

Prolotherapy

Prolotherapy is a technique directed at treating the underlying cause of many pain problems. Although the technique has been around for almost 30 years, it has only recently been widely used.

Ligaments are the “ropes” that hold your bones together. Tendons are the structures that attach the muscle to the bones. Both are made of material which is both strong and elastic. However, just like an elastic waistband, if the ligaments are over stretched (because of injury or repetitive stress they become less elastic and the bones no longer “fit together.” The initial inflammation after an injury may not result in full healing.

Prolotherapy may help the body to repair itself by stimulating the production of repair cells called fibroblasts. The injection of irritating medicine around the loose ligaments stimulates the body to lay down more connective tissue. Many irritants (or proliferants) have been used; the one I use is dextrose 25 which is a highly concentrated sugar solution.

The proliferant is mixed with local anesthetic and injected into the base of the ligament where it attaches to the bone. The local anesthetic should take away virtually all the pain for several hours. However, for several days after that, you should expect to be stiff and sore. Motion is very helpful or Bromelain. Bruising and swelling are normal and will pass. As the inflammation dies down, you may gradually notice a strengthening along with a decrease in pain. Each set of injections stimulates only a thin new layer of tissue and the tissues can take up to six weeks to come to full strength. The injections are usually repeated at two to six week intervals until the tissues have reached their maximum strength. The typical course of treatment is 3 injections.

Since prolotherapy of all types uses your body’s own repair system, anything that hinders your healing response hurts the effectiveness of this type of treatment. The most common problem is smoking which cuts the effectiveness at least in half. Anti-inflammatory medications such as Aleve and Mortin stop the repair as well. Other important considerations including hormones and Vitamin D levels. I recommend taking fish oil approximately 2 gm per day. It is important to look for fish oil that is mercury free.

Every treatment has possible side effects. With any injection there is a possibility of infection or nerve injury. There is also the possibility of puncturing a lung with an injection in the chest or back. These complications are extremely rare. Prolotherapy helps rebuild new tissue and is relatively slow so something little if any improvement of the pain occurs initially. Dangerous side effects from the medication are very infrequent, especially with the use of dextrose. It is possible that someone could be allergic to the medication used for numbing the area which is injected with the dextrose (Lidocaine).

In order to achieve the greatest success and minimize the number of injections, good nutrition and physical therapy (exercise programs) are extremely helpful. Do not use any anti-inflammatory medicine throughout the duration of the treatment period, acceptable medications include Tylenol, Tramadol (Ultram) a prescription drug, and Bromelain, a plant enzyme that is available over the counter.