How Many Treatments Are Needed?

The response to treatment varies with each individual and the extent of trauma to the ligament, tendon or cartilage, as well as individual rates of healing.

Some people require a few treatments (i.e. 3 to 6) while others may need 10 or more. Once you begin treatment, you will be able to assess how you are responding.

Wound strength studies show that it takes 6-12 months for maximum tensile strength to occur without prolotherapy and even then the resultant wound has approximately 60% of the original strength. With a treatment every 2 weeks, prolotherapy healing can occur in 1-2 months.

Prolotherapy can be combined with Ultrasound, Acupuncture, Physiotherapy, Laser therapy, Chiropractic treatments, Homeopathy, PRP and nutritional supplements to obtain the best results.

Pain From Injections

Not every patient experiences pain with the injection. Nevertheless, the injections may be more painful, particularly in the first two to three visits.

After an injection there is usually a significant change in sensation with some contraction or release of muscles and changes in blood flow. For this reason, it may be helpful to have someone drive you home after the treatment so you can rest. After the second or third treatment, these functional changes are usually not so profound.

Secondary Effects

Soreness and bruising at the injection site and temporary muscle stiffness are normal and may last for 1-2 days.

The use of over the counter anti-inflammatories is discouraged as these will defeat the purpose of prolotherapy which is to temporarily increase inflammation.

You can apply alternating hot and cold compresses over the affected area. Traumeel cream or a "deep heat" like Tiger Balm can be used if some additional relief is needed.

Using MSM and glucosamine sulphate may also lessen the secondary pain reaction. Natural anti-inflammatories, such as bromelain, curcumin, proteolytic enzymes, fish oils etc., will help the healing response.

If you are taking any of these, please stop taking them the day before, day of, and day after a prolotherapy treatment to allow the natural inflammatory response to occur.

Exercise

In order to align the new collagen correctly with the existing ligament tissues, it is very important for the structure to heal in the presence of movement. As such, gentle walking is recommended after a treatment.

This will protect the ligament from forming adhesions to neighboring structures and increase the correct formation of the new collagen.

Cost of Treatment

Initial Visit and Repeat Visit Costs vary with time required for the visit.

<table>
<thead>
<tr>
<th>Time</th>
<th>Cost</th>
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</thead>
<tbody>
<tr>
<td>1.5 hours</td>
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<tr>
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<td>45 minutes</td>
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<tr>
<td>30 minutes</td>
<td>$75</td>
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<tr>
<td>20 minutes</td>
<td>$50</td>
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Each Prolotherapy Treatment $125 plus visit cost
Each Neural Treatment $60 plus visit cost
Each BioPuncture Treatment $60 plus visit cost
Each PRP Treatment $325 plus visit cost
Specialized Supplements $ Varies

Disclaimer

NO WARRANTY OR GUARANTEE is given or implied by the Optimum Wellness Naturopathic Medical Clinic, or by members of its staff, that the testing or the treatment received at the clinic will cure symptoms or complaints for which the patient seeks treatment.

Patients acknowledge that they have not been solicited to take treatment by the doctors or any staff member.

Treatment is provided only with the patient’s consent and at their request with their full knowledge of the limitations and potential complications of treatment.
What is Prolotherapy /RIT (Regenerative Injection Therapy)

Prolotherapy is also known as “nonsurgical ligament reconstruction” and is a treatment for chronic musculoskeletal pain. The word "Prolo" is short for proliferation as prolotherapy treatment enhances the growth and formation of new ligaments, tendons and cartilage in areas where there is weakness or excess scar tissue. Any joint in the body can be treated successfully with prolotherapy regardless of when the injury happened. The treatment is also beneficial for most types of musculoskeletal pain.

Prolotherapy incorporates the use of a specialized dextrose (sugar) solution, which is injected into a ligament or tendon where it attaches to the bone. The initial reaction of the treatment is localized inflammation triggering a wound healing cascade leading to increased blood supply and flow of nutrients and growth factors. This stimulates the tissue to repair itself by deposition of new collagen, the material that ligaments and tendons are made of.

The new collagen then shrinks as it matures leading to ligament/tendon tightening and increased strength.

What are Ligaments?

Ligaments can be described as "rubber bands" that actually hold bone to bone and allow flexible movement of joints. Injury, overstretching and degeneration/weakness of ligaments can cause them to become weak and damaged to a state of disrepair. The reason that ligaments don't heal easily is largely due to the lack of blood supply to the area.

As a result, healing is slow and not always complete. In addition, the nerve endings to ligaments can become impaired or damaged, so you may feel acute intense pain. This pain can then become chronic.

With Prolotherapy, an important concept to understand is that chronic pain leads to tissue destruction and acute pain leads to tissue regeneration.

With this treatment, patients often say “I already have inflammation and you want to give me more?” The idea behind this is that acute inflammation leads to healing. The ligament and tendon tissue which forms as a result of Prolotherapy is thicker and stronger than normal tissue, up to 40% stronger in some cases.

Why Are Tendons?

Tendons are the name given to tissue which connects muscle to bone. Tendons may also be damaged in the same manner as ligaments which can result in pain and scar tissue development if not treated appropriately.

What are Tendons?

The Injection Solution

The basic Prolotherapy solution is 12.5% to 20% dextrose with 1% procaine. The dextrose makes the solution more concentrated than blood, acting as a strong proliferant. Procaine is an anesthetic that helps reinforce the diagnosis because the patient may experience immediate pain relief after the injection.

The dextrose solution, in addition to being safe, will not affect a diabetic's blood sugar level. Other injectables may be added such as hyaluronic acid or Vitamin B12 (methylcobalamin).

The hyaluronic acid would be added in cases of osteoarthritis where cartilage regeneration is the desired outcome and methylcobalamin is used in nerve regeneration. Homeopathic remedies may also be added to help speed the healing process, these will vary depending on the type of injury.

PRP (Platelet Reduced Plasma)

PRP is injected in the same manner as prolotherapy; however, the substance injected is different.

About 50ml of blood is drawn from the patient and spun in a centrifuge to separate the blood components and from this serum is extracted.

This serum is then injected back into the joint for treatment. This serum already has concentrated growth factors which lead to healing of the joint.

The treatment is slightly more painful than prolotherapy, however the healing power is faster, more enhanced and requires less treatments.

Why Is There Pain With The Treatments?

• Any joint pain (hip, knee, ankle, shoulder, ankle, wrist)
• Torn ligaments, tendons and cartilage
• Herniated / Degenerated discs
• Post injury / Trauma pain
• Low Back Pain
• Neck Pain /Headaches
• Unstable shoulder joints (repeated dislocations)
• Surgical scar reduction (I.E. cesarian section scars)
• Yoga overstretch injuries
• Post fractures
• Pain conditions: Sciatica, Arthritis, etc.
• Frozen shoulder
• TMJ
• Whiplash injuries
• Fibromyalgia
• Sports injuries
• Tendonitis
• Rib pain

It will often take a series of RIT treatments spaced at appropriate intervals to maximize the healing power of the body. Sometimes a patient’s body is incapable of generating an appropriate healing response because of other factors such as deficient nutritional support. These factors are addressed in conjunction with RIT treatment so that the maximum benefit can be made with each session.