

Prolotherapy: Non-surgical Solution to Chronic Pain and Injured Joints



Prolotherapy is a non-surgical, medication free solution to pain. In prolotherapy, stretched or torn tendons and ligaments are treated with pro-inflammatory agents like dextrose and glucosamine over several weeks time, resulting in loss of pain and the return of normal function to the area treated.¹

Pain is the single most common reason why patients visit their doctor. Musculoskeletal pain is the most common type of pain and is conventionally treated with pain medications and surgery; overlooking a well documented and amazingly effective treatment called prolotherapy. Prolotherapy, also known as regenerative injection therapy (RIT) was first performed as early as the 1930's. The earliest contemporary pioneer of the art was George S. Hackett, M.D. who developed much of its methodology through the 1950's². From its humble beginnings, prolotherapy is now practiced across the nation and worldwide by hundreds of alternative medicine minded physicians.

Definition of Prolotherapy

Prolotherapy is the restoration of painful, injured and arthritic joints by injections that stimulate healing via the wound healing cascade. The injections stimulate blood flow and cause a low grade inflammation resulting in the release of growth factors which activate collagen. The collagen then deposits cells called fibroblasts, giving new strength to the area. What results is a stronger, thicker and tighter ligament and joint. This is the same general healing cascade that occurs in response to any injury and is necessary to return any injured tissue back to function.

Research and Rationale

K. Dean Reeves, M.D., chief of Physical Medicine and Rehabilitation at Bethany Medical Center in Kansas City is the foremost proponent of prolotherapy and author of several contemporary clinical studies on the subject. He concludes that the inflammatory proliferent injections for chronic low back pain according to research, resulted in significant improvement in pain and decreased disability in two randomized, double-blind studies and that "direct exposure of fibroblast to growth factors causes new cell growth and collagen deposition."³

Why Old Injuries Still Hurt

Anatomically, the distribution of blood vessels to ligaments and tendons is sparse. In the event of a joint injury such as chronic overuse or an acute traumatic sprain or strain the naturally limited blood flow dampens the healing cascade. After an injury, growth factors are present only for a few days.³ The healing cascade is also dampened by non-steroidal anti-inflammatory drugs, steroids and even ice. If healing is not complete, ligaments and tendons will remain loose, weak, and painful. This often contributes to cartilage degeneration or arthritis, which causes more pain. Reeves, states "without further stimulation of growth factors, sufficient repair cannot take place."³

The Benefits of Prolotherapy

The treatments are helpful not only for chronic joint pain but for acute joint pain and injuries as well. Conditions treated include sprains and strains, tendonitis, tendonosis, arthritis, low back pain, tennis elbow, carpal tunnel syndrome, sciatic and others. Prolotherapy is proven to decrease or eliminate pain and improve joint function and to allow a return to previous activity. Prolotherapy gives individuals the opportunity to no longer rely on pain medications. Prolotherapy is beneficial to both young and older adults and athletes.

How many treatments do I need?

The number of treatments is determined by the extent of the injury, the complexity of the joint, the area being treated, and the age and health of the patient. Simple joints with less injury need as few as two or three treatments while joints more significantly affected by injury or degeneration, or those anatomically more complex such as the back may require six or more treatments. Lastly, patients in a poorer state of health or those with unhealthy habits such as smoking require more treatments than those who are healthier. Treatments are spaced at four to six week intervals.

Dr. Ayo Bankole has received advanced training in prolotherapy and is a member of the Naturopathic Academy of Therapeutic Injection www.injectiontx.org and the American Association of Naturopathic Physicians www.naturopathic.org. He uses prolotherapy to treat pain conditions of the back, hips, knees, feet, shoulders, elbows, and hands. To learn if prolotherapy is right for you call our office at **951.801.2302** for a free consultation. Additional reading can be found at www.prolotherapy.org.

References:

1. Banks, A. A Rationale for Prolotherapy
2. Hackett G, Hemwall, Montgomery, G. Ligament and Tendon Relaxation treated by Prolotherapy
3. Reeves, K. Prolotherapy: Basic Science, Clinical Studies, and Technique