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Platelet Rich Plasma – Shoulder Info

What is it?

More and more patients are asking about biologic options such as Platelet Rich Plasma (PRP) to improve healing. PRP is essentially concentrated growth factors obtained from peripheral blood. Although blood is mainly a liquid (called plasma), it also contains small solid components (red cells, white cells, and platelets.) Platelets are best known for their importance in clotting blood. However, platelets also contain hundreds of proteins called growth factors which are very important in the healing of injuries.

PRP is plasma with many more platelets than what is typically found in blood. The concentration of platelets — and, thereby, the concentration of growth factors — can be 5 to 10 times greater (or richer) than usual.

What are the potential uses/benefits?

These technologies are safe and potentially beneficial, but the clinical evidence is unclear. Although it is not exactly clear how PRP works, laboratory studies have shown that the increased concentration of growth factors in PRP can potentially speed up the healing process and reduce pain.

Rotator Cuff

The greatest benefit for healing appears to be in small to medium sized tears where studies have suggested that healing is improved with PRP. The use of PRP for rotator cuff tears is primarily for after surgical repair (at the time of surgery). PRP can't make the tendon move back to the bone. The only way to do that is to repair the tendon. However, several studies have suggested that PRP can improve healing once the tendon is repaired.

Arthritis

Clinical evidence from knees has demonstrated that PRP injection decrease pain compared to injection of hyaluronic acid. At this time, there are no studies in the shoulder. However, we have used PRP for shoulder arthritis in many cases with success.

What is the process?

PRP is obtained from peripheral blood. In this technique 15 ml (3 teaspoons) of the patient's own blood is drawn in the clinic. This blood is then processed in a special centrifuge which separates the blood into different layers. The goal here is to obtain 2-4 ml of PRP. This layer is specifically chosen because PRP has a high concentrate of growth factors that may aid in healing. This process takes about 15 mins. Then, the PRP concentrate is injected back into the shoulder under ultrasound guidance to ensure that it is placed properly. For shoulder arthritis, the general recommendation is do a series of 3 treatments, spaced 1-2 weeks apart.

What is the cost?

Currently, PRP is not covered by insurance. Therefore, it is an "out-of-pocket" expense. The cost for PRP is \$550 for one treatment or \$1250 for three treatments.

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