



The Front Range breeds a particular kind of athlete. Between Garden of the Gods stair sprints, high school cross-country meets at 6,000 feet, long days at Fort Carson, and weekend climbs up the Incline, the daily load on tendons and joints adds up. Overuse injuries are the tax this town pays for its active identity. They arrive quietly, then suddenly refuse to leave. If you have tried rest, stretching, new shoes, and three rounds of physical therapy, you are not alone. This is where modern sports medicine in Colorado Springs often reaches for a well studied option in regenerative medicine: platelet-rich plasma, or PRP.

I treat runners who log 40 to 70 mile weeks on the Santa Fe Trail, climbers who live in fingerboards all winter, and pitchers with elbows that have seen too many weekend doubleheaders. The pattern repeats. Pain starts as a nagging whisper, then sets up camp. Tendons lose their spring. Morning steps feel like walking on pebbles. Alarms ring when a patient says, I can train through it, but it never gets better. That plateau is a sign to consider targeted biologic help and a more disciplined rebuild.

## **What overuse looks like at altitude**

Living and training here magnifies load in ways you can feel and ways you cannot. Dry air sneaks fluid out of tissues. High altitude slows recovery between hard days. Steep grades on local trails force long eccentric braking that tendons do not forget. Military and tactical athletes add ruck marches on concrete and repeated jumping under weight. None of this is inherently bad. It simply means tissue turnover and tendon remodeling need genuine support.

Overuse injury is not inflammation in the classic sense. Chronic tendinopathy is more like a frayed rope than a swollen one. Collagen fibers lose alignment. Microscopic tearing outpaces repair. Blood flow in the tendon itself is minimal, which is why rest alone, even several weeks, often fails to restore load tolerance. The old model of repeated corticosteroid injections tried to quiet inflammation, but that does not rebuild disorganized tissue. In the elbow and Achilles, steroids can temporarily numb pain while weakening the tendon over time. I rarely reach for steroids in those locations anymore.

## PRP in plain terms

PRP is your own blood, concentrated to deliver a higher dose of platelets back into the problem area. Those platelets carry growth factors that nudge local cells to clean up damage and [Regenerative Medicine Colorado Springs](#) lay down better organized collagen. Think of it as hitting the reset button on a stalled healing process.

In the clinic, we draw 30 to 60 milliliters of your blood, spin it in a centrifuge to separate layers, and capture the plasma with a high concentration of platelets. The exact product varies. For chronic tendons near the skin, I usually prefer leukocyte-poor PRP to reduce post-injection irritation. For deeper, thicker tendons or certain ligament fibers, there is a case for leukocyte-rich preparations. Ultrasound guides the needle to the exact zone of degeneration. After that, your body has to do the work, and your rehab plan must match the biology.

PRP is not a miracle and not a quick fix. In my practice, meaningful change often appears after the 4 to 6 week mark, with continued gains through 3 months. Patients who combine PRP with a disciplined loading program and reasonable lifestyle adjustments do better than those who rely on the injection alone. The literature supports this cadence. Meta-analyses show moderate to strong evidence for PRP in lateral epicondylitis, patellar tendinopathy, and plantar fasciopathy, especially beyond the 12 week window. In comparison with corticosteroid injections, PRP tends to lag in the first month, then surpass steroids by the third month and maintain the advantage.

## Where PRP fits within regenerative medicine in Colorado Springs

Regenerative Medicine is a broad term. It includes PRP, bone marrow concentrate, and other orthobiologic options. In Colorado Springs, access has grown quickly, and so have marketing claims. The FDA allows the use of minimally manipulated autologous blood products like PRP for musculoskeletal indications, which is one reason PRP has become a staple of responsible Sports medicine in Colorado Springs. Stem cell therapy Colorado Springs also appears on many clinic menus, usually in the form of bone marrow aspirate concentrate. While there is intriguing early data for certain joint and cartilage conditions, high quality evidence for chronic tendinopathy is less consistent than it is for PRP. I reserve bone marrow procedures for cases that fail the simpler, safer, and generally more affordable options, or when we are addressing complex joint degeneration.

Patients deserve clarity. PRP has a supportive evidence base for specific overuse conditions, realistic costs in the hundreds rather than thousands, and a good safety profile. Stem cell procedures may cost several thousand dollars and can be appropriate for certain situations, but they should not be pitched as a universal solution. If a clinic promises guaranteed results, or uses donor "stem cell" products sourced from amniotic or umbilical tissue for tendon problems, ask hard questions about regulatory status and published data.

## The overuse injuries I treat most with PRP

Colorado Springs produces a predictable injury map. A few stand out as frequent and highly responsive to well executed PRP plus rehab.

- Lateral epicondylitis: Tennis elbow is everywhere, from desk workers gripping a mouse to climbers crimping tiny holds. Ultrasound often shows hypoechoic regions and neovessels at the common extensor tendon origin. PRP combined with eccentric wrist extensor loading and proximal shoulder work changes both pain and tendon appearance over time.
- Proximal hamstring tendinopathy: Runners feel it with uphill strides and when sitting on hard surfaces. Injecting at the conjoined tendon origin under ultrasound guides the product where degeneration hides. The rehab centers on hip hinge mechanics and graduated hamstring loading at longer muscle lengths.

- Patellar tendinopathy: Jumpers, skiers, and lifters often describe pain at the inferior pole of the patella. PRP can help, but the plan fails if the rehab does not include heavy slow resistance and attention to landing mechanics.
- Plantar fasciopathy: Morning hobble, first steps off the bed, then a dull bruise under the heel by afternoon. PRP shows better mid to long term results than corticosteroid for many patients, with fewer recurrences. Foot intrinsic strength and calf flexibility remain non negotiable.
- Gluteal tendinopathy: Lateral hip pain that wakes you when you roll over and sparks during long walks. Here, load management matters as much as the needle. Patients must avoid long periods of hip adduction early on, including crossing legs and sleeping on the painful side.

Notice what is not on the list. IT band friction is often a biomechanics problem, not a tissue degeneration problem, so PRP has limited value. Stress fractures are a bone health and load management issue, best solved by rest, nutrition, and in some cases shockwave therapy once healing is underway. PRP can be considered around certain partial ligament injuries, but many sprains heal with time and targeted stability work.

## How the appointment actually unfolds

Patients do better when they know the rhythm of the visit and the weeks that follow. We start with a candid review of your training history, occupational load, diet, sleep, and previous treatments. Ultrasound imaging maps the tendon in real time, including areas of disorganization, thickening, or calcification. If PRP makes sense, we draw blood, spin it for 10 to 15 minutes, and prepare the injectate. I use antiseptic technique and local anesthetic in the skin, but I avoid anesthetic in the tendon belly. Local anesthetic inside the tendon can impair tenocyte function, which runs against the goal of the procedure.

During the injection, you will feel pressure and a deep ache. I often perform a limited peppering technique within the degenerated zone to stimulate a controlled healing response. Once finished, the site is tender for a few days. Expect some swelling or warmth, which is not infection but rather a normal inflammatory phase. Keep the bandage on for several hours, then let the area breathe. Most people walk out under their own power and drive home unless we injected a weight bearing structure and your pain is larger than expected.

## What the rehab looks like, week by week

Biology needs a scaffold, and rehab is that scaffold. Your program will be customized, but the outline below reflects what I teach most often for tendon targets.

- Days 0 to 3: Relative rest and protected activities of daily living. Short, frequent walks are fine. Avoid NSAIDs. If you need something for pain, choose acetaminophen or a small dose of prescribed medication. Gentle range of motion keeps joints moving.
- Days 4 to 14: Isometrics begin. For patellar and Achilles, that might mean 5 sets of 30 to 45 second holds at a load that reaches 4 to 6 out of 10 effort without sharp pain. For elbows, sustained wrist extension holds. For plantar fascia, sustained calf raises with a towel under the toes. Two or three sessions per day work well.
- Weeks 2 to 6: Eccentric and heavy slow resistance loading comes online. Progress from two to three days per week of slow, controlled reps. Keep a training log. Pain during exercise can rise to a 3 or 4 out of 10, but it should settle to baseline by the next morning. If it does not, back down 10 to 20 percent.
- Weeks 6 to 12: Power and return to sport drills. Introduce plyometrics, change of direction, or graded hill running if that fits your sport. Mileage or volume climbs slowly. Most athletes test sport specific tasks by

week 10 to 12 without next day regret.

During this period, I often use ultrasound reassessment at 6 to 8 weeks to confirm structural trends. The tendon rarely looks perfect, even when symptoms improve. What matters most is function and consistent loading without next day punishment.

## **Practical details unique to Colorado Springs athletes**

A few local factors shape care. The altitude and climate nudge hydration from optional to essential, especially in the two weeks after PRP, when your body is busy rebuilding tissue. I recommend 0.6 to 0.8 ounces of water per pound of body weight per day as a starting range, more on long training days. If you work on base and spend hours on concrete, vary footwear across the week to change load patterns. Trail runners who live on technical descents need eccentric calf and quad work long term, not just during rehab. Climbers should rotate grip types and embrace antagonistic training to spare the common extensor tendon.

Winter can help or hurt. Cold mornings amplify stiffness, which tempts aggressive stretching. Replace hard static stretches with light mobility and progressive loading. If you use a training mask during conditioning, remove it for several weeks after PRP. Your body has enough stress to adapt to.

## **Safety, risks, and realistic expectations**

PRP is generally safe. Because it is your own blood, allergic reactions are rare. The most common side effect is a short term pain flare lasting two to five days. Infection risk is low, typically under 1 in several thousand in experienced hands. Bruising is possible. A small subset of patients feels no meaningful benefit, which is why setting clear goals and choosing the right diagnosis matter.

The number of injections varies. Many tendinopathies respond to a single treatment. Stubborn cases, or long standing injuries with heavy structural change, sometimes need a second round at 8 to 12 weeks. Insurance coverage in Colorado is uneven. Some plans recognize PRP for specific indications, but many do not. Costs in our region commonly range from the mid hundreds to just over a thousand dollars, depending on the preparation and whether ultrasound guidance is included. Ask for itemized pricing and whether follow up rehab is built into the package.

## **PRP versus other options**

When I lay out choices with patients, we usually compare three paths.

Rest and rehab only: Free of procedure risks and cost. Works well for early stage problems. If you have tried three months of consistent, well designed loading without progress, the odds of a new outcome without changing inputs are not great.

Corticosteroid injections: Useful in a few locations for short term relief when function must be regained quickly. The elbow and Achilles are poor candidates due to tissue weakening risk. Recurrence rates are higher. Steroids make sense in bursitis and certain inflammatory arthropathies, not so much in classic degenerative tendinopathy.

PRP injections Colorado Springs: Best for moderate to severe, chronic tendon problems that have resisted rehab alone. Slower onset, better durability. Pairs well with exercise therapy and patient education.

Other orthobiologics, including bone marrow concentrate, sit beyond PRP when the target problem is broader joint degeneration, or when a patient has failed the more conservative biologic steps. That sits within the larger

lane of Regenerative Medicine Colorado Springs, and it should be offered alongside transparent discussion of evidence, cost, and recovery time.

## **The small choices that tilt outcomes**

In my experience, outcomes hinge on details that look small on paper but loom large in practice. Ultrasound guidance matters. You want the needle tip in the pathologic zone, not just near it. Prehab matters. Tendons that have already learned to tolerate isometrics before PRP accept the next steps more gracefully. Sleep matters. One extra hour per night in the first two weeks after injection is not a luxury, it is a lever. Nutrition matters. I encourage 1.6 to 2.2 grams of protein per kilogram of body weight per day during the rebuild phase, along with collagen or gelatin plus vitamin C taken 30 to 60 minutes before loading sessions. Avoid nicotine and minimize alcohol while tissue remodeling is underway. These are boring truths, and they move the needle.

## **A case that illustrates the arc**

A 37 year old firefighter came in with a one year history of patellar tendon pain. He had tried rest, sleeves, and two rounds of PT. Ultrasound showed thickening and a focal hypoechoic zone at the deep central tendon near the inferior pole. We performed leukocyte-poor PRP under ultrasound, then followed the framework above. He logged isometrics twice daily for 10 days, then added heavy slow resistance three days per week. At week six he resumed light sled pushes. At week nine he tested box jumps and deceleration drills. By week twelve he returned to full duty and managed stairs in gear without the familiar bite. His training log showed a handful of 2 out of 10 mornings during volume spikes, which settled with a 10 percent deload. One injection, one committed plan, and an honest respect for the tissue timeline.

Not every story ends this neatly. I have seen climbers with years of elbow pain need a second injection, and one runner whose plantar fascia also required shockwave as an adjunct. The common thread is a collaborative approach with clear expectations.

## **Finding a qualified team in Colorado Springs**

If you are exploring Regenerative Medicine Colorado Springs, look for a sports medicine practice that offers a full toolbox. PRP should live alongside diagnostic ultrasound, evidence based rehab, and return to sport testing. Ask how many tendon procedures the clinician performs each month. Ask whether they tailor PRP preparation to the target tissue. Ask to see the rehab plan before you commit to the injection. Transparency correlates with outcomes.

I also encourage coordination with your physical therapist or strength coach. The best plans bridge the clinic and the gym. If your routine includes high altitude races or military selection events, tell the team. We can reverse engineer the calendar from your target date and decide whether PRP belongs, or whether a different timing or strategy makes more sense.

## **When stem cells enter the conversation**

Stem cell therapy Colorado Springs almost always comes up. The honest answer is nuanced. For focal tendinopathy, PRP currently carries stronger and more consistent support. For complex joint issues, bone marrow aspirate concentrate may help certain patients, especially when paired with mechanical correction, weight management, and strength training. The regulatory landscape limits what clinics can do with adipose tissue. If

someone offers off the shelf "stem cell" injections from birth tissues for your tennis elbow, be cautious. Ask for published studies specific to your condition and the exact product.

I am not anti stem cell. I am pro matching the right tool to the right job, with eyes open to cost and evidence. Most tendons in this town do very well with disciplined rehab and thoughtfully delivered PRP.

## **Your next step**

If your overuse pain has held steady for three months or more despite honest rehab, or if you plateau at a level that still limits the life you want, PRP deserves a seat at the table. A good evaluation will confirm the diagnosis, check for red flags like referred pain from the spine or a hidden stress reaction, and map the tendon with ultrasound. From there, a clear plan pairs the injection with progressive loading and the daily habits that let biology do its work.

Colorado Springs rewards people who move. It also punishes shortcuts. With the right blend of sports medicine, regenerative strategies, and patient grit, stubborn overuse injuries do let go. When they do, the first pain free run in Palmer Park or the first heavy deadlift without guarding feels like you got a part of your life back. That is the goal, not just less pain, but more capacity.

Denver Regenerative Medicine | Stem Cell Therapy, HRT, Testosterone Clinic

Address: 5040 Corporate Plaza Dr Suite 7, Colorado Springs, CO 80919

Phone number: +17197813434

## **FAQ About Regenerative Medicine Colorado Springs**

**Will insurance pay for regenerative medicine?**

In most cases, health insurance will not pay for regenerative medicine. Major providers and Medicare consider non-surgical therapies—such as Platelet-Rich Plasma (PRP) and stem cell injections for joint pain—to be "experimental" or "investigational". You should be prepared for out-of-pocket costs unless you have specific exceptions.

### **What drink increases stem cell production?**

Research shows that drinks rich in flavonoids and antioxidants—particularly high-flavanol cocoa and green tea/matcha—can increase the number of circulating stem cells. These compounds stimulate stem cells to leave the bone marrow and enter the bloodstream to repair tissues throughout the body.

### **What are the disadvantages of regenerative medicine?**

Regenerative medicine holds immense promise, but it faces significant disadvantages, including severe safety risks like uncontrolled tissue growth, high financial costs, and lingering ethical dilemmas. The field is also hindered by inconsistent clinical results, regulatory hurdles, and a general lack of long-term data.