

## **Platelet-Rich Plasma Therapy**

### **PRP Therapy for Foot and Ankle Conditions**

Slow healing foot and ankle conditions may be associated with a longer recovery process than other parts of the human body. One way that may help speed up the process is utilizing platelet-rich plasma (PRP) therapy.

The foot and ankle are unique in our anatomy. Combined, they provide support for our body weight, balance and shock absorption. The lower extremity is subjected to many different forces. The ligaments, tendons and joints that make up this area all work together to allow us to be mobile and active. When one of these structures is injured the healing process can be very slow.

PRP therapy is a type of regenerative medicine that may help speed recovery time for injuries, and alleviate pain.

### **What is Platelet-Rich Plasma Therapy?**

PRP therapy uses components of your own blood. Blood is made up of four main components: plasma, red blood cells, white blood cells, and platelets. Platelets contain proteins called growth factors. Growth factors play an important role in healing tissue including connective tissue, tendons, muscles, ligaments, and other soft tissue. Platelet-rich plasma is plasma that contains 5-10 times the typical number of platelets, thereby increasing the concentration of growth factors.

PRP is prepared by drawing a small sample of blood from your arm. Using a special centrifuge in our clinics, your blood is separated into plasma, platelets and red blood cells. The platelets are then concentrated and mixed with some of the plasma, creating platelet-rich plasma. This is injected into the site of your injury.

### **Common Foot and Ankle Conditions treated by PRP Therapy**

There are many ways that your foot or ankle can become injured, leading to reduced functionality while undergoing recovery. Tendons, ligaments, and other soft tissue can become overworked, sprained, strained, or damaged from overuse.

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### **Tendon Tears**

Microtears in the tendons (Achilles, posterior tibialis, and peroneal) of your feet or ankles can cause damage and inflammation, leading to pain and function issues. Peroneal tendonitis is characterized by painful tendons on the outer side of your ankle while Achilles tendon pain presents between the heel and the calf, in the largest tendon in the body. These injuries are usually the result of overuse or a sudden increase of repetitive activity or strain.

### **Plantar Fasciitis**

Plantar fasciitis occurs when the fascia, a thick band of tissue on the bottom of the foot, begins to break down. This causes inflammation and can lead to severe, stabbing pain, particularly in the heel of the foot. This is typically caused by repetitive strain, imbalance of the leg muscles or pressure to the fascia, damaging the ligament.

### **Ankle Sprains**

Ankle sprains are relatively common and can occur when the ankle rolls or twists. There are three main ligaments around the ankle and overstretching them leads to a sprain, tear, or rupture. This results in pain, swelling, tenderness, and instability. If not treated properly, ankle injuries can lead to instability which could require surgical repair.

### **Is PRP Therapy Safe?**

Because PRP therapy is using your own blood, it is considered a safe procedure. In most cases, patients experience no adverse reactions to the injections. The procedure is very quick, and can be performed in the office. After injection, there will be a period of rest/immobilization and rehabilitation with physical therapy.

**Read more about biologics to treat orthopedic injuries and conditions on our website at [gsorthobiologics.com](http://gsorthobiologics.com)**