

Platelet-Rich Plasma Injections

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Platelet Rich Plasma Injections (PRP) is a new and exciting treatment. PRP is becoming increasingly popular because of its effectiveness in treating various sports injuries, as well as, osteoarthritis. PRP is viewed as a very “natural” treatment that is derived from your own blood, and does not involve the injection of any medication. Every year, more and more research studies have been completed and have increasingly shown the effectiveness of PRP.

PRP is a procedure in which a sample of your blood is put into a special centrifuge which separates your blood into different components. The part of the blood that contains the platelets also has a high concentration of Growth Factors. These Growth Factors are then injected back into your body part that is injured to promote healing.

The Growth Factors in PRP work to promote healing by helping your body to produce “collagen” which is a building block for musculoskeletal tissue such as bone, tendons, ligaments and cartilage. They also promote the growth and development of the actual cells that make up this musculoskeletal tissue, thereby helping with the healing process. These Growth Factors also stimulate new blood vessel formation and help in the development of “stem cells” which form the basis of new tissue growth. The Growth Factors contained in PRP also have an anti-inflammatory effect.

Some common conditions in sports medicine that are treated with PRP include:

- Tendonitis, tendinopathies (e.g., “Tennis elbow”, patellar tendonitis, plantar fasciitis, rotator cuff injuries, etc.)
- Osteoarthritis of the knee and other joints
- Articular cartilage injuries, meniscus tears
- Other tendon, muscle and ligament injuries

Over the past 5 years, there has been a lot of research showing the effectiveness of PRP for treating osteoarthritis (especially OA of the knee). PRP tends to have a long-lasting effect (between 1 to 2 years). Research indicates that you can expect decreased

pain and improved function for daily activities and exercise.

There has also been a lot of research showing the effectiveness of PRP in treating and healing tendon injuries. PRP is especially good at healing chronic tendinopathies such as lateral epicondylitis (“tennis elbow”), patellar tendonitis (“jumper’s knee”) and plantar fasciitis (heel).

One of the main benefits of PRP injections is the potential for regeneration of articular cartilage. Because osteoarthritis involves degeneration and loss of articular (surface) cartilage in the joint, there has been a lot of excitement in the medical community surrounding PRP because of the potential that it can slow or possibly reverse this degenerative process. Research showing its regenerative potential is still in the early stages, but there have been some very positive results so far and expectations remain very high for long term benefit from PRP injections for treating OA.

Besides the possible complications that can occur with any injection, (click here), PRP has been shown to be very safe, and is not known to have any specific side effects because the injection involves your own body tissue.

Summary: PRP is a new type of injection that is safe and effective in treating various sports injuries and osteoarthritis. In addition, PRP may have a regenerative effect in building new cartilage and hopefully slowing the degenerative process of OA.



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Possible Side Effects with All Injections

Injections that are performed by a properly trained physician tend to be a relatively safe procedure. However, there are possible side effects that are possible with any type of injection. These include the following:

- Local pain or discomfort during or after the injection (e.g., needle discomfort, temporary tightness or fullness after the injection).
- Skin bruising, bleeding or discoloration
- Local tissue irritation and/or swelling
- Allergy to the local analgesic (“freezing”) agent (topical xylocaine)
- Suffering a “vasovagal reaction” (fainting or feeling weak/faint/dizzy)
- Infection (risk is estimated statistically to be between 1:10,000 to 1:50,000)
- Needle break
- Nerve injury
- Blood vessel injury
- Lack of improvement
- Worsened pain or function

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