



Our Approach to Injury & Pain is to Fix the Underlying Cause!

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What I am about to tell you should have been taught to every doctor as they went through medical school, but it was not. In fact, no medical school, nor post graduate training program, teaches this. It has taken me about 50 years to figure it out and find a truly effective, consistent way to restore joint function.

In the vast majority of cases (90+%), injuries and chronic pain are associated with damage to the **connective tissues** as opposed to the joint itself. The initial damage can be due to a single traumatic event, the accumulation of damage from several traumas, or from repetitive motion activities/injuries where there was no ‘apparent’ trauma at all. Of course, over time the other joint structures also begin to degenerate.

Joints are held together and stabilized by ligaments.

Joints are able to move due to muscles which are attached by tendons.

Most injuries are the result of damage to either ligaments, tendons, or both.

The primary site of injury, whether it be to the ligaments or tendons, is at the ‘enthesis’ which is where the ligament or tendon connects to the bone.

When **ligaments** are damaged (sprained) they do not heal back to full strength, anyone that has ever sprained an ankle can attest to that. They heal back to only about 50-75% of their original strength and a bit longer than they were before. In the case of **tendons**, they are also weakened, and typically develop tenonitis at first which often progresses to tendinosis.

Either one of these leads to **joint instability compared to before the injury or damage. This** sends messages to the brain that the joint is ‘looser and less stable’ than it once was. The brain does the only thing it can to help compensate and stabilize the joint by sending messages to the surrounding **muscles** associated with that joint **to tighten.**

This leads to increased, **chronic muscle tension** thereby **restricting blood flow**, which in turn leads to reduced nutrient delivery (including oxygen) to the area. This eventually causes **damage to the mitochondria** inside the muscle cells leading to **reduced energy production, increased lactic acid production, inappropriate inflammation, accelerated joint degeneration, restricted movement, & pain.** Additionally, neuromuscular ‘trigger’ points will tend to form which can lead to additional muscle tension, imbalances, and pain in areas not directly involved with the primary injury.

Over time, all of this leads to **joint damage and degeneration** including pain, chronic inflammation, and often calcium deposits (the combination is called arthritis).

What does ‘Modern’ Medicine do about this?

Not much, and what they do actually does more harm. They recommend things like anti-inflammatory medications, pain medications, rest, ice, heat, and physical therapy. As it progresses, depending on the joint, they will offer cortisone injections, gel injections, nerve ablation, and surgery. Eventually, they will recommend joint reconstructive surgery or joint replacement. Overall, none of these things addresses the root cause of the problem, the ligament &/or tendon attachments. Is it any wonder that those approaches do not work? Is it any wonder that those approaches actually speed up the degenerative process? If you weren't aware of that, you should be.

What do Chiropractors do about this?

Chiropractors are primarily focused on the spine, although some do treat the extremities as well. Their primary tool is called HVLA which stands for High Velocity Low Amplitude adjustments. Their goal is to put the joint back into proper alignment to restore proper nerve flow so the body can heal itself. While the philosophy of assisting the body to heal itself is quite valid, simply putting the joint back in proper alignment will not restore ligament or tendon integrity.

How about Physical Therapy, Massage Therapy, and Acupuncture?

Physical therapy is focused on a variety of basic exercises designed primarily to strengthen or stretch the muscles of the joint. Massage therapy is focused on working the muscles which typically provides some temporary relief, however, since it also fails to repair the ligament and tendon attachments, the benefits are quite short lived. Acupuncture is focused on opening up blocked energy flow through the body, thereby helping the body to heal itself; another focus or goal of acupuncture involves the toning down and modulation of pain pathways.

Our Solution involves correcting the underlying root cause of most chronic joint pain:

We use a blend of the most proven & cutting-edge techniques to help restore proper integrity & stability to the joint, the associated muscles, and the damaged connective tissues (ligaments and tendons).

Some of those techniques include Joint Decompression, Shockwave Therapy, Red & Near-Infrared Light Therapy, Electro-Frequency Therapy, Trigenics Muscle-Brain Reeducation, and Regenerative Injection Therapies including Prolotherapy. Keep reading to learn more.

Additionally, we place a strong focus on proper Nutrition, Restoring, and Resetting the MICROCIRCULATION!

The Microcirculation is the only place where nutrient exchange takes place between the blood and the trillions of cells of the body. Several of the approaches we use play roles in supporting proper blood flow and nutrient exchange to the damaged tissues.

Each person's injury, pain, and situation are unique so there are different therapies and components depending on your particular situation.

It is important to have a consultation & examination to learn how we can best help your body to heal. We will design a program to help restore the damaged joint complex to get you out of pain and back in the game.

More About Regenerative Injection Therapies:

There are several types or levels of Regenerative Injection Therapies based on the solutions used. The most basic, that I designate as **Level I**, is called **Prolotherapy** and was first published in 1937. Since then, there have been a couple of hundred studies all showing an approximate 90+% improvement. To do this therapy properly requires a considerable amount of training and practice, as a result, there are very few properly trained doctors performing true Prolotherapy. I call the proper approach to this time-proven technique **Precise Placement Prolotherapy**.

The term Prolotherapy is based on the word **proliferation**. The technique is used to stimulate the PROLIFERATION and regeneration of specific connective tissue by attracting & activating fibroblasts. The main focus is on the entheses which are where both ligaments & tendons connect with the bones.

The technique involves carefully injecting small amounts of **a mild irritant solution** at the specific locations that have been damaged. The injection sites are where either ligaments or tendons connect to the bones and depend on which structures are being targeted. This safe irritant stimulates a chemical messenger system of the body (cytokines) to attract and activate a special type of cells called fibroblasts. **Fibroblasts**, once activated, will come to the precise location targeted and produce new **collagen and elastin proteins** that strengthen the damaged connections. Prolotherapy is simply a technique that tricks your body into thinking there is a fresh injury, thereby **mobilizing, activating, and enhancing your body's natural healing response**. There are typically a series of treatments spaced one to three weeks apart allowing a gradual ramping up and buildup of new connective tissue to restore the original strength to the joint.

Prolotherapy can be used to help restore strength and integrity to virtually any joint in the body as long as the injections are properly placed, and the person is able to mount a solid, anabolic repair response. For maximum benefit it is important for the person to be well nourished, including proper supplementation, along with good circulation to the area. Both are part of our Wolverine Healing Protocol to support the healing process.

There have been **over 150 studies published** on the efficacy of prolotherapy. The first study was published in 1937. These studies consistently show an 87-95% success rate at improving joint stability, reducing pain, and restoring proper function.

The tragedy is that so few doctors know about it, and even fewer are proficient at it. It should be the primary tool used by Orthopedic Surgeons; however, most are not interested as insurance pays big bucks for surgery and that's what they spent several years learning to do. Sadly, Medicare, being the illogical, brainless behemoth that it is, has chosen not to pay for prolotherapy since it is 'regenerative.' They have determined that they will not pay for anything 'regenerative' as they do not consider regeneration to be 'medically necessary.' Amazing, you can't make this kind of illogical nonsense up! Medicare will pay for a joint replacement once the situation is allowed to progress to that point, but prevention & regeneration do not seem to be concepts that this agency understands! Of course, most insurance companies follow Medicare's lead and do not pay for prolotherapy and other regenerative treatments either since Medicare won't. As ludicrous as that sounds, it is the reality of our current, hopelessly corrupt, and inefficient 'disease care' system.

The good news is that Regenerative Injection Therapy is very cost-effective, and most importantly, it JUST WORKS.

There is a tremendous amount of material about Prolotherapy online so by all means do your homework. Also note that our approach is quite comprehensive and incorporates several additional components to maximize your results.

In the vast majority of cases, 4-6 sessions will do the job very nicely. More severe or chronic damage may take 8-10 sessions but that is only when the damage is quite severe, has been there for a long time, and/or the individual has a reduced healing capacity. In such cases, Level II or III would be more appropriate.

Regenerative Joint Injections, Level II: By now, most people have heard about **PRP** (platelet rich plasma) injections. Prolotherapy is the predecessor of this technique which should also utilize the Precise Placement Prolotherapy approach that simply uses PRP as a stronger regenerative solution.

In more severe cases, moving up to using PRP, or **Beyond PRP** as we do, can be quite justified. Although basic Prolotherapy has a very high rate of success, when the damage is more severe, it has been there a long time, and/or the person's healing response may be limited, moving to a stronger proliferant solution may be necessary to achieve the desired results.

There is a significant increase in expense when using stronger Biologic Solutions such as either PRP or Beyond PRP. Regular PRP comes from your own blood, which is collected, processed, and reinjected. Alternatively, we use a product called **Beyond PRP** that comes from the 'amion' which is the epithelial lining of the umbilical cord of full term, healthy, C-section deliveries. The cost goes up about 40-50% over Prolotherapy when PRP is used. Interestingly,

Beyond PRP costs less than regular PRP and has significantly more collagens and growth factors than even the healthiest young blood.

Therefore, in situations where the damage is more severe, or one's regenerative processes are not up to snuff, it is reasonable and justified to use a stronger 'Biological agent' to magnify and speed the regenerative process.

Regenerative Joint Injections, Level III: If the damage to the underlying joint and connective tissues are extensive, or if the individual is not able to mount a solid healing or regenerative response, that might be a time to pull out the BIG guns and add some Stem Cells to the proliferent solution.

Currently, the best choice is to use the latest 'Biological Regenerative Agents' from Wharton's Jelly that contains a plethora of **nutrients, growth factors, signaling molecules, and stem cells.**

With each level the cost goes up, as you might expect. The basic injection and support process is the same, however, the cost of the solutions used is significantly more expensive which is what accounts for the increased cost. Adding stem cell bumps the cost up another 50% or so.

Our approach is based on 30 years of doing Regenerative Injection Therapies and around 45 years of clinical experience overall. What I've learned is that the idea of a 'one and done' approach rarely, if ever, works as well as a series of sessions. The optimum number of sessions ranges between 4-6 although people typically feel significantly better after 2-3. From this experience I've developed a protocol that works great for 95+% of people while providing the best value.

Whether it is level I, II, or III, the same rule applies. Pay for 4 sessions and receive up to 7 treatments! My goal is to get optimum results, that is best obtained by having enough treatments to completely heal & regenerate the joint complex as much as possible given the degree of damage. This ranges between about \$2,500 and \$6,500 depending on the joint involved, the level of damage, and the biological regenerative solutions used. The sessions are typically done weekly; however, they can be done closer together or further apart with comparable results. In some situations where the degeneration is extensive, additional booster sessions and biologic solutions may be necessary to complete the healing process. These are done at a discounted rate for program graduates.