Soft (and Not-So-Soft)-Tissue Overview

By Marc Heller, DC

In my opinion, quality chiropractic care begins with combining soft-tissue techniques with joint manipulation and rehabilitation exercise. Muscles move bones. If you are not addressing the dysfunction in the muscles, your adjusting is much less likely to have long-term success.

This article, the first in a series on soft-tissue techniques, reviews some of soft-tissue methods I have been introduced to over the past 35 years.

One underlying theme when it comes to the various soft-tissue methods is that pain is a liar. The pain generator may be the local joint, or the nerves affected by disc pathology or impingement, but we need to look beyond that. "He who treats (only) the site of pain is lost" has been attributed to Lewit. Research proving that soft tissue is the source of a particular pain is difficult. Sometimes the pain generator can be identified, but the question remains, what is pulling on the pain generator?

Clinical confirmation that a particular soft-tissue restriction is significant to the patient’s complaint is not so difficult. My usual protocol for difficult conditions is fairly straightforward. Find a functional test, a limited ROM, a difficult motion, that relates to the main complaint. In addition or as a substitute, find one or more tender points that are in the area of pain. Next, do your search pattern, whatever that is. You can use palpation, AK-style muscle testing, Barral’s "listening," logic; whatever.

Find an area of soft tissue, either nearby or distant, that you suspect relates to the symptomatic area. You could do the "treatment test" in one of three ways:

1. briefly treat the soft tissue;
2. completely treat the soft tissue; or
3. hold the soft tissue in the direction you think will help.

Treatment could be Graston Technique, myofascial release, or just finding the barrier and holding the lesioned area toward the barrier or away from the barrier (indirect).
Having initiated the "treatment test," now go back to the original functional test or tender points and recheck them. Are they somewhat improved? If so, this area is significant to the patient’s complaint. If not, find other areas you suspect may be involved.

The goal of this protocol is to individualize treatment to the patient, to their particular set of fascial patterns. There is good research suggesting that identifying a treatment that works during the clinical session helps make any therapy more effective.¹²

**Soft-Tissue Techniques**

Let’s briefly review several soft-tissue techniques with which I am familiar. Keep in mind that this list is not complete; there are many brilliant therapists who have either invented or evolved different systems.

I divide soft tissue into low-force and higher-force methods. Although I tend to prefer to do most of my joint manipulation with low-force methods, I like and appreciate both low-force and higher-force soft-tissue methods. I suspect that they do different things.

*Craniosacral therapy:* Lower-force soft-tissue methods probably start with craniosacral therapy and variations on it. Cranial has many variations; it can be a therapy that focuses on the bones of the skull or it can be a therapy that feels for a particular rhythm, and disturbances of that rhythm. The rhythm is seen as the motion of the fluids, a cranial respiratory motion, and expansion and external rotation of the whole of the body, followed by a contraction and internal rotation of the whole body. This is thought to start in the cerebrospinal fluids and spread throughout the body.

*Myofascial release:* Another popular low-force fascial method is myofascial release. Popularized by John Barnes, PT, it uses a gentle, long three-dimensional release. You could call it fascial stretching, but it is much more sophisticated than that.

*Strain-counterstrain:* Another low-force method is strain-counterstrain. This was developed by Lawrence Jones, DO, around 1955. The points are named after joints, but most of the points are in muscles, tendons, ligaments or fascia. It seems to be particularly effective on spots that are extremely tender to the touch. You fold and hold, or slack the tissue, until you find a position at which the point is much less tender. Then hold the positioning for 90 seconds while monitoring the point. When you are done, the tender point is usually gone. It is postulated that the original strain left the muscles spindles or GTOs in an aberrant set point, and that slacking the tissue helps reset them.
Visceral manipulation is another of my favorites, although not as well-known. Visceral was developed by a French osteopath, Jean Pierre Barral. He postulates that the fascia surrounding the visceral organs can become restricted, and developed sophisticated anatomically based techniques to release these restrictions. I find that I use this technique mostly for musculoskeletal pain, and that often, these visceral restrictions can be key soft-tissue lesions keeping the musculoskeletal system from healing. A related method is scar tissue therapy. Here, one would use slow three-dimensional myofascial release on old scar tissue. Again, the theory is that active scar tissue can have profound distant effects.3

Fascial release techniques can be divided into direct and indirect techniques. Direct techniques involve finding the barrier and doing your manual release toward the barrier, feeling the barrier recede and melt. Indirect techniques take the tissue in the direction of ease, away from the barrier. Counterstrain is always done indirect. The others mentioned above are usually done as indirect, but can also be done as direct methods. I’ve noticed that chiropractors tend to prefer direct techniques. This may be secondary to our training in high-velocity manipulation.

During the early years of my career, I focused on both low-force manipulation and low-force soft tissue. This changed when I was introduced to Graston Technique. Once it began to grow in the chiropractic profession, GT really changed the playing field. The concept of using instruments to perform soft tissue spread rapidly, throughout both the chiropractic and the manual therapy field. Gua sha, the Chinese medicine version of instrument-assisted soft-tissue manipulation, became more popular. The verb form, to Graston, although it has not yet made it to the dictionary, began being used by soft-tissue therapists. I have continued to use Graston Technique, and the more generic instrument-assisted soft-tissue manipulation (IASTM), and have added other more direct, somewhat more physical methods of soft tissue. More direct, more physical methods would include FAKTR, active release technique (ART), Stecco’s fascial manipulation, Rolfing and other deep-tissue methods. Any article on soft tissue should mention both Janet Travell, who popularized trigger-point therapy, and Raymond Nimmo, DC, a chiropractic pioneer who developed receptor-tonus technique.

There is good evidence that pressure changes tissues, both on the gross level and on a subcellular level. Breaking up fascial adhesions can be done with both low-force and higher-force techniques. Once you start to use deeper, higher pressures, you add an additional component. You can restart first-stage healing, re-initiating the acute self-limiting inflammation that is an important part of the healing that occurs after an
injury. Pro-inflammatory techniques require further explanation to the patient, as the patient can be very sore for a day or two after treatment. These methods can be dramatic in starting the healing process for chronic soft-tissue injuries.

*Active release technique* (ART), developed by Michael Leahy, DC, is a popular technique within chiropractic, especially within chiropractic sports medicine. ART could be called pin and stretch, as the doctor holds the point or area, as the patient moves the limb or body. ART was one of the first soft-tissue methods I know of that incorporated active motion on the part of the patient during soft-tissue treatment.

*FAKTR*: Functional And Kinetic Treatment with Rehabilitation, including provocation and motion, is another deep-tissue method, developed by Tom Hyde, DC, and Greg Doerr, DC. It was originally presented as an advanced methodology for using Graston Technique.

What I love about FAKTR is how it blurs the lines between passive soft-tissue therapy and active care. The patient is not just having something done to them. FAKTR treatment is unique, as it is done during functional ranges and functional activities. An example would be treating the soft tissue of the shoulder and scapula during a baseball pitcher’s pitching motion.

The diagnostic aspect of FAKTR involves using the kinetic chain, following the movement pattern throughout the body. Try to imagine how pulls on the fascia transfer aberrant motion patterns throughout the body. The goal, of course, is to truly resolve the injury, not just treat the pain or loss of motion.

The algorithm of FAKTR follows the outline I mentioned above. Of course, you would start with history and then do a functional screening. Treatment is diagnostic; go back and retest and retreat, and see what changes after the initial treatment. This five-step outline illustrates how FAKTR is really unique:

1. Take them into position of provocation; not just pain, but also imbalance, instability and/or restrictions (loss of ROM).
2. Find the motions of provocation (dynamic).
3. Add in resistance, isometric and/or concentric and/or eccentric. As you treat, you’ll feel the texture of the tissues change.
4. Do your actual soft-tissue treatment while the patient is doing the functional motion, such as working on the various soft tissues as the pitcher goes through their pitching motion.
5. You can add in further proprioceptive and perturbation inputs, such as having the patient stand on
unstable surfaces during treatment.

I really like this concept. It is all about creating increases in afferent input, magnifying the proprioceptive bombardment. I will admit that I tend to simplify it and do it on my treatment table most of the time. For example, when I am releasing the piriformis area, the patient is side-lying, and I will have them abduct their leg against my resistance, and then let the leg back down toward the table while I am doing my IASTM. It tends to feel more painful to the patient, but tends to release more completely.

These concepts can be applied to any age group and with almost any soft-tissue technique. You can even use the FAKTR concepts with passive modalities, such as laser or estim, making them more active and adding the increased proprioceptive input.

There is so much growth happening in the field of soft tissue, both within and outside of our own profession. I encourage you to help more patients and expand your toolbox by using more soft-tissue techniques.

References

4. Thanks to Drs. Greg Doerr and Tom Hyde for the classes and conversations that informed this part of the article.

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