

Why Low Force Adjusting

by Marc Heller,DC

Why should chiropractors learn low force adjusting? The techniques I have studied and the work I teach are all done manually, hands-on, and are based on palpation as our primary diagnostic tool. **Are there potential advantages to a manual, palpation-based approach** to low force adjusting?

1. **Safety:** One of the major potential risks from chiropractic adjustments is stroke from injury to the vertebral artery. Even if this is only one in 10 million, it is a **perceived safety** issue that may prevent patients from feeling safe going to the chiropractor. Low-force adjusting is inherently safer to apply earlier after a major trauma such as surgery or fracture.
2. **Comfort:** Many patients get to a stage where they are too old or too stiff to respond to the usual type of chiropractic manipulation. They feel traumatized or hurt more for several days after an adjustment. This is especially true for those patients who have fibromyalgia, heal slowly, or have any tendency to more than normal inflammation. These people certainly have as many clinically significant subluxations as healthier people. They desperately need manipulative care, but it must be done without trauma or substantial force.
3. **Comfort - and longevity - for the doctor:** Low-force adjusting is much easier physically for the doctor. It saves the low back, shoulders and wrists from the repetitive trauma of high-velocity adjusting. We need to take care of ourselves. **This may be the most important reason to use lower-force methods.**
4. **Active neurological retraining (ANR):** Chiropractic adjustments are designed to address the nervous system. Low-velocity, low-force adjusting requires the patient to be a participant, and to let go into the adjustment, to allow the change to occur. Low force adjusting does not force a change in the tissues; it allows a change to occur. **The patient can access and incorporate this new movement pattern more easily after they've directly experienced the movement during the adjustment itself.** In muscle energy (postisometric relaxation aimed at the joints), the patients' muscles are being actively retrained during the adjustment. In ELF (engage, listen, follow), like myofascial release, the tissues are guiding our motion, and changing by the second through the adjustment.

When addressing neurological retraining, we're reminded of the importance of education and patient self-care. Are we teaching our patients how to move better, through basic exercise, spinal stabilization, and proper activities of daily living?

5. **Effectiveness:** There really isn't any research that I know comparing low- force to high-velocity adjusting. But anecdotal reports claim that low-force adjusting

changes musculoskeletal patterns in a deeper way, requiring fewer adjustments to make change. If our high-velocity, low-force adjustment only gives a few hours to a day of relief, and the patient needs to come back two or three times a week to get temporary relief, are we really getting to the cause, or are we providing a form of chiropractic aspirin? My personal experience is that I get longer lasting, deeper change through addressing a broader range of tissues through low-force work. The neurological retraining, mentioned above, may be a significant aspect of this improved effectiveness.

6. **"If the only tool you have is a hammer, everything looks like a nail":** This analogy speaks to the limitations of having only one way to adjust the spine. Low-force adjustment can be used as another tool, or approach when the usual adjustment is "contra-indicated" or is not working.
7. **Low-force manual methods lend themselves to an attitude of "just enough" force:** Using and mastering these new skills changes the way we do all of our adjusting, with low-force or high-velocity.
8. **Neurological retraining:** The same rules of muscle energy and ELF apply here as within ANR. Also, as with ANR, education and patient self-care should be kept in mind.

What are the advantages of manual, palpation-based low-force methods? For many years I used muscle testing, the Activator instrument, and the artho-stim. Why do I think it's so important to use our hands for both the diagnostic and therapeutic aspects of our art? It's really all about developing mastery. Its not called **chiropractic**, literally meaning, **"practiced with the hands,"** without good reason.

Many chiropractic techniques are dependent upon what I would call intuitive or innate guidance. We are using a "reflex" method of determining where to adjust, whether it's a leg check or a muscle test. I'm not knocking these methods, but unfortunately, **if the doctor uses these tools to the exclusion of using his or her palpating hands, he or she never develops the subtle manual skills necessary to become really good at our art.**

One of the benefits of palpation is that it has an incredibly broad learning ramp. This means that this is a tool that can lead to mastery, if applied consistently over many years. We have the opportunity of practice, our everyday opportunity to touch many people, and **continually build our "database" of palpatory experience.** There is so much information stored in the tissues of the body.

I believe, as do most of the respected teachers within international manual methods, that palpation with the hands is the key diagnostic skill for manipulation. This skill only develops if you use it, and if you seek to understand what you are feeling under your hands. I'll quote Karel Lewit, from *Manipulative Therapy of the Locomotor System*: "Eliciting the twitch sign in a trigger point illustrates another very important feature of palpation: it provokes a reaction in the patient's tissues, additional diagnostic information

establishing a unique feedback relationship between two highly complex self-regulating systems, examiner and patient, which can be matched by no other instrument. This would satisfy any criteria of modern information theory, if it were reproducible and scientifically verifiable. We are thus faced with a paradoxical situation. The clinical method that provides the richest and most differentiated information is stigmatized as 'subjective' and therefore nonscientific, compared with sophisticated apparatuses that at best are but a poor copy of the nervous system, whereas palpation uses the human brain itself, and the sensing hands."

Unfortunately, studies that have looked at the reliability of palpation have shown a lack of reproducibility of findings between examiners. This does create a dilemma. I will not claim to have all the answers to the questions that these research results create for the field chiropractor. I will continue to practice based on palpation for all of the reasons outlined here and more, acknowledging that the signal to noise ratio for palpation is troubling. **We always add tenderness as an important part of our palpation exam, as it adds the feedback quality mentioned by Lewit, and is the most reproducible palpation tool.**

If we are working only with digital, off/on tools like muscle testing, leg checks, or the testing tool itself, once mastered, they do not require further learning. If all of my adjustments are done with an instrument, do my hands become more adept each time I do an adjustment? In palpation and in manual adjusting, there is an ongoing learning, a continual improvement of skills. Some of you may not feel you need more skills in this area; others may welcome the opportunity for the lifelong improvement of skills.

There is recent intriguing research about what happens to the brain in skill development. The essence of this research says, "Use it or lose it." MRIs of the brains of London taxi drivers, who must memorize the incredibly complex roads of the city, revealed that the drivers had larger posterior hippocampi compared to noncabbies. Violin players have greater development of the parts of their brains that control the fingering hand. If we palpate and pay attention, we can develop this skill, this connection between our brain and our eyes and our hands, to an incredible degree. Any of you who have seen a master at work in any field know this. Are you becoming a master of your own art, or are you satisfied to work at the journeyman level? **There is an incredible combination of satisfaction and ongoing yearning that comes from climbing the difficult path to mastery.**

There is much more to say and learn about improving our hand on clinical skills, and I'll address palpation and barriers more specifically in the next article of my series.

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