

How does Prolotherapy help?

Jason Porter, NMD

Prolotherapy is a method of treatment utilizing nutritive injections for the purpose of strengthening ligament and tendon attachments. The injections stimulate the growth of new collagen and ligament fibers resulting in stronger ligaments, more stable or tighter joints, improved joint function and reduction in pain.

The first layers of joint stabilizers include the ligaments that attach bone to bone. The next layers of joint stabilizers are small muscles that span the length of a single or multiple joints. These deep muscles are often referred to as the core muscles. Exercise routines such as Pilates and Yoga help strengthen these core muscles. Overlying these core muscles are larger muscles which are known as prime movers. They are designed for gross or dynamic movement and although not considered joint stabilizers, they do help and are called upon more so when there is an injury to a related joint. These muscles include the quadriceps, hamstrings, gluteals, piriformis, pectorals, and so on.

Pain comes as a result of a direct injury or the slow repetitive injury that occurs overtime of the ligamentous joint stabilizers. Many times people may feel this injury immediately such as a torn meniscus in the knee or a rolled ankle, but just as frequent is the slow repetitive stretching and weakening of the deep ligaments due to tasks as simple and common as walking. This is biomechanical damage that occurs because we are walking incorrectly, causing the angles of forces to travel outside the center of the joint. Initially our bodies are able to stabilize a joint with the deep core muscles. We may notice some pain and discomfort on occasion, but it is easily relieved with stretching, acupuncture, massage, physical therapy and manipulation. If overtime more damage occurs through simple wear and tear or a person is directly injured, the larger muscles or prime movers will jump in to help stabilize and try to save a joint. That is when pain is felt in the low back, in the gluteals, and even radiating down the leg toward the calve muscle. When the damage or strain to a joint is extensive or fails to respond to the above mentioned therapies, then other therapies such as trigger point therapy and prolotherapy are utilized to strengthen a joint and reduce pain.

Once stretched or weakened, ligaments are not able to return to there original strength or length without outside assistance. Again, many therapies are very beneficial such as acupuncture, manipulation, massage, stretching, and rightly directed exercise, when pain is present. But, when these forms of therapy do not lead to a complete resolution of pain or the pain continually returns, this is an indication along with a thorough physical exam, that the deep stabilizers, mainly the ligaments are stretched and weakened.

The solution seems simple: strengthen the ligaments. There are natural products such as glucosamine and curcumin that have shown benefit in sparing joint cartilage and even repairing to some degree. But the most effective treatment thus far is Regenerative Injection Therapy (RIT) or otherwise known as Prolotherapy.

Treatment solutions consist of dextrose (a sugar), procaine, glucosamine sulfate, and vitamin B12, which work in combination to stimulate a mild inflammation of the ligamentous tissue and a subsequent healing with an increase in tensile strength. RIT solutions do not contain cortisone which actually may weaken ligamentous tissue.

The strengthening process continues for approximately 1-4 weeks following the treatment. Pain diminishes over this period as ligaments grow stronger and function of the joint returns. For many, pain relief occurs following the first or second treatment, but total repair may require from 3-8 treatments according to the severity of pain and history of the joint instability.

Prolotherapy has been applied since 1936 and is applauded by many pain specialists as the most effective treatment for pain therapy available in this country. Even our former U.S. Surgeon General, Dr. C. Everett Koop has been quoted as saying, "I have been a patient who has benefited from Prolotherapy. I saw so many...cured that I could not help but become a believer in Prolotherapy."