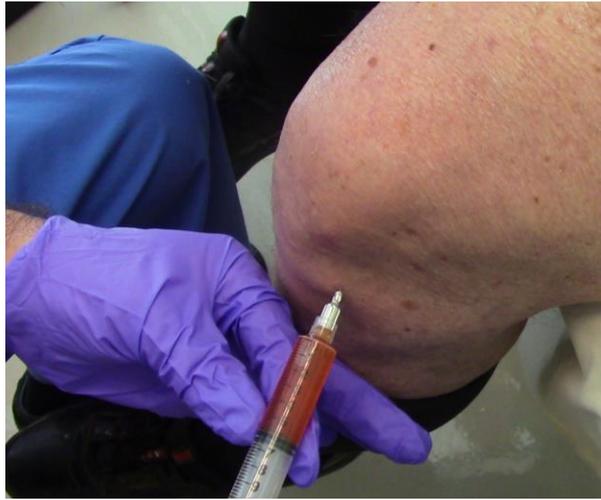




## PROLOTHERAPY



I'm a practitioner and fan of prolotherapy. It's a relatively non-invasive technique that helps restore health to your joints. Admittedly, it's an injection, so it's not totally noninvasive. However, the substances used are naturally occurring (like dextrose--- a sugar your body burns for fuel).

The injections are made into the connective tissue surrounding your joints, especially the ligaments. These are the collagen bands that hold your joints together. Loosening of your ligaments due to trauma or inflammation leads to joint problems and pain. As a result, muscles must work harder to protect the joint motion. Even worse, your body's response to diminished collagen in the joint is to shoot calcium into the joint. The calcium is there to protect, by limiting motion. But you want your joint to move, so calcification created further stress.

By tightening the ligaments (like tightening the hinge on your door), the joint swings without requiring additional muscle contraction to protect it. Less muscle contraction means less pain. It also reduces the need for calcium to limit motion.

If you doubt prolotherapy can solve arthritis problems better than Celebrex or similar drugs, there are many studies out that further prove prolotherapy's effectiveness.

The first is a study on knee arthritis. The participants had suffered with pain on average for eight years. The structural damage of the participants' knees was very evident, with 35 of 111 knees having no cartilage in one or more major locations. The cartilage that remained in the knees was very thin and worn.

Doctors gave each participant only three injections of dextrose solution over six months. The results were stunning! The participants' pain was reduced by 35%, their swelling went down by 45%, and they saw 67% improvement in knee buckling. They also experienced an average 13% improvement in their range of motion. The placebo treatments did no achieve any of these improvements!

Another study looked at injuries to the anterior cruciate ligament, a serious internal knee joint injury. It's an injury that leaves the knee very unstable. Wobbly is an even better word. And it can cause severe arthritis if not corrected.

In the study, researchers injected 16 knees bimonthly with a 10---25% dextrose solution for one year. After that, the researchers gave injections four times a year for two more years. To determine how well the solution worked, researchers tested the looseness of the knee with a machine that measures ACL laxity. It's a very objective measurement.

At the three---year follow---up, the researchers found 10 of the 16 knees were no longer loose. And those knees that did still have some looseness experienced a significant improvement in their arthritis symptoms.

A third study looked at how well prolotherapy worked on groin sprains in athletes. In the study, 24 elite athletes (22 rugby and two soccer players) had chronic pain from sprained leg or abdomen attachments to the groin. They were unable to fully play their sport. All of them had received “usual” treatments for more than 15 months without response.

The researchers gave the athletes monthly injections of dextrose solution. The average number of injections for each participant was 2.8 treatments. The athletes were followed for a year. The researchers found that 20 of the 24 athletes had no pain after more than a year. And 22 of the 24 no longer had restriction on their sports play. That means the pain in 22 of the athletes improved enough to allow full participation in their sport.

These are remarkable findings and so, it is unfortunate that prolotherapy is relatively unknown outside of alternative medical circles. It’s far more effective than NSAID drugs. And it’s safer, too. Of course, no treatment is totally without risk. However, this one is close. My colleagues and I report virtually no infections (which is always a concern with large numbers of injections). Out of tens of thousands of sessions, the worst side effect we’ve seen is only a very rare temporary post-treatment neuralgia (nerve pain). The treatment itself is a little uncomfortable. But we’ve never seen any heart attacks, strokes, or deaths!

### The Only Cure That Works Better Than Prolotherapy!

If you suffer from joint or muscle pain, what you’re about to read will likely change your life. I have experience the most incredible healing therapy the world has even known. This therapy far surpasses any other pain treatment I’ve ever used. In many cases, pain disappears instantly. And the relief can be permanent!

Hard to believe? Not after you read about Erin and several others.

Erin is a lovely 28-year-old woman who was in a terrible car accident. She was in the passenger seat of a car that had been pulled over on a southern California freeway to avoid a police chase. Well, they didn’t avoid it. The fleeing car plowed into her car at 70 mph. Her injuries were extensive. Her doctor told her she would never be able to walk again. She defied her doctors and recovered enough to get around, shunning suggested surgery and other harsh treatments.

When she was first evaluated after seven years following the accident, she limped in with severe chronic pain running from her lower back down through her legs. Her evaluation suggested unstable sacroiliac (SI) joints. The SI joint is the most important in your back. Instability can radiate pain from the small of your back down to your toes. And your conventional doctor won’t have a clue about how to treat it. He’ll offer dangerous and often unsuccessful surgery. And he’ll give you pain pills that have terrible side effects.

Erin agreed to this new treatment, which is a modification of prolotherapy. In just a few minutes, she was about 80% pain free. She was shocked! Two days later she came back for other reasons. At the time of the accident, she was still a newlywed. Most of her married life was spent in horrible pain. When she came back in, she told me that her husband emotionally told her it was fantastic to get his wife back.

But Erin isn’t the only success story. There’s also D. Graham, age 73. He suffered extensive lower back pain for four years. The X-ray showed moderate lumbar degeneration. With just one session, taking only five minutes, his pain was gone, instantly. That was several months ago. So far, the pain has not come back.

Then there’s Patrick. He has degenerating hips. Surgeons recommended hip replacement surgery. After only three sessions, he rates his pain dropping from a 10 down to between 0--2 points.

Finally, there's Mary T. and Mary S. Both of them suffer from chronic knee arthritis. Mary T. is 74. She was an avid equestrian. But the degeneration in her knees caused so much pain that she couldn't ride anymore. Her doctor recommended knee replacements. After only three sessions, she was riding her horse again, which is a very strenuous work out on your knees.

Mary S, a bit older at 78 came in with bone hitting bone in her knees. Her X-ray showed absolutely no joint space. She barely made it in with a walker. A complicating factor was her weight. She is about 100 pounds over her ideal weight. That's a serious risk for anyone's knees.

She was given weight loss suggestions, while her new therapy was performed. It's been 18 months. Mary comes to the office monthly now, walking in on her own, with significant pain reduction. She has avoided the knee replacements, and she now has her smile back. And this relief came without even a pound of weight loss. I don't expect to rebuild a destroyed knee. But to give an elderly obese woman an additional 18 months with her own knees and with significant clinical improvement, I'd say we did very well.

So what is this therapy? It's simply a modification of prolotherapy, which involves targeted injections of natural substances like glucose or saline. These solutions cause temporary inflammation, which stimulates your body to heal. It works in areas where most treatments can't do anything, such as your joints, ligaments, and cartilage. They won't heal very well, because unlike muscles, they don't have a blood supply to bring them oxygen. Prolotherapy injections, irritate the area just enough to stimulate a temporary blood supply to repair the injury.

By modifying prolotherapy, we can actually supercharge the treatment. It heals much faster, which means fewer injections and less pain.

The modification is Prolozone<sup>®</sup>. It's an amazing treatment developed by my friend and colleague, Dr. Frank Shallenberger. He used prolotherapy for years, but, was frustrated with the pain and the large number of treatments needed to see complete healing.

So he decided to try using an oxygen/ozone gas mixture instead of the prolo solution. The treatment essentially directs oxidation, my favorite therapy, to the affected painful area. This induces your own body to actually heal the problem.

You might ask how could there be instant relief of pain endured for years. Well, first the area is anesthetized with procaine, a local anesthetic. A pinch of vitamin B12 and folic acid is added to the procaine. These vitamins stimulate the DNA of cells to get in action for a longer-term fix. Now here's the amazing thing. Procaine typically lasts only 15 minutes. Yet the pain relief lasts and lasts. How could that be?

Let's consider the obvious ----- oxygen. After the numbing medicine, a small amount of gas is injected. Because of the procaine, the injection is virtually painless. It's all oxygen, but a small amount is the highly active oxygen called ozone. Any area of pain and injury is begging for oxygen. That's because oxygen is the most critical nutrient for energy production and healing. Without it, cells simply cannot repair. They might languish in an injured state for years, or eventually die. The oxygen alone can get the cells going. It stimulates them to excrete waste material, and promotes their ability to repair themselves and the tissues around them.

Prolozone works by providing energy---producing oxygen to the innermost parts of your joint. This is where ozone, which I call the miracle healer, does its magic. Ozone is a powerful stimulator of cellular growth factors, such as Transforming Growth Factor Beta (TGF---B). This powerful cytokine activates cartilage cells to produce matrix proteins necessary for the body to make the white cartilage substance.

TGF---B improves matrix protein arrangement. It protects the surface of the cartilage. It modulates the activity of enzymes that dissolve other proteins and compounds that are involved with inflammation. That's a 1---2---3 punch for healing. Injecting ozone in or around the joint stimulates tissue regeneration, a build up of antioxidant enzymes and reduction in inflammation.

Can it actually regenerate your cartilage? I've seen knee X-rays that show a definite increase in cartilage thickness. So, yes, it really does regenerate cartilage.

Ozone reacts almost instantly with the membranes of the cells it contacts. The oxidation of the membrane jump starts the cells. Immune cells are particularly responsive to ozone. They will produce a cascade of powerful healing chemicals called cytokines. These are the very short proteins immune cells use to talk with each other. Immune cells not only provide protection against infection, they also clean up debris and modulate inflammation.

Research has connected arthritis and chronic pain to subclinical infection. While ozone stimulates cells, which it comes into contact with microorganism, it kills them. In other words, this non-toxic therapy can kill microbes on its own, and stimulate your immune cells to kill them as well. When delivered directly to a painful area, the combination of oxygen/ozone provides the stimulation to repair while simultaneously providing the essential oxygen to energize them.

Many practitioners have been doing conventional prolotherapy for over 20 years (see [getprolo.com](http://getprolo.com) for more information). But conventional prolotherapy has some limitations compared to ozone. It's far more uncomfortable. It requires many more needle insertions to get the fluid to the target area. Prolozone injects a gas, which easily diffuses to a much greater area. That promotes widespread stimulation, even to areas that are not in direct contact with the needle. Prolotherapy generally requires several sessions to achieve the same effects Prolozone achieves in just one session. Prolotherapy usually causes inflammatory discomfort at the injection area that peaks in 36 hours. There's almost no lingering discomfort with Prolozone.

Dr. Shallenberger's discovery has changed my practice permanently. If you have chronic pain, Prolozone could be a significant solution to your pain.

EDITED BY DR. AHVIE HERSKOWITZ