

Platelet Rich Plasma (PRP)

Injection Therapy Clinic

What is PRP?

- PRP is a blood product containing concentrated levels of platelets and their growth factors.
- Growth factors enhance and modulate tissue repair and regeneration.

What is the science behind PRP?

- PRP has been shown to enhance the growth of stem cells and fibroblasts, through growth factor release.
- This augments or stimulates the body's normal healing process.
- PRP also inhibits or decreases inflammation in cartilage cells (chondrocytes).
- Cartilage cells exposed to PRP produce more type 2 collagen, which is the building block of normal cartilage.
- Joint lining cells (synoviocytes) exposed to PRP produce more hyaluronic acid, which is a joint lubricant.

What does PRP do?

- Animal studies have shown PRP improves healing after osteochondral (cartilage and bone) injuries, tendon and muscle injuries.
- Animal studies have shown PRP decreases progression of osteoarthritis after certain injuries.
- Human studies have shown PRP decreases pain levels in patients with knee osteoarthritis, shoulder osteoarthritis, tennis elbow, rotator cuff problems and patellar tendinopathy.

How is the PRP collected and delivered?

At Central Alberta Orthopedics, a nurse will establish IV access.





Blood is drawn from your arm and spun in a centrifuge.



The centrifuge separates the PRP from the rest of the blood.



The PRP is decanted from the syringe.



The surgeon or musculoskeletal physician will then inject the PRP into the site of pathology.

Ultrasound guidance may be used to assist in the accuracy of the injection.

How does a patient get referred for PRP injection therapy?

If you are unsure whether or not you are a good candidate for PRP injection therapy, your doctor will refer you to Central Alberta Orthopedics to be assessed by an Orthopedic Surgeon or Musculoskeletal physician.

PRP injection therapy may then be discussed at your consultation as one of your treatment options, and you may be referred on to the PRP injection clinic.

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If you and your referring physician already have decided you would like to try PRP injection therapy, you will be placed directly on the PRP injection therapy clinic waitlist.

Referring physicians: Please refer to the Central Alberta Orthopedics website for information on how to refer patients.

Does every patient get significant improvements after PRP injection therapy?

- Unfortunately, no therapy is universally successful.
- As such, you may not experience significant improvements after PRP injection therapy.
- Central Alberta Orthopedics does perform pre- and one-month post injection surveys to evaluate your level of improvement. Most patients do show improvement.

Does PRP injection therapy last forever?

- Usually not.
- Sometimes one injection is enough, but for chronic medical conditions such as osteoarthritis, PRP may have to be repeated as its beneficial effects wear off.

Does PRP injection therapy start acting right away?

 Not always; sometimes it may take upwards of a month before you notice significant improvement after PRP injection therapy.

Are there any negative side effects to PRP injection therapy?

- There is always a very small risk of infection with any injection.
- Please contact Central Alberta Orthopedics or the Orthopedic Surgeon on call as soon as possible if you experience signs and symptoms of infection after injection (fever >38.5 degrees Celsius, spreading redness around injection site, pus draining from injection site).
- Some patients experience an initial increase in pain and a feeling of fullness for the first 48-72 hours after injection.
- These symptoms can be treated with acetaminophen or ibuprofen according to the dosage instructions on the bottle.

Is there a cost associated with PRP injection therapy?

- Yes, PRP is currently an uninsured service.
- Currently PRP injection therapy costs \$450 per injection.

Do private insurance companies cover the cost of PRP injection therapy?

- Every insurance company is different, but most will cover the cost as part of their 'flex spending' package.
- Central Alberta Orthopedics can, upon request, provide a free letter of support you can send to your insurance company.

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