

Platelet-Rich Plasma for Orthopedic and Spine Conditions

What is Platelet-Rich Plasma?

Your blood contains many components including red blood cells, white blood cells, and platelets. When isolated and concentrated from your blood after a blood draw and centrifuge process, the platelet layer contains growth factors and signaling molecules that seem to have beneficial effects when injected for orthopedic and spinal conditions.

How will I know if a PRP injection is suitable for me?

You will first have a consultation appointment with a CPRI physician to discuss your diagnosis, review other treatments you have tried, and your suitability for a PRP injection. All consultations and follow-up visits are covered by MSP (no cost to you). Ask your physician for a referral to CPRI with relevant previous consultation notes and imaging.

What is the scientific evidence for the use of Platelet-Rich Plasma in orthopedic and spine conditions?

The number of scientific papers studying PRP is increasing from month-to-month, providing clinicians valuable information on which conditions it should and should not be recommended for. Recent meta-analyses reviews have recommended PRP for some types of osteoarthritis (e.g. knee) and certain tendon disorders (e.g. patellar tendinitis, tennis elbow).

CPRI physicians remain up to date with advances in orthobiologic treatments by regularly reviewing new literature, and have recently participated in medical conferences through a number of societies, including:

American Academy of Pain Medicine (AAPM), American Society of Interventional Pain Physicians (ASIPP), American Society for Regional Anesthesia and Pain Medicine (ASRA), American Medical Society for Sports Medicine (AMSSM), Canadian Association for Physical Medicine and Rehabilitation (CAPMR), Canadian Anesthesiologists Society (CAS), Interventional Orthopedics Foundation (IOF), and World Academy of Pain Medicine Ultrasound (WAPMU).

Is it important to use image guidance during the injection?

Injections of any type, including PRP, are safer and more effective when image guidance is used. All PRP injections at CPRI are performed with meticulous precision, with the use of ultrasound and/or fluoroscopy guidance. If guidance is not used, there is a chance that the PRP (or any other medication) will miss the target structure and have less effect than intended, or damage surrounding structures such as blood vessels and/or nerves.

Is all PRP the same?

No, there is large variability in types of PRP, depending on patient characteristics, type of processing, and use of activators, amongst many other factors. CPRI uses an Arthrex Angel harvesting/ centrifuge system, which is a machine that can concentrate platelets from baseline levels. We are constantly monitoring the available literature to learn how specific PRP preparations can be tailored to specific orthopedic and spine conditions.

What is the cost of a PRP injection?

The cost of a basic PRP injection (e.g. for knee osteoarthritis) is **\$780 + GST**.

The cost of more advanced procedures (e.g spine conditions) is on a case-by-case basis, depending on complexity.

I have read that some places recommend a series of injections (e.g. 3 in a row, few weeks apart) – is that better than one?

Currently we have not seen definitive evidence that a series of injections is more beneficial than 1 alone, based on the available literature. We recommend a single injection with a follow up in 3 months time to review response.

What should I do to prepare for my injection?

On the day of the injection, stay well hydrated so your blood vessels are easy to access. Stop taking anti-inflammatory medications such as NSAIDs (e.g. ibuprofen/ advil, celecoxib/ celebrex, diclofenac/ arthrotec, naproxen/ Vimovo) for 2 weeks before the injection and for 6 weeks after the injection, as PRP injection initiates a pro-inflammatory cascade.

What will happen on the day of the procedure?

The nurse will perform a blood draw from your arm under sterile conditions, and start processing the blood sample in the sterile Arthrex Angel system. Once ready, the physician will inject the PRP into the site of pathology using precise ultrasound and/or fluoroscopy (x-ray) guidance.

What should I do after the injection?

We recommend relative rest from physical activities for 72 hours post-injection. Some procedures require crutches, an arm sling, or a walking boot for the first few days. Depending on the type of tissue injected (cartilage, tendon, muscle), you will be given a specific 3-month rehabilitation protocol that you should perform with your rehabilitation therapist. If you cannot see a therapist, do your best to follow it on your own. The most important thing is to keep moving and not let the joint or tendon freeze up. Return to sport (unless otherwise discussed) is at the 2-month mark, if specific criteria are met with your therapist.



When will I notice improvement?

Your CPRI physician will see you back 3 months after the injection to review your response, or sooner if you have any questions.

Why should I come to CPRI for my injection?

At CPRI our goal is a standard of excellence in non-surgical orthopedic and spine medicine. CPRI is a state-of-the-art, accredited facility that allows highly-trained physicians to perform these injections in a maximally sterile and highly precise manner, using ultrasound and/ or fluoroscopy guidance.

For more information, please do not hesitate to contact us!