

LORI WIESER N.D. NATUROPATHIC PHYSICIAN

Prolotherapy FAQs for practitioners and patients

What is Prolotherapy?

- Prolotherapy is a therapeutic technique that involves the injection of a <u>solution</u> (*dextrose*, *sodium bicarbonate*, *and lidocaine*) into damaged connective tissue, in and around joints.
- This helps reduce the disruption of normal tissue due to poor structural alignment & biomechanics, incomplete repair from trauma, or the degenerative changes associated with aging.

What is Platelet Rich Plasma (PRP)?

- The preparation of therapeutic doses of growth factors consists of an autologous blood collection (blood from the patient), plasma separation (blood is centrifuged), and application of the plasma rich in growth factors (injecting the plasma into the area.)
- In other words, a PRP treatment is done just like any other Prolotherapy treatment, except the solution used for injection is plasma enriched with growth factors from your own blood.

How does Prolotherapy /Platelet Rich Plasma (PRP) work?

- When the solution is injected into the affected ligaments or tendons it causes a local inflammatory response.
- This, in turn, triggers the body's natural healing process resulting in the deposition of new collagen, the foundation of ligaments and tendons.
- This new collagen shrinks as it matures, tightening and strengthening the tissue around the joint that has been injected, thus eliminating chronic pain by getting to the root cause of the situation.

What is the difference between Prolotherapy and Platelet Rich Plasma (PRP) and how do I choose which treatment would be most beneficial?

• Platelet Rich Plasma (PRP) is considered 4x as effective as the regular prolotherapy solution due to concentrating the growth factors and injecting them into the damaged joint vs. using the general



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prolotherapy solution to stimulate your own growth factors to be stimulated to come to the area being treated by your circulation.

- · Prolotherapy and Platelet Rich Plasma (PRP) are both very effective treatments. But:
 - -Generally you will *need* <u>less injections</u> <u>utilizing the Platelet Rich Plasma(PRP)</u> due to concentrating the growth factors to the site of the injection to repair cartilage of 3 to 6 injections vs. 6 to 10 injections.
 - -If you are over the age of 50 I generally recommend the PRP due to changes microcirculation with age and less ability to stimulate or bring growth factors to the site of injections.
 - -General Prolotherapy injections are about 50% cheaper than the PRP injections but you can rotate treatments or get them done at the same time on the same or different joints to manage costs.
 - -Platelet Rich Plasma injections has an *inflammatory phase that is about 14 days vs. 10 days* with the general prolotherapy solution after each injection, but is more effective long term.
 - -Each injection whether it is the general Prolotherapy solution or PRP will have an 18 month healing phase and each consecutive injection brings more healing to the area.

What to expect with the Prolotherapy/PRP injections:

1.) The first injection usually creates the most pain and inflammatory response. Subsequent injections generally are less painful with each consecutive injection because the tissue is healing and less inflamed, even if it has been a significant amount of time between injections.

Then number of Prolotherapy/PRP injections needed will differ with each patient:

- This is different for each individual, but few people feel their pain resolved after just one treatment.
- Many require multiple injections in the range of 4 to 10 injections separated by every four to six weeks
 depending on: <u>the condition</u> being treated, the <u>general health</u> of the patient related to nutrition,
 circulation, and the patient's response to the treatment.

Down time between injections:

Every person is different in their response to the injections, but I always recommend <u>no down time</u>.
 Moving the joint will allow more blood flow to reach the area for healing. For the first 10 days it is recommended to not do any heavy lifting, excessive running, compression of the joint type of exercises, or stretching to prevent tearing or reinjuring the area during the proliferation and laying down of new tissue. We do encourage walking, alternating heat packs or utilizing other alternative forms of treatment like chiropractic, massage, acupuncture, and treatments that create heat such as alternating heat packs,



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saunas, and currently the Bemer Treatment here at Trinity using a magnet (PEMF) bed to aid in microcirculation for healing in a 30 min session.

Practitioners treating chronic pain and what to expect with Prolotherapy treatment:

2.) I recommend patients see their pain treatment practitioners for massage, chiropractic, acupuncture, cold laser, PT, rolfing, decompression, etc 1 to 3 days before the injection to aid in alignment and improvement in blood flow and return to see these practitioners 3 to 10 days after the injections and ongoing. This will allow for the proliferation phase and laying down new tissue of cartilage, tendons, and ligaments without disruption. After the injections it is encouraged to see these pain practitioners to continue to stimulate blood flow, healing, and stabilization of the joints affected.

Prolotherapy can be helpful for the following conditions:

- Athletic injuries: ligament and tendon injuries, sprains, strains, tears.
- Overuse injuries: golfers elbow, tennis elbow, shoulder tendonitis, achilles tendonitis, plantar fasciitis, carpal tunnel.
- Low back pain: musculoskeletal tension, sciatica, arthritis, herniated and degenerative discs.
- Arthritis pain: knees, back, neck, shoulders, hip, hands, wrists, feet.
- Weak, loose, and unstable joints: hypermobility, subluxations, nerve impingement.
- Whiplash injuries: neck, upper back, shoulders, low back.
- Sacroiliac joint disorders
- Fibromyalgia & Myofascial Pain

Current areas I inject:

• Cervical and thoracic spine (supraspinous and interspinous ligaments), lumbar spine (supraspinous and interspinous ligaments, facets, TVPs), shoulder, elbow, wrist, knuckle/fingers, SI joint, hip, symphysis pubis, knee, ankle, and toes.

Not every patient is a candidate for Prolotherapy and needs to be assessed prior to treatment:

Contraindications:



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 Infection, edema (associated with circulation/heart disease), nerve damage from diabetes, malignancy, and allergy to lidocaine.

Avoid:

- Type I & II Diabetes that is <u>uncontrolled</u>- Blood sugars over 120 on average.
- Cortisone shot within the last 3 months (after 3 months from the date of injection we can start prolotherapy/PRP treatment.)

Considerations:

- · Tobacco smoking or chewing
- Diet lacking nutritional value
- Alcohol consumed daily
- pharmaceutical blood thinners (maybe experience more bruising)

Best Patient for Prolotherapy:

- Eating a Mediterranean, Anti-inflammatory, Anti- Candida, and Paleo type diet, exercises regularly, supplements their current vitamin/mineral deficiencies, and is compliant. No one is perfect, but this is optimal.
- Age and the length of time for how long they have experienced the pain does not matter in the outcome of treatment. What matters is their diet, lifestyle, and blood flow as to how well they will respond to creating new cartilage.
- You do not need to be a perfect patient to get this treatment and even if you start the day of injections making some positive diet and lifestyle changes you can still experience great results.

If the patient is not healthy enough to receive injections currently:

A diet and lifestyle change maybe prescribed for 2 weeks to 3 months prior to injection treatment to give
their body time to decrease all over body inflammation, decrease blood sugar, increase blood flow,
decrease moderate to severe HTN, quit or minimize smoking, decrease to eliminating alcohol intake to
allow for the bodies most optimal ability to heal and create new cartilage.