



PLATELET RICH PLASMA (PRP) THERAPY FOR ARTHRITIS



What is Plasma?

Plasma is a large proportion of the blood and carries water, salts and enzymes throughout the body.

Its main role is to transport nutrients

The other role is to transport hormones and proteins, and it also helps remove waste from the body.

What Is Platelet Rich Plasma?

- Platelet rich plasma (PRP) is a form of regenerative medicine that amplifies the body's natural healing response in the repair of muscles, tendons, cartilage and bone.

Platelets from the patients' blood are concentrated in plasma and re-injected into the wound site. Because platelets are components that are essential to wound healing, an increased rate of wound

healing has been shown by concentrating these factors and having consistent clinical use in the field of orthopedics. A blood sample is extracted from the patient initially, and then platelets are separated from the blood through the process of centrifugation. The PRP solution is injected directly into the osteoarthritis affected area.

What Are Platelets?

Platelets are small blood cells that play an essential role in the wound healing process. They mainly do this through the release of certain substances and growth factors, promoting tissue repair and blood vessel formation. Platelets also play an important role in helping the blood clot during injury.



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Who PRP Is For?

- PRP is suitable for patients with a wide array of injuries. PRP treatment is particularly beneficial for improved healing in soft tissue and bone and is successful in lower severity osteoarthritic applications for the cartilage of the knee and ankle. It aims to repair at least slow damage to cartilage by providing the body with a higher number of reparative cells. It also produces more natural lubricating fluid in the joints, improving joint function. Patients with joint pain will also benefit from PRP, as the injection can alter a patient's pain receptors.

PRP is not suitable for patients who have an infection that would spread with injections. Those who are pregnant, afflicted by anemia, have bleeding disorders, or are undergoing anticoagulation therapy are not suitable.

PRP is not a complete cure for arthritis and is administered alongside other treatments and changes, including bracing, weight loss, anti-inflammatory drugs and physical therapy.



Advantages

PRP reduces the need for strong anti-inflammatories or medications, including opioids. The chance of an adverse reaction to PRP is also low, given that the injection is from the own patients' blood. PRP is an early intervention option that can prevent other treatments with larger drawbacks, such as costly joint replacements, cortisone injections and physical therapy that might not always eliminate symptoms.

Disadvantages

There is currently limited knowledge of the mechanism of action for PRP, as it is a relatively new treatment. It also is not suitable for patients with severe osteoarthritis. Risks are mostly unknown at this stage, and little is known by specialists regarding treatment plans in terms of how often and how much PRP to inject. It is a developing field that requires more clinical study.