

# The Case for Prolotherapy – The Opening Argument

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## AN OPENING ARGUMENT

Most attorneys begin a case with the simple words “Ladies and Gentlemen of the Jury.” The case for Prolotherapy can and must begin a little differently. This journal is not intended for the eyes of jury, because it is not a jury that needs convincing. Instead, this issue is intended for the interested practitioner who wants to learn more, the healed patient who is fighting his insurance company for coverage, or the long-suffering friend who receiving endless cortisone shots that do not end his joint pain. In this issue, the practitioners and researchers on the front lines of the fight against chronic pain will outline the evidence for Prolotherapy.

Any case lives or dies by the evidence that supports it. Medicine should be no different. The recent push for evidence-based medicine underscores the idea that treatments should be supported by systematic reviews of clinical research and cost effective compared to its benefits. Evidence based medicine seeks to move beyond conventional wisdom and traditional remedies, and bring the results of research to clinical settings. In the case for Prolotherapy, the strength and weight of the evidence shows that it is effective at reducing pain, affordable, and low risk.

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## PROLOTHERAPY IS EVIDENCE-BASED MEDICINE

The prevalence of musculoskeletal conditions is staggering. According to the U.S. Bone and Joint Initiative, the cost of dealing with musculoskeletal conditions is an estimated \$849 billion dollars a year. This seems staggering until one considers that one out of every two Americans will require medical care for a bone or joint issue in their lifetime. With an aging population and a populace that has become accustomed to an increasingly sedentary lifestyle, these numbers are only expected to grow in the coming years. If a lasting, cost effective treatment is available for

even a portion of those suffering from arthritis and other joint ailments, it could improve the quality of life for millions while containing health care costs.

This issue explores the evidence in the case for Prolotherapy as a treatment for musculoskeletal conditions. When considering a treatment, the U.S. Preventative Services Task Force (USPSTF) ranks evidence on a three-point scale as good, fair, or poor, and weighs the benefits against the risks posed. For example, good evidence includes well-designed, well-conducted studies that directly assess effects on health outcomes, while fair evidence would include evidence sufficient to determine effects on health outcomes, but perhaps lacking in the size, scope, or consistency of individual studies. When there is good or fair evidence for a procedure, and the benefits of the service outweigh its harms, the USPSTF issues an A or B recommendation respectively.

This issue presents the evidence to support an A and B recommendation for the use of dextrose Prolotherapy. This is because studies show not only that Prolotherapy is effective, but perhaps as important, it is a low risk, inexpensive outpatient procedure that allows for quick recovery and near instantaneous return to normal activities.

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## PATIENTS DESERVE MORE THAN PAIN MANAGEMENT

In 2001, I caught the front edge of my snowboard during a ski trip in Arizona. My nose caught the snowboard, but my shoulder absorbed most of the impact as I tumbled down the slopes. What seemed like a minor injury at the time (perhaps minor compared to a very gruesome looking nose), never healed correctly and caused pain for years. In what is all too common a story, doctors treated my injury by managing the pain. After multiple consultations and other treatments, I was told that my only option was pain management.

Patients deserve better than having their pain “managed.” Patients need and deserve to have their pain resolved. In this issue you will read about how Prolotherapy not only diminishes pain, but is able to strengthen and stabilize painful ligaments. Prolotherapy addresses the underlying problem, not just the symptom of pain.

In this issue, you will find a scientific literature review limited solely to dextrose Prolotherapy. This review pooled data from over 2,400 patients treated with dextrose Prolotherapy and found that, in studies using comparable scales, patients experience an average 4.4 point reduction in pain on the Visual Analogue Scale or Numeric Rating Scale after treatment. In plain English, when patients were asked to rank their pain on a zero to 10 scale, they ranked their pain an average 4.4 points lower at the end of Prolotherapy treatment than at the beginning. Not only is this statistic a huge quality of life improvement for an individual, it is over 150% the pain relief required for treatment to be considered clinically significant.

The evidence shows Prolotherapy lowers pain, but also decreases ligament laxity, helping restore and heal the joint. Left unchecked, a ligament-injured joint is a risk for osteoarthritis, causing further pain and disability. This issue shows how Prolotherapy is different than cortisone treatments or ibuprofen, in that it helps restore the compromised structure and prevent further degeneration. It is not merely pain management; it is pain resolution.

Prolotherapy is not merely pain management; it is pain resolution.

PROLOTHERAPY SHOULD BE OFFERED AS A FIRST TREATMENT AND NOT A LAST RESORT

By the time I found Prolotherapy, I had already experienced countless treatments that were not effective. Many patients find Prolotherapy after another doctor has told them that there are no more options or that surgery is the only option.

When a treatment is supported by level A or B evidence it is the recommendation that the clinician provide this service to eligible patients. If patients were to receive Prolotherapy before more invasive services, perhaps many surgeries could be forgone, netting a huge savings in health

costs. Further, by promptly treating injuries before they develop into more serious degenerative illnesses, patients would experience fewer disabilities and a higher quality of life.

PROLOTHERAPY IS WELL ESTABLISHED

If you have ever sought reimbursement for Prolotherapy, you have probably heard these words before: “[Your insurance company] considers Prolotherapy (also known as proliferant therapy or proliferation therapy) experimental and investigational for any indications.” Prolotherapy was first used in the fifth Century B.C., and while the methods have changed, the science behind Prolotherapy has not. By inducing inflammation in injured ligaments, Prolotherapy stimulates the body’s healing mechanisms and self-repair. Nevertheless, insurance companies across the board regard Prolotherapy as experimental even for patients who have experienced a complete resolution of their pain.

There are multiple reasons why Prolotherapy should not be considered an “experimental” procedure, but first consider what the term “experimental” means. There is no uniform definition for the term. “Experimental” means whatever an insurance company says it means in the insurance contract. Typically, these definitions look to whether a procedure is generally recognized in the medical community as effective and appropriate for the specific diagnosis being treated. Occasionally the language may merely rely on the judgment of the Plan Administrator, leaving the patient unable to determine on his own what will be covered. Rarely, a plan or jurisdiction may rely on a more specific definition of “experimental.”

Consider, for example, a more specific definition adopted by the Kansas Board of Healing Arts, albeit for purposes other than insurance. Under their definition, a procedure is not experimental if it is “taught as an acceptable method or procedure as part of the core curriculum of an approved professional school,” “taught as an acceptable method or procedure by an academic training institution in an approved post graduate program in the healing arts” or “based upon sufficient learned publications supporting [its] safety and efficacy.”

Not only is the efficacy of Prolotherapy supported by the literature, but Prolotherapy has its own specialty college within the American Osteopathic Association, is performed

and taught at the University of Wisconsin School of Medicine, and has even been cited by the Mayo Clinic as a treatment for ligament pain. Furthermore, Prolotherapy training is a requirement in the neuromuscular residency training for Osteopathic doctors, and is common in Osteopathic medical schools and universities.

While Prolotherapy is routinely not covered, many insurance companies continue to cover treatments that are not supported by evidence. There is not evidence for example, that cortisone has any benefit beyond three weeks, and some studies have suggested that cortisone may accelerate the arthritic process. More extreme examples include certain types of arthroscopy for knee osteoarthritis that have been shown to have no benefit, compared to sham operations, or placebo. Before we ask one more patient to undergo an expensive and painful surgery and rehabilitation, we should examine the evidence whether the procedure is effective. By creating a culture of evidence-based medicine, patients will receive better care and health care cost could be kept in check.

#### THE VERDICT FOR PROLOThERAPY

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This issue lays out in detail the case for Prolotherapy. The evidence shows that Prolotherapy is effective for a wide range of injuries caused by injured ligaments and other soft tissue structures. The evidence shows Prolotherapy has a role in preventing arthritis, restoring joints, and even healing our pets. The evidence shows that it is effective at reducing pain, affordable, and low risk. Moreover, the case for Prolotherapy asks us to reexamine the way we treat injuries. Over half of the people reading this will seek medical attention for a joint or bone injury in their lifetime. They deserve nothing less than the best care, and the best care is that which is supported by evidence. ■