Dynamic Chiropractic

CHIROPRACTIC TECHNIQUES

Everything You Know About Adjusting the Low Back Is Wrong

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Yes, you heard me and no, I have not gone off my rocker. This title is a logical extension of everything I have learned in the past five years and my attempts to integrate everything I've learned over 35 years of practice. It's time to challenge how you look at chronic lower back and pelvic pain. For most chiropractors, the adjustment is front and center; it is the bread and butter of what we do. Where and how we adjust the lower back is both a philosophical dilemma and a practical challenge.

"Pain is a liar. He who treats the site of pain is lost." I've attributed this statement to Lewit for many years. Lower back and pelvic pain don't necessarily benefit from being adjusted over and over. In my humble opinion, if we use repetitive, high-velocity adjusting to the lower lumbar spine and pelvis, I suspect we may be contributing to instability problems, not solving them.

The basic hypothesis here is this: Chronic LB pain has more to do with instability than with fixation of the painful areas. The pain generators may very well be the lower lumbar discs, the lower lumbar facets and/or the SI joints – but these same joints and areas tend toward hypermobility / instability. There is an inherent conflict between attempting to stabilize the core and at the same time, adjusting the lower back. (Let's distinguish chronic and recurrent lower back and pelvic pain from acute pain; in cases of acute pain, an adjustment directly to the lower back can be immediately helpful.)

Marc, are you telling us not to adjust the lower back? No, not exactly. Let me attempt to describe how to use this model. I hope to make this practical, to give you a road map that includes adjusting. Is there a logical and effective place for manipulation for the lower back, for chronic pain? Yes, absolutely.

Better Assessments: Above and Below

We should start doing better assessments of the areas above and below the low back and pelvis. We should assess the lower back with both functional tests and via palpation for tenderness. Use these findings as your indicators. Assess and treat above and below, and then reassess the lower back. The indicators usually will have changed.

Let's start by learning what *not* to do. Remember the definition of insanity: doing the same thing over and over, and expecting a different result? Start by stopping the repetitive high-velocity lumbar rotary adjustments, especially when done as a standard routine. I want to avoid the risk of being useless or harmful to the patient. Start by looking beyond the painful areas to the areas most likely to be fixated.

Where should you begin to assess and adjust? Start by assessing *above and below* the painful area.

The joint-by-joint model, by Mike Boyle[1] and Gray Cook, posits that the lumbar spine moves too much, and that the hips and thoracic spine get stiff. This model started in the rehab / training world, but can also be applied to our joint assessments and adjustments, as I have written about for the past several years.

What do I mean by *above and below*? Above: Check the lower thoracic and upper lumbar spine. We have a great set of palpatory indicators that indicate clinical significance of these fixations. Check the "Maigne" points, tender points just below the iliac crest, from medial to lateral. Below: Check the hips. Hip assessment tools are fairly straightforward, as we will review shortly. These areas

above and below often do not hurt, but can contribute to or cause lower back and pelvic pain.

The levels that have overall hypermobility, the lower lumbar and SI, can have isolated fixation within them. Yes, we need to address these. In my opinion, for these areas you absolutely need to learn to use low-force, non-thrust techniques. When you side posture the patient and get an audible release, you know you are moving more than just the segment at which you are aiming. The evolution in rehab reminds us we do not want to aim at increasing flexion and rotation in the lower back. The goal: stability of the lower back. So, address the stuck lower lumbar and pelvic fixations; but do it without the risk of harm; without overstretching already injured joints and ligaments.

Check and Treat Above: Lower Thoracic and Upper Lumbar Fixations

Why are the lower thoracics and upper lumbars so important, and how does dysfunction at this areas contribute to lower back pain? I've noticed stiffness here forever, but until I was reintroduced to Maigne's ideas about the thoracolumbar junction (T-L), I couldn't quite put the picture together. Lyftogt's approach to lower back and pelvic pain, within the neuroprolotherapy or perineural injection technique model, further clarified this.

There are two obvious mechanisms. The first is based on the joint-by-joint concept. When one area is stiff, the areas above and below compensate by moving excessively. When the T-L is stiff, the lower lumbar and SI move more to compensate. If our goal is to create lower lumbar stability, one way to assist this is to get the stiff areas above moving. The second mechanism is direct referral from the irritated, fixated T-L joints.

Review your anatomy and understand the small, often ignored, peripheral sensory nerves. There are no imaging studies or nerve conduction studies that will help you here. We are back to basic palpation and clinical correlation. I've written about this in detail.[2-4]

To review briefly, you are looking for a correlation between your spinal palpation and the tender points just below the iliac crest. I tend to find different patterns in the lower thoracic than in the upper lumbar. In the lower thoracic, the most tender area is usually the lateral side of the spinous process, and the vertebra tends to resist extension and lateral bending toward the tender side.

In the upper lumbar spine, near the apex of the lumbar lordosis, the restricted vertebrae tend to resist flexion and rotation away. These facet joints are often stuck closed. The most tender area tends to be either over the mammillary or transverse process. To find the fixation and tenderness, you have to approach from below, inducing passive flexion with rotation away.

The iliac crest points, when tender, tell you the T-L dysfunction is significant in producing flank or gluteal pain, and can mimic SI- or lumbar-generated pain. This pain is often vague; sometimes the patient can put their finger on it, but not always. The more medial points, starting at about 6 cm lateral to midline, reflect upper lumbar dysfunction. The more lateral points, about 10-12 cm lateral to midline, tend to reflect the lower thoracic. The exception here, as you move further lateral, is that the tender points in the upper part of the gluteus medius can reflect irritation of the lateral femoral cutaneous nerve (from L2-4).

I always appreciate "reality checks" via the assess-treat-reassess or clinical audit model. Changes you can create within the office visit improve the accuracy of your diagnostic assessment and your effectiveness. When these iliac crest peripheral-nerve points are tender and you find a correlating T-L fixation, adjust the stiff joints. After your manipulation, the vertebrae should be moving better and the tender points you found in the spine should be diminished.

Now go back and immediately check the tender iliac crest points. They should be less tender. Yes, you may need to do further soft-tissue work or other modalities along the irritated nerve. You may need to teach stretches or exercises. It is useful to start with the adjustment to confirm the irritated iliac crest point is connected to the spinal fixation.

Check and Treat Below: Impingement of the Hips

Check the hips for functional impingement. This is so common. It will include a lack of hip motion, which can manifest as a lack of internal rotation and/or external rotation. Since revisiting this area, thanks to Lucy Whyte Ferguson, I've learned to do a general palpation for stiffness directly over the anterior hip-joint area, just below the AIIS, with a broad contact.

In functional impingement, the area feels quite stiff, and it feels as if the femur is stuck forward. Note the correlation with poor posture, especially a "rest-on-the-ligaments, belly out, no-butt posture." If your patient is flexion intolerant and doesn't understand how to hinge at the hip, they will tend to show this pattern. I've updated our views of hip dysfunction in a recent series of two articles.[5-6] Functional impingement of the hip is so common and alas, so commonly missed.

This is a place where rehab and adjusting work hand in hand. I do not know a good high-velocity adjustment to reset the hips. I've seen plenty of leg-pull maneuvers. They occasionally work, but also occasionally harm patients, especially those with ligamentous issues around the SI joints. Lucy Whyte Ferguson's wishbone maneuver, a gradual eccentric muscle activated motion, works marvelously.[7] Saito and Liebenson's "side plank plus" (low diagonal oblique sit)[8-9] is a fabulous way to globally activate the involved hip and core musculature, and seems to reset the hips quickly and effectively, giving the patient a way to correct themselves.

Once you have addressed the T-L and/or the hip, you may find your original lower lumbar and SI indicators have diminished. If so, great! It tells you your focus above and below has changed the lower back pattern.

Yes, I do adjust/mobilize the lower lumbars and SI joints; and yes, it is both useful and necessary to adjust those areas. I often find that after two or three low-force mobilizations to the lower lumbar and/or SI joints, the area begins to stabilize. This is especially true if I am addressing the areas above and below; and the patient is changing their movement habits and doing their home stabilization routines.

References

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