Core Principles

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by Marc Heller, DC

In my previous 27 articles, I've covered principles of low-force manual techniques, including detailed exploration of how to use these on various aspects of the spine. These articles are well-organized and available for your review.[1]

Before going any further, I want to review the principles of low-force manual adjusting: the Framework approach. Where does this technique come from? I believe that lineage is very important in understanding what we do, and why. I have always been oriented toward low-force methods. I was a massage therapist before I became a chiropractor; I studied Toftness, SOT, AK, soft-tissue techniques and rehab principles. Eight years ago, I worked in a multidisci-plinary clinic, where I first was exposed to osteopathic spinal techniques. I was very excited about the precision, gentleness and effectiveness of these methods. I started studying with other practitioners who were using these methods, including chiropractors, osteopaths and physical therapists. I took a series of courses in visceral manipulation and mechanical link through the Upledger Institute. These courses are based on the work of two leading French osteopaths, Jean Pierre Barral, DO, and Paul Chauffour, DO, who became my main mentors.

Below are various low-force techniques I use and teach, followed by each founder's name and a brief description of the technique:

Muscle energy (Fred Mitchell) - post-isometric relaxation applied to joints;

Strain-counterstrain (Lawrence Jones) - positional release;

Engage, listen, follow (my variation on Barral's specific fascial release methods applied to joints and fascia);

Recoil (Paul Chauffour) - variation of toggle-recoil.

What I teach and write about is my own integration of these methods. These techniques attempt to simultaneously address the joints and the soft tissues. These are not two separate issues, but integrated structures, part of the whole fascial network of the body. I use bony levers to gradually release the soft tissues (fascia, ligaments and muscles) that are holding the joints in restriction.

I am not averse to instrumentation that can help us. My own wrists and hands have begun to wear from 24 years of practice. The adjusting instruments I use include the vertebral distraction pump, the percussor and arthrostim tools.

There are several models that give us a theoretic basis for this work, making sense of the intercon-nectiveness of the whole body. Some of my influences include the biotensegrity

model of Steven Levin, MD, and Donald Ingber's work on the tensegrity model on the cellular level. (Ingber has an excellent 2003 review article referenced on page 23.) This has been explored in the chiropractic field by George Roth, DC (matrix repatterning). Dr. Ingber's work with integrins looks at the structural aspects of the cell itself. The intracellular matrix is an organized structure; the structural components include actin (a protein also involved in muscle contraction), and the three-dimensional shape of each biostructure is malleable. In a nutshell, all tissues and cells are soft tissues, and can be affected by mechanical forces.

What are we attempting to accomplish when we adjust the spine, when we do soft-tissue work? My main goal is to "superinform" the tissues, to improve suboptimal patterns of the neurological feedback in the sensory-motor system. We are changing patterns of sensory feedback from the mechanoreceptors, the pain receptors, and the stretch receptors in the joints, fascia and muscles. We are changing motor feedback loops, from the brain down into the muscles. Current concepts in clinical neuroscience remind us that chronic pain is not primarily about tissue damage, but about changes in the pathways of feedback from the afferent tissues (think joint de-afferentation) and aberrant efferent messages to the muscles surrounding the painful area. We need to keep this concept in mind whenever we are working on our patients. I think the beauty of low-force methods is their effectiveness in changing these afferent/efferent loops in profound ways.

I could go on and on with theory, but I always try to give you something practical to immediately use on your next patient. Here are the core principles for effective low-force chiropractic:

Key Principles for Low-Force Chiropractic

1. Soft initial touch
2. Beginning feel palpation
3. Work at the soft edge of the barrier
4. Exact three-dimensional direction-specificity
5. Let the body guide the release process
6. Recheck; confirm effectiveness

The first step is your initial touch. This begins the instant you touch the patient. Many of us are too harsh, too sudden - and our hands are too stiff. The first touch is critical. Think of how you hold a baby. Begin your approach to the body with soft hands that want to "know." The opposite, hard hands that already "think they know," can be invasive to an area that has been traumatized. When you begin with soft hands, you allow relaxation in the patient's nervous system, and you don't activate a sympathetic fight/flight reaction. You will receive so much more information!

From the soft initial touch, the next step is to see how much information you can get via "beginning feel." The palpation techniques I teach begin at the beginning of the barrier.

Many of you push too hard, especially when you are unfamiliar with a method or area. You go right beyond the key barrier zone, far beyond the feather edge. The original motion palpation techniques I learned assessed the end range. I assess at the very beginning of motion, just as motion begins. I am interested in the initial stiffness or compliance of the joint tissue. I call this "initial response testing" or IRT.

The core technique we use, "engage, listen, follow" (ELF), begins here, at the beginning of the barrier. We line up our feeling of the three-dimensional resistance patterns, paying attention to fine tuning. We then back off just a bit, because we probably have gone too far into the barrier in our attempt at accurate assessment. At that point, we have engaged the beginning of the barrier in three dimensions.

Let the body make the release. Yes, you are holding the barrier, going directly in the direction the tissues resist. Now, listen and follow; let the body make the release. Trust innate intelligence in the moment of the adjustment. The tissues will either go through a torquing, twisting motion, similar to an unwind in myofascial release, or they will directly release in the direction of the barrier, a more straightforward stretch. Both of these can happen in the same adjustment - the tissue begins by twisting and turning, and then begins a more linear release. Either way, you have allowed the tissues themselves to participate in the release, to determine the exact direction. In this miraculous moment, you are directly in touch with the vital forces of the body, giving it some guidance via your direct engagement, and listening and following its own intelligence on the direction of the release.

If the tissues do not easily release, or begin to release and then stop, we can use our other tools. We could use an indirect version of ELF, taking the restricted tissues first into the direction of ease. Muscle energy (post-isometric relaxation) directly addresses the intrinsic muscles around the joint, using mild contraction, followed by relaxation, to release aberrant tensions in these critical muscles and their proprioceptors. Recoil is another way to break up patterns of abnormal proprioceptive activity, and seems to more directly address the joint capsule and/or ligaments. I use positional release to address exquisitely tender muscular attachments that are not responding to my other methods.

I use the vertebral distraction pump for obvious disc cases (**www.chiroweb.com/archives/21/21/09.html**) and for any joint that is compressed in the axial plane. I can use the percussor to enhance any fascial release pattern, and incorporate a larger tissue release area; and arthrostim is an accurate, effective easy way to release joint restrictions.

At the end of the office visit, always recheck. An optimal adjustment, whether low-force or high-velocity, makes an immediate change. Ask the patient about his or her pain levels; recheck range of motion; and recheck for joint restrictions. Be a bulldog: You are not done until you are done! The patient should walk out feeling better.

These techniques are ways of integrating soft-tissue work and joint adjusting. We use our contact on the bony prominences to both assess and treat. The treatment lines up the

tissue restrictions and directly takes into account all of the soft-tissues around the joint. Our focus is on the joint capsule, the ligaments and the intermediate and deep layers of the fascia, not just the muscles. When we adjust a joint, we are not just moving the bones; we are directly releasing the soft tissues around the joint. When we do soft tissue work, we are not just releasing restrictions in a muscle; we are releasing lines of force in fascial tissues that affect motion, both locally and in distant areas.

I invite you to continually expand your knowledge; doing so will keep you more vibrant as a practitioner.

References and Resources

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