

## Applying the Graston Technique: An Update

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I have discussed soft tissue lesions in this column for years, and have taken all types of courses on their evaluation and treatment. This education, and my own clinical practice, left no doubt in my mind that pressure/loading of soft tissue produces a healing effect. What I didn't know until recently is that a relatively new treatment protocol, the Graston technique, would substantiate my experience.

Research literature has documented the effects of loading on soft tissue. We now know that we are affecting it on a cellular level from many aspects, one being the piezoelectric effect.<sup>1</sup> Soft tissue loading causes fibroblastic proliferation that is responsible for the synthesis and maintenance of collagen, fibronectin, proteoglycans and other proteins of the connective tissue matrix. Additionally, we know there is a resorption of restrictive fibrotic tissue. Finally, there is the importance of creating a vascular disruption - necessary to initiate a new inflammatory cascade, and ultimately the remodeling stage of new collagen formation along the normal lines of stress.<sup>2-4</sup> Tensile load is also proven to create an increase in proteoglycan synthesis and collagen synthesis in the extracellular matrix.<sup>5</sup>

However, to identify the source of soft tissue lesions, soft tissue loading must be based on accurate functional testing. Practitioners must have a method of palpating this abnormal tissue for diagnosis, and a technique for effective treatment.

Enter Graston and its stainless steel instruments. My experience with the technique during this past year-and-a-half has convinced me that our profession now has available a truly revolutionary advance in the diagnosis and treatment of soft tissue lesions.

I discussed my experiences with the instruments in a *Dynamic Chiropractic* article in September 2001.<sup>6</sup> A few months before I wrote that article, the Graston staff had contacted me and sent a trained clinician to my office to demonstrate the unique effectiveness of the technique. Over the next two months, I used the instruments in my own practice and became convinced of their capacity to detect and treat soft tissue lesions. Now, after using the instruments over an extended period, my original impressions are magnified. (Currently, I instruct a 12-hour advanced course on the technique that details functional testing of soft tissue lesions and their treatment. Prior to the advanced seminar, clinicians are required to attend Module I, a 12-hour basic training lab course on the hand-holds, strokes and techniques needed to treat the various soft tissue sites of the body. This module includes indications and contraindications for use of the technique.)

My fascination with the instruments is that, although they do not reveal skin temperature, moisture and tissue layers as can the hands, they can significantly magnify what you can feel. The pads of the fingers cannot distinguish individual fibers and many hidden restrictions, but the stainless steel instruments can. It is not uncommon for me to locate with the instruments a deep fibrous restriction, bumpiness, gristle-like deposits or scar tissue that I could not have found with unaided manual palpation. The instruments leave no doubt in my mind, or that of the patient's, that a significant area needs treatment. On occasion, I may ask the patient's relative or friend who may

accompany the patient to touch the instrument while I pass over the area, and even this person can "feel" the lesion by way of the vibratory sensation.

Not only do the instruments assist in identifying areas in need of treatment, which formerly were not apparent, but also in directing the clinician in the precise treatment. The instrument can be passed over the lesion in multiple directions, typically five or six, to find the usual two or three directions that create the abnormal barrier sensation. This reveals to the practitioner and the patient that if the lesion is treated in a particular direction, the treatment will be specific to provide rapid response and recovery. I have often suspected that the direct patient understanding, made possible by the instruments, helps the patient be more involved in the process and promotes more rapid recovery.

Areas of involvement proximal or distal to the lesion are essential, and must be treated. Manual palpation will not help locate many of these areas, necessitating the aid of the instruments. The technique also enhances manual treatment, which expands our effectiveness in many ways. Hamstring problems, for example, can be prevented by using the instruments passively over the hamstrings and related areas in "normal" athletes only to reveal potential minimal restrictions that may eventually result in a tear. Personally, a considerable benefit of the instruments is the reduction of wear and tear on my own hands and joints.

For years, I used a T-bar to reach difficult areas, but its effectiveness fades when compared to the six Graston instruments. Each is fashioned to conform to the anatomy of the body, and has either a single-or double-beveled edge, designed to treat specific tissue types in specific ways. The type of edge used depends on the location of the lesion, and the instrument/edge will vary depending if the lesion is in the belly, musculotendinous or insertion area of muscle/fascia, or if it is locally around a joint (maleolae, patella, greater tuberosity, etc).

This technique has permitted me to send orthopedists, internists and podiatrists reports on their patients when previous treatments have failed. These reports explain how I achieved positive results with the technique. Not only have doctor referrals increased as a result, but patient referrals have risen substantially.

### *References*

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