

The Art of Painless Spinal and Pelvic Adjusting

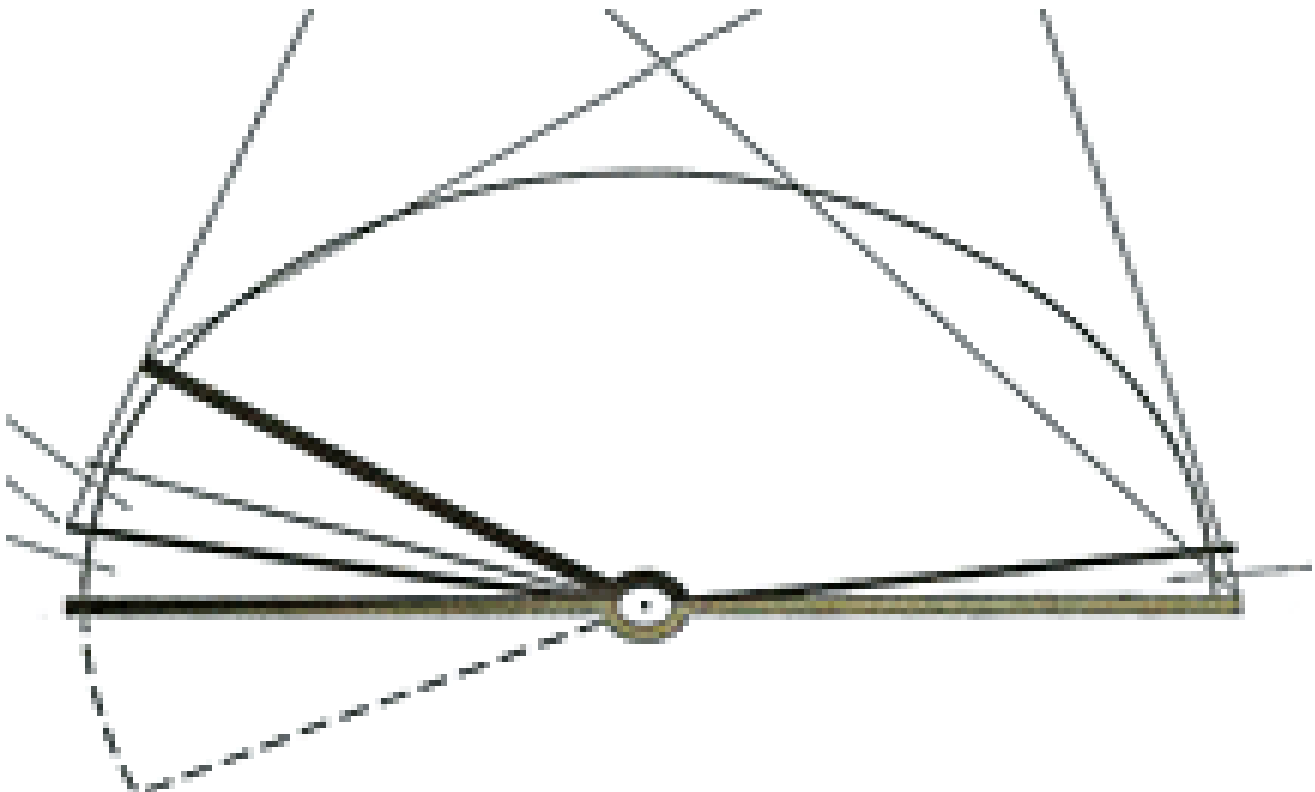
John R. Bomar, DC

The advantage of having come to the work through my own disability is that it has given me the opportunity to experience many varied techniques of spinal and pelvic manipulation/adjustment. I was fortunate to have been introduced to this form of healing through the hands of an "old-school" osteopathic physician who had studied under the founder of the profession, Dr. Andrew Still. As a result, I have always been open to various techniques of manual therapy and unhampered by the philosophical constraints that seem to limit some.

In my 30 years in practice, I have had one overriding thought: "Lord, show me what is safe and works well." I have been helped tremendously by many generous colleagues who offered me their services. I have also been hurt, a few times severely.

Initial Patient Management

As many of us soon realize, high levels of conscious pain are what spur most, if not all, patients through our front doors. Unenlightened, heavy-handed treatment during this phase often will backfire, creating such additional suffering and pain as to lose a patient. On initial visit, we can fall into the trap of thinking, "Well, I've got to do *something* for my fee."



Active and passive ROM limits vs. anatomic limits. Articular release and cavitation occur within the paraphysiological

space; going beyond the anatomic limit results in joint trauma.

I confess to having committed this mistake in the early days of my practice. With reflection, and the loss of patients, I came to realize a much wiser approach would be to concentrate on a comprehensive initial history, thorough examination/evaluation and full understanding of all the factors involved in the case. When called for, I now have no problem contenting myself with palliative care on a patient's first visit. Initially, patients have little concern about the root causes of their thorny bush; they are too preoccupied with the painful prick of its leaves.

Characteristics of spinal biomechanical impairment with subluxation are: neural alarm and guarding response, high levels of capsular edema and inflammation, nociceptive discharge, reflex paraspinal myospasm and facilitated pain pathways (DC, DO definition). Something as simple as an in-office cryotherapy treatment (direct-skin application of a cold pack for eight minutes or ice massage) can have excellent temporary anesthetic effect and is well-received by most acute patients. Spastic muscles sometimes resist cold and signal their distress through increased pain consciousness. Then a good alternative is the use of infrared lamp or moist heat to vasodilate, relax the tissue and override pain consciousness through heat stimulus. I also have found that high-frequency electrical stimulation to the painful region will also have good symptom-relieving outcome.

Ruling out red-flag conditions and proper management of increased sensitivity to pain and high levels of inflammation should be our main concern on initial visit. Knowing when not to apply deep manipulation is the first axiom in proper pain management.

I send almost every new patient home with two cold packs (20 minutes on/20 minutes off, covered, rotating the packs for as long as three days, all waking hours) and other anti-inflammatory recommendations. For the worst cases, I explain the absolute need for non-weight-bearing rest in a recliner or bed.

A Good Adjustment

A good adjustment, from my experience with various masters of the art, is not painful. These seasoned biomechanical technicians seem to have perfected the knack of sensing when I am relaxed enough to receive their correction. Their adjustments are "in and out" so fast I hardly realize anything has taken place. They are patient in their approach. They also take great care with tissue pull and remove all connective and soft-tissue laxity around the troubled region prior to delivering a high-speed thrust. The force is only enough mass combined with high velocity to get the job done. When I was in school and practicing my adjusting technique, I kept in mind the stage performer who could tug a tablecloth completely from under dinnerware, disturbing nothing on the table itself.

Practitioners who seem less competent, and whose adjustments are almost always painful, don't seem to have regard for my level of relaxation prior to adjustment. They do not take up and remove all the slack in the joint and use an unnecessary excess of force in their delivery. They often exhibit a lack of concentration on the work at hand; as if they had done it so often they "could do it in their sleep." Well, as one who has been on the other side of such inattention, I can tell you that sleepy, bored doctors discredit themselves and the noble value of their work.

Finally, a good adjustment begins with excellent and skilled palpation. I tell patients, "One cannot slay the multi-headed beast unless he fully recognizes its many forms and shapes." (See my previous

article, "Palpation 501 - Or What They Might Not Have Taught You in School."
www.chiroweb.com/archives/25/24/13.html).

The Biomechanical Lesion (Subluxation Complex)

I have come to view biomechanical spinal and pelvic lesions in more simple terms than I was taught in school. By my observation, a subluxation's primary components of facet locking and inflammatory distress almost always manifest some degree of rotary fixation and overlying unilateral myospasm on the side of rotation; clockwise or counterclockwise (cephalid view).

Less often, I appreciate straight posterior or anterior blocks of facet hypokinesia, usually in the thoracic spine and secondary to some basic postural anomaly. I see the pelvis as a hinged bowl in the front with a (sacral) keystone arch in the back. The ilia hinge and pivot in rotary torsion around the sacrum with ambulation. If the right ilium rotates backwards and locks in posterior-medial fashion, the right PSIS is prominent on prone palpation and compares to an anterior-lateral recess on the left. By my observation, both sides are not always displaced and hypokinetic.

The Cervical Spine

Because of its delicacy and my being able to more carefully control the forces involved, I prefer sitting cervical rotary adjustment from the side, with the patient in a chair. From my experience, supine and prone cervical techniques finish up with the total force "dead-ended" into the spinal column. Not only is this more dangerous to weak discs, but this form of adjustment usually hurts. Sitting cervical maneuvers, with me standing to the side and utilizing the flat pad of my middle finger, allows me to slide the force laterally, away from the column, once mobilization has occurred. The other advantage of this technique is I can more accurately adjust the volume and force of my delivery, taking much greater care with very acute conditions and the elderly. The Taoist admonition *better to stop short than go too far*, while applicable to all regions in spinal mobilization, seems especially appropriate in the neck.

I also have come to greatly appreciate the many advantages of cervical traction-tug maneuver with a patient supine. Geriatric patients exhibiting advanced DJD with significant disc loss and facet overlap are the best candidates for this type of facet distraction and release technique. I have also used it very successfully in acute cases. The key to its successful and painless application seems to be in having the patience to apply repeated progressive weight traction of about 15 seconds duration. I tell patients this allows the "hydraulic pistons" inside the muscles time to fully extend. I apply a quick tug maneuver without letting up the traction only when the small intersegmental muscle groups have fully extended. Otherwise, one may tear these small and delicate structures. I now use a cervical traction halter with crossbar in the procedure. It's sometimes surprising how little tug force is required for mobilization to occur if you have patiently tractioned the structures beforehand.

The Thoracic Spine

I have done literally tens of thousands of thoracic spine adjustments over the years using conventional P-A (thenar contact) thrust maneuvers. These are potentially the most painful maneuvers I perform; I broke one rib in an older, postmenopausal woman. I still use the technique in younger, healthier patients, but I use great caution in the amount of force I introduce into the rib heads and spine. I never fall into the trap of trying to "force" an adjustment. Therein, my friend, lies the path to perdition for practitioners of spinal manual therapy.

I have learned to appreciate the many advantages of rotation-thrust maneuvers for the middle- and lower-thoracic regions. I have a patient straddle the table, cross their arms in front with hands on opposite shoulder, involved-side arm on top, then I take hold of the top elbow and fully rotate the spine, allowing time for rotator muscle extension and relaxation. I repeat this at least twice more and then deliver a palm-heel thrust into the involved segments at the apex of the third full rotation. I often get multiple confirming cavitations of an apparent hypokinetic chain of rotary fixations. This technique is almost always completely painless in application.

Except for the one case of the geriatric, osteoporotic woman, I utilize a conventional, anterior-thoracic leveraged chest-thrust maneuver with a patient standing with their back to the wall, my opposite hand used as fulcrum.

The Lumbar Spine

Because of the high incidence of weakened, bulging discs in the lumbar spine, I shun long-lever, side-posture rotary maneuvers using the flexed knee as fulcrum. Such a primitive and gross technique is fraught with danger, as many of you know, since the disc is most vulnerable when under rotary strain.

I have found the same rotary-thrust technique used in the thoracic spine to be very useful in lumbar manipulation. Sometimes I use conventional side-posture thrust maneuvers, being careful to avoid excessive rotation at the instant of delivered thrust. I also use a two-man traction leg-tug maneuver for mobilizing fixated lumbar facets. This maneuver is borrowed from our osteopathic cousins.

The Pelvis

Since all conditions of rotary displacement and fixation of the S-I joints stimulate active sacroilitis and reflex dystonias (spasm) in the gluteal regions, I first compare the resting tonus of the sacrotuberous ligaments in approaching pelvic pain, explaining my procedure to the patient. The work of Drs. Logan and Nimmo in the treatment of such large muscle imbalance is invaluable.

I commonly have used side-posture pelvic techniques with PSIS contact on the side of posterior-medial rotation and ischial contact on the side of anterior recess. The key to success here seems to be in giving patients the time to breathe, relax and get comfortable in what otherwise is a very awkward position. I often take the pelvis to fully tensioned load repeatedly before delivering a corrective thrust.

For the last four or five years, my favored technique for the posterior-medial side of iliac rotation and fixation is to use a prone two-man technique. With the patient holding on to a cross bar or the legs of an adjusting table I have my assistant firmly press down on the prominent knob of the PSIS along the plane line of the sacroiliac joint. I then apply three or four 15-second, progressively heavy distractions, holding the ankle firmly while sitting at the foot of the table. This allows me to brace my feet and use body weight rather than arm strength for the sustained traction. I instruct the patient to take deep inhalation through the nose, followed by exhalation and directed relaxation of the lower body, as I apply traction. At the end of the third or fourth sustained traction, at the point of exhalation and good relaxation, I nod to my assistant and deliver a sharp, quick tug without letting up the traction as they increases pressure on the posterior spine of the ilium. The procedure is almost always completely painless for the patient and, where needed, results in very good reset of the posterior displaced ilium on the sacrum.

True mastery of the fine and valuable art of painless spinal and pelvic adjustment is attainable. The

application should be an organic on-going process of growth with continued keen attention and learning throughout your practice career. Your reward will be the excellent outcomes you will observe and the complete satisfaction and praise of your patients. The good reputation you will earn will give you the ability to endure through the up and down vagaries of an evolving health care marketplace. Besides, it's your duty.

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