

Curing Chronic Pain with Prolotherapy

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Have you ever suffered from chronic musculoskeletal pain? If you have, you are not alone. Statistically speaking, 75% of Americans will experience chronic back pain in their lifetime. Unfortunately, a stressful and active lifestyle may not give our body the chance it deserves to heal. Instead we are prescribed medicines such as ibuprofen (i.e., Motrin, Advil) and naproxen (i.e., Aleve) that relieve pain and decrease the inflammatory process.

However, natural healing is predicated upon inflammation. Your body releases naturally occurring chemicals known as cytokines, chemotactic substances and vasoactive factors in response to injury to help repair the body. Drugs such as ibuprofen block these healing factors resulting in unrepaired microscopic damage to the tendons, ligaments and joints. When these structures haven't completely healed, the body compensates and signals the surrounding muscles to spasm. Chronic pain results from a combination of these factors.

Therefore, without correcting the underlying problem, your pain will persist. Fortunately, there is a way to correct the underlying defect by stimulating the body to repair itself using a technique known as Prolotherapy.

Definition and History

Prolotherapy (also called sclerotherapy) is named for its proliferative effect on tendons and ligaments. Although the term was coined by an industrial surgeon in the 1950s, Prolotherapy was first used in ancient times. Hippocrates treated injured rotator cuffs of javelin throwers back around 400 B.C. with hot lances to create small amounts of scar tissue around the shoulder joint. The technique evolved in the 1930s and was used to repair hernias before modern surgical techniques became available. Dr. George Hackett refined the procedure and described the use of localized injections into the junction between a bone and tendon, causing a controlled rate of inflammation and healing. Hackett also described the sclerogenous origin of pain, that is, pain referred from an injured tendon, ligament or bone. He had success in relieving headaches and arm and shoulder pain by treating injuries in the neck. Similar points have been described in treatment of the legs and hips.

Healing Mechanisms of Prolotherapy

The healing process is a multi-factorial event. Healing pathways are multiple and are initiated by tissue injury. Injury provokes the release of chemotactic factors and complement, and stimulates processes known as fibrinolysis and coagulation. Specialized white blood cells, called neutrophils and macrophages, enter the site to eliminate cellular debris and to release growth factors. These growth factors tell your body to deposit a new collagen matrix, initiating the rebuilding and strengthening of the damaged structure.

Several solutions may be used for Prolotherapy treatment. A standard solution will consist of an anesthetic (numbing agent) combined with an inflammatory agent such as phenol, dextrose, or sodium morrhuate. This inflammation triggers biochemicals that signal the beginning of the natural healing process.

Case Histories

G.A. is a fifty-two-year-old female who experienced severe pain in her right ankle. Even the simple task of walking became a painful chore. She was diagnosed with chronic ankle tendinitis and reflex sympathetic dystrophy. Ankle surgery and physical therapy did not relieve her symptoms. The severity of pain led her to become disabled for a period of four months. When she was examined, pain was noted on palpation of the supporting ankle ligaments, and the ankle joint was hypermobile. There were no abnormalities appreciated in the knees, hips or back. After a series of Prolotherapy treatments, G.A.'s pain completely resolved. She was no longer disabled and resumed full time employment.

A.S. is a sixty-two-year-old female with chronic neck and back pain. She owns a health food store and is active in all aspects of its operation, including the lifting of cartons. A.S. had failed to cure her pain with numerous supplements such as MSM, boswellia, glucosamine, chondroitin, tumeric and SAME. She was unable to get relief from acupuncture or chiropractic treatments. Radiographs and MRIs of her spine taken by her primary physician did not reveal any abnormalities. On examination, she had full range of motion of her lumbar spine, cervical spine, hips, and knees. She was tender upon palpation of the sacroiliac joints and had tension in the muscles that support the spine. Prolotherapy injections were given to the joints and ligaments of the neck, low back, and sacral area. After three sessions, her pain had decreased 70-80%. She began to sleep better and no longer awoke at night from back or neck pain.

Conclusion

Prolotherapy is a safe and effective treatment for pain. It presents a superior treatment option for relieving chronic pain when compared to drugs which interfere with the inflammatory pathways of healing. Proper and complete healing can only occur when the natural pathways are left uninterrupted. As a result, Prolotherapy should be considered a tool in treating chronic pain.