



Platelet Rich Plasma (PRP) Injections

Your blood is mainly made up of a liquid called plasma. Plasma also contains small solid components such as red blood cells, white blood cells, and platelets. The platelets are best known for their role as in clotting blood but they also contain hundreds of proteins called growth factors. These growth factors are very important in the healing of injuries.

Platelet rich plasma, or PRP, is plasma with many more platelets than what is typically found in blood. The concentration of platelets can be 5 to 10 times greater than usual, which means there is also a much higher level of growth factors.

To make a PRP preparation, the doctor will first take some blood from your arm. Your blood is then spun in a machine to concentrate the platelets and separate them from the rest of the blood. After this spinning, the solution has increased concentration of platelets, or is “platelet rich” and this is then used as an injection to stimulate healing.

HOW DOES PRP WORK?

Laboratory and research studies have shown that the increased concentration of growth factors in PRP can speed up the healing process of certain tendon and ligament injuries, and have been shown to be effective in managing certain osteoarthritis (OA) conditions. PRP can be carefully injected into the injured area, or PRP can be prepared as a mesh to be used during surgery.

BEFORE THE PROCEDURE

Stop taking drugs and supplements that can affect the platelets for two weeks before PRP therapy.

These include the following medications:

NSAIDs (eg: Ibuprofen, Aleve, Naproxen, Aspirin, Motrin, Voltaren, Diclofenac). You can safely use Acetaminophen (Tylenol) if needed for pain, at any time leading up to the injection.

These include the following supplements:

Black currant seed oil, Krill oil, Borage oil, Nattokinase, Bromelain, Papain, Evening primrose oil, Serrapeptase, Fish oil, Wobenzyme, Flaxseed oil

AFTER THE PROCEDURE

1. Minimize your activity for 24-48 hours.
2. Apply an ice pack for 15-20 minutes over the area every 2-4 hours for the first 1-2 days following the procedure.
3. Avoid major physical activity or strain of the treated area for one week.
4. Do not take any drugs or food supplements (see list above) that affect platelets for two weeks after the procedure.
5. It may take 6-8 weeks to assess your response to the injection.



RISKS OF PRP INJECTIONS

Pain in the area of the injection:

A moderate amount of discomfort is expected due to the inflammation caused by the injection. This increased inflammation is one of the ways that PRP promotes healing. Inflammation results in repair of the damaged tissues into which the blood has been injected, however it also causes swelling and pain. You may choose to take a pain reliever such as Tylenol® (acetaminophen) to treat this discomfort if regular cold packs are not providing relief. If the post-injection pain lasts longer than 3 days, please make sure you call your doctor.

Infection: The risk of infection is extremely low. Studies have shown the risk of infection after an injection is 1 in 10,000 injections. Signs of infection include fever, chills, and pain, warmth and redness around the area of the injection. Symptoms of an infection could occur up to 10 days after the injection. If you have any of these symptoms please call our office, or the Banff Mineral Springs Hospital, or go to the nearest urgent care or emergency clinic and tell them that you had a PRP injection.

Allergic Reaction:

PRP is made from your own blood and this makes it very unlikely that you will have an allergic reaction. Allergic reactions following PRP injections are considered very rare.

Bruising: Sometimes the skin around the area of the PRP injection will appear bruised. This could be normal, based upon your history of bruising. But if it's an unusual deep and dark bruise, or you simply don't bruise easily, contact your doctor as soon as possible.

No Improvement in symptoms:

While this is not necessarily a side-effect, it is important that you know that not all patients respond to a PRP injection. Sometimes the original pain and soreness of the injury remains (it may even get worse), even after an extended rest period after the PRP therapy. If this occurs, please book an appointment so that your doctor can discuss other treatment options with you.

If you have any questions, please ask your doctor. If you have persistent swelling or pain, fever or chills, or if you notice a significant change in your well-being, please contact the clinic office at 403-760-2897, or the Banff Mineral Springs Hospital 403-762-2222 and ask to speak with an orthopedic surgeon.