

***Prolotherapy is also known as nonsurgical ligament reconstruction, and is a treatment for chronic pain***

### **Prolotherapy is helpful for what conditions?**

The treatment is useful for many different types of musculoskeletal pain, including arthritis, back pain, neck pain, fibromyalgia, sports injuries, unresolved whiplash injuries, carpal tunnel syndrome, chronic tendonitis, partially torn tendons, ligaments and cartilage, degenerated or herniated discs, TMJ and sciatica.

### **What is prolotherapy?**

First, it is important to understand what the word **prolotherapy** itself means. "*Prolo*" is short for *proliferation*, because the treatment causes the proliferation (growth, formation) of new ligament tissue in areas where it has become weak.

**Ligaments** are the structural "rubber bands" that hold *bones to bones* in joints. Ligaments can become weak or injured and may not heal back to their original strength or endurance. This is largely because the blood supply to ligaments is limited, and therefore healing is slow and not always complete. To further complicate this, ligaments also have many nerve endings and therefore the person will feel pain at the areas where the ligaments are damaged or loose.

**Tendons** are the name given to tissue which connects *muscles to bones*, and in the same manner tendons may also become injured, and cause pain.

Prolotherapy uses a *dextrose* (sugar water) solution, which is injected into the ligament or tendon where it attaches to the bone. This causes a localized inflammation in these weak areas which then *increases the blood supply* and flow of nutrients and stimulates the tissue to repair itself.

Historical review shows that a version of this technique was first used by Hippocrates on soldiers with dislocated, torn shoulder joints. He would stick a hot poker into the joint, and it would then miraculously heal normally. Of course, we don't use hot pokers today, but the principle is similar—get the body to repair itself, an innate ability that the body has.

Another effective and similar form of prolotherapy that stimulates the proliferation of new tissue is Trigger Point Dry Needling (TDN). TDN involves the use of a fine filament needle (acupuncture needle) to deactivate tight and tender trigger points within a muscle. This deactivation involves pistoning of the needle which causes a local inflammatory reaction in the tissue being needled. Tissues that respond well to this form of intervention include; muscles, tendons, fascia and ligaments.

For a list of practitioners trained in TDN 'click here'.