



Injections Offered at Aspen Integrative Medicine

The injections we offer are regenerative in nature as they aim to stimulate cellular growth, stabilize tissues, and strengthen weakened joints, cartilage, ligaments, and tendons. Each injection procedure begins with local anesthetic to the area, followed by the solution injection, and ended with prolozone. During the injections, the doctor may needle away any scar tissue or bone spurs that exists and pepper the area with the solution, which may require multiple injections in one visit.

Neural or Prolotherapy with Peptides is the injection of dextrose, which is basically sugar water, that creates a temporary, low grade inflammatory response at the injection site. This activates the healing cascade, notifying the body to send growth factors to the area to initiate cellular repair.

- This procedure ranges from \$1,000-\$2,000 depending on complexity. Additional areas are \$500 each. The appointment is roughly one hour long and may require follow up injections.
- For more information, visit: <https://aspenintegrativemedicine.com/colorado-prolotherapy-and-prolozone/>

Bioactive Plasma is the injection of the patient's own plasma. "Bioactive Plasma" is similar to PRP but superior to it because it has been activated with ozone, dextrose, ascorbate, and magnesium. This process not only assists in healing, but also simulates new cell growth to repair bone, blood vessels, and connective tissues.

- This procedure ranges from \$2,500 to \$5,500 depending on complexity. Additional areas are \$1500 each. This appointment also includes an IV with nutrients mixed with the patient's PRP. It is roughly 90-minutes long and doesn't typically require follow up injections.
- For more information, visit: <https://aspenintegrativemedicine.com/colorado-prp-therapy/>

Regenerative Plasma Concentrate (RPC) injections at our clinic are an enhanced, ozonated plasma cocktail consisting of *concentrated* platelet growth factors, stem cells, nutrients and administered with peptides. Once the cells are fully harvested and activated, they are then injected into the injured area and infused via IV.

- This procedure ranges from \$5,500 to \$8,000 depending on complexity. Additional areas are \$3000 each. This appointment also includes an IV with nutrients mixed with the patient's PRP. It is roughly 2-hours long and doesn't typically require follow up injections.
- For more information, visit: <https://aspenintegrativemedicine.com/colorado-stem-cell-therapy/>



Injection Procedure Prep

1. How to prepare for your Stem Cell, PRP, Prolotherapy procedure:

Do NOT take Naproxen (Aleve), Aspirin, or Ibuprofen for at least 2 days before the procedure. **Stop** taking fish oil, vitamin E or any anti-inflammatory supplement one week before the procedure. **You may take** Tylenol, Tramadol, Vicodin, Norco, Percocet or anything natural but **do not take any medication until after your procedure**. Do not ingest or smoke any marijuana before the appointment as it can counteract with some of the solutions - it is ok to take after the appointment if you are of legal age.

2. On the day of your Injection:

Please make sure you are well hydrated and that you have eaten something before the appointment.

3. What to expect during the injection procedure:

Dr. Hughes always gives each patient a healthy dose of local anesthetic during the injection; however, this may not prevent the shocking type of pain that occurs for only seconds after a lesion or scar tissue is injected. Some injections performed by Dr. Hughes may be guided by ultrasound imaging. Sometimes, the ultrasound allows Dr. Hughes to see and inject a torn ligament or tendon (for example with a rotator cuff tear). At other times, Dr. Hughes must inject a bone spur or scar tissue. Torn ligament injections may feel different than that of an injection into scar tissue.

4. What to do after the injections?

Warm water and gentle motion followed by ice packs for inflammation can reduce the swelling and bruising that may occur. For most patients, following a healthy diet with plenty of protein, along with adequate rest is the key to recovery. Quite often, patients make the mistake of exercising too aggressively after the injections and end up slowing down or even impeding the healing process and collagen remodeling that is described above. Dr. Hughes recommends that patients **spend at least 2 days resting the injected body part**, treating it as if it had been acutely sprained. For the next 2-3 weeks, patients should be careful about aggressive or long sports activities, even hiking and yoga. **Avoid dairy (especially cheese) for several weeks. Avoid alcohol for one week. Increase your Vitamin C and collagen intake.** Many patients benefit from physical therapy, massage, acupuncture, chiropractic care, yoga, or osteopathic manual therapy a few days after the procedure. Please discuss your plans with Dr. Hughes during or before the injections.

5. Adverse Reactions:

The pain after an injection can be as painful as a surgical procedure and will typically last a couple of days. Sometimes injections can cause bruising for days afterwards. Any fevers, chills, nausea, shortness of breath should be reported to Dr. Hughes immediately **970-927-0308** or after hours **970-236-2303**. If you are unable to reach Dr. Hughes and are experiencing extreme allergic reaction or heart palpitations, please call 911 or report to the nearest Emergency Care Clinic.



Post Injection Follow Up Care

The pain after an injection can be as painful as a surgical procedure and will typically last a couple of days. Any fevers, chills, nausea, shortness of breath should be reported to Dr. Hughes immediately **970-236-2303**. If you are unable to reach Dr. Hughes and are experiencing extreme allergic reaction or heart palpitations, please call 911 or report to the nearest Emergency Care Clinic.

Rest for at least 2 days, minimizing load bearing activities and treating the injected area as if it has been sprained or torn. For the next 2-3 weeks, patients should be careful while doing light sports activities including hiking, yoga and biking.

WARM AND ICE

Use warmth for 10 mins from a warm bath, shower or heated compress and follow with ice for 10 to 15 mins several times a day for one week or longer if needed.

PAIN RELIEF

You may take: Tylenol, Ultram, Percocet, Vicodin, Norco, or a muscle relaxer. Natural anti-inflammatory creams such as Traumeel, Arnica, or Cannabis.

Do not take: Anti-inflammatory drugs or supplements including Ibuprofen, Naproxen, Advil, Motrin, Aspirin, fish oil and vitamin E.

Avoid dairy (especially cheese) and alcohol. Increase your Vitamin C intake and Collagen.

The overall goal is to take it easy for 2 to 3 weeks. Use warm, ice, rest, and be patient before restarting any moderate to high level activities. If it hurts, **STOP** doing what you are doing. **You may further aggravate the condition if you overexert too soon.**

Again, call Dr. Hughes if you have any questions or challenges after your procedure.