Addressing Fibrosis to Improve Tendinopathies

Histopathologic studies have long established inappropriate fibrosis and scarring, that lacks the parallel, longitudinal structure of a normal tendon, as consistent elements in various tendinopathies.\(^1\)\(^-\)\(^7\) Here we use the term tendinopathies to encompass both tendinitis and tendinosis diagnoses. Of course, the discomfort lasting 3 weeks or more and labeled tendinitis is not typically the result of inflammation as the term tendonitis would imply.\(^8\) Painful overuse tendon conditions more commonly result from forms of collagen differentiation, and scientific evaluation shows that the typical presentations usually do not include inflammatory cells.\(^1\)\(^,\)\(^9\)\(^,\)\(^10\) If patients with tendinopathies are to continue the work or exercise activities that aggravate their tendinopathies, therapies with long-term positive results must be prescribed.

Standard physical therapy approaches have produced long-term results in various tendinopathies. However, one of the specialized approaches available at Enfield Health & Wellness Center improves physical therapy results by specifically addressing the fibrosis and scarring usually associated with tendinopathies.\(^11\)\(^-\)\(^14\) The Graston Technique is an instrument-assisted, soft tissue mobilization technique utilizing ergonomically designed stainless steel instruments to detect and break down scar tissue and fascial restrictions. The controlled microtrauma introduced by the Graston Technique initiates a local inflammatory response that leads to the resorption of inappropriate fibrosis or excessive scar tissue. The doses of controlled microtrauma also stimulate regeneration of the targeted structures.\(^15\) The manual therapy treatments are accompanied by programs of functional activities and stretches that direct the collagen formation in more functional patterns. In one study of cases diagnosed as patellar tendinitis, normal physical therapy resolved the patient complaint in 60% of cases while instrument assisted, soft tissue mobilization resolved the patellar tendinitis complaints in 100% of cases.\(^16\)

At Enfield Health & Wellness Center, use of the Graston Technique begins with an assessment to determine the appropriateness of the treatments. Treatments address the entire kinetic chain related to the complaint, not just the site of the complaint. Therapists utilize a selection of ergonomically designed, stainless steel instruments that are not only designed to apply optimal pressure to the varying contours of different body parts, but that are also designed to conduct sensory input to the therapist. Therapists pass instruments over targeted structures, breaking up adhesions, attempting to locate gritty, gravelly, and sandy sensations that are amplified to the therapist through the Graston instrument. Less severe conditions often respond well in 2-4 sessions while difficult, chronic cases my require 8-16 sessions. The manual therapy portion of the sessions ranges from non-painful to mildly painful. If sharp pain is experienced, treatments are halted. Graston Technique typically produces rapid improvements in function and pain and thereby facilitates patient adherence to the treatment plan.

Therapists have found the Graston Technique useful in a number of situations including:
- Post Surgical Tendon Complaints
- Carpal Tunnel Symptoms
- Lateral Epicondylitis
- DeQuervain’s Tenosynovitis
- Trigger Finger
- Heel Pain
- Achilles Tendinopathies
- Shin Splints
- IT Band Syndrome
- Chronic Hamstring Strain
- Joint Contractures
- Anterior Knee Pain
- Plantar Fasciitis

Please refer your patients to Enfield Health & Wellness Center
Doctor Recommended, Patient Preferred
REFERENCES


