

## PROLOTHERAPY

**INTRODUCTION:** Prolotherapy (also known as regenerative injection therapy) is useful for the relief of chronic musculoskeletal pain. It is a great alternative to surgery, cortisone shots, and narcotic pain medicine, and is a good option when conventional treatments such as physical therapy, joint manipulation, and surgery fail. The clinical success rate for resolving chronic pain and dysfunction with prolotherapy is 85% or more.

Often described as “anti-aging medicine for the joints,” prolotherapy restores tissue health and function, encourages the deposit of new, better organized collagen, strengthens ligaments, stabilizes the joints, and reverses conditions leading to the development of osteoarthritis. It has been used by orthopedic, osteopathic, and naturopathic physicians since the 1950s and is practiced today at such medical facilities as University Hospital, The Mayo Clinic in Rochester, and Scripps Institute in California. It is endorsed by The American Academy of Pain Management for the treatment of chronic, unresolved musculoskeletal pain.

**HOW IT WORKS:** During treatment, a sugar-based (dextrose) solution is injected into the affected ligament, tendon and/or joint, causing a localized subclinical inflammatory response. The injected prolotherapy substance acts as a growth factor, promoting cell and tissue regeneration. The body responds by increasing the blood supply and flow of nutrients to the area, causing the area to repair, strengthen, and tighten itself. New collagen (which ligaments and tendons are made of) is also deposited, resulting in a stronger joint.

**INDICATIONS:** Prolotherapy can be useful for any chronic pain originating from a ligament, tendon, or joint. Candidates for treatment include people with arthritis, musculoskeletal disorders, and back pain, particularly those who have found little or no relief through manual or physical therapy, cortisone injections, or surgery.

**CONTRAINDICATIONS:** Prolotherapy should not be used where metal (usually associated with joint replacement or fracture repair) is present in the vicinity of the injection. Also, if a patient is allergic to particular anesthetics, care must be taken to inject an anesthetic that will not cause an allergic reaction.

**TREATMENT PROTOCOLS:** A local anesthetic is often given to numb the treated area to reduce discomfort. The patient may be a little sore for a day or so after treatment.

The response to treatment varies from individual to individual, and depends upon one's healing ability. Results usually start to appear in 2-6 weeks. Some people may need only one treatment while others may need six or more. Prolotherapy tends to yield “permanent” results, with booster injections required just once a year (if at all) after the initial series.

Following an injection, the patient should not use any anti-inflammatory medication (NSAIDs) for 7 days. Tylenol can be used if pain is unbearable; ice and heat can also be applied to the affected area. During the course of treatment, patients should also avoid aggressive physical activities that might stress the injured area.

Prolotherapy should only be performed by physicians knowledgeable about prolotherapy techniques and substances. Skill is required to properly diagnosis the location of the causative condition or injury. Sprains, strains, and weakened ligaments do not show up on diagnostic images.

