many professional athletes. It is also being used more and more in professional baseball players to avoid “Tommy John Surgery” of the elbow.

It is used for injuries of tendons, muscles and ligaments. Common injuries that can be treated with PRP include, but are not limited to, tennis elbow (Lateral Epicondylitis), Achilles tendonitis, Plantar Fasciitis, and Patellar Tendonitis. Studies are being done on its use for rotator cuff injuries and osteoarthritis.



What Do I Do To Prepare For My Upcoming PRP Treatment?

Please do not take any nonsteroidal anti-inflammatory drugs (NSAIDs) like Motrin, Ibuprofen, or Naproxen. No corticosteroids before the procedure. No anticoagulation medicines before the procedure. These medications could alter the effectiveness of the procedure. Increase fluid intake in the 24 hours preceding the procedure.



After the procedure, DO NOT apply ice to the area. The limb that was treated should be elevated and activity should be limited for the first 1-2 days. Ice and medications such as Motrin, Ibuprofen and Naproxen should not be taken since it can stop the necessary healing effects of the PRP.

Since the platelet rich plasma promotes inflammation, there will be moderate discomfort after the treatment, yet this will subside with time and acetaminophen (Tylenol) or another type of prescribed pain medication may be used for pain control. Physical therapy after the procedure is always done to help you progress back to full activity.

Why PRP with Dr. Neidecker?

Dr. Neidecker has a much more different approach than most healthcare providers who perform PRP. He believes that PRP is an individualized procedure. Meaning that depending on the person and the person's orthopedic condition, everybody may require a different PRP “recipe”. Baseline platelet counts can vary from person to person. Tendons respond more favorably to a different PRP concentration than cartilage. A large tendon of the knee may require a larger amount of PRP volume than a small tendon of the wrist. You see most healthcare providers who perform PRP use a standard kit. These standard kits allow for no customization. Dr. Neidecker uses a PRP system that allows him to draw as much blood as he needs and can concentrate platelets as much as he needs to. This gives you a PRP product made for you and your exact orthopedic problem!