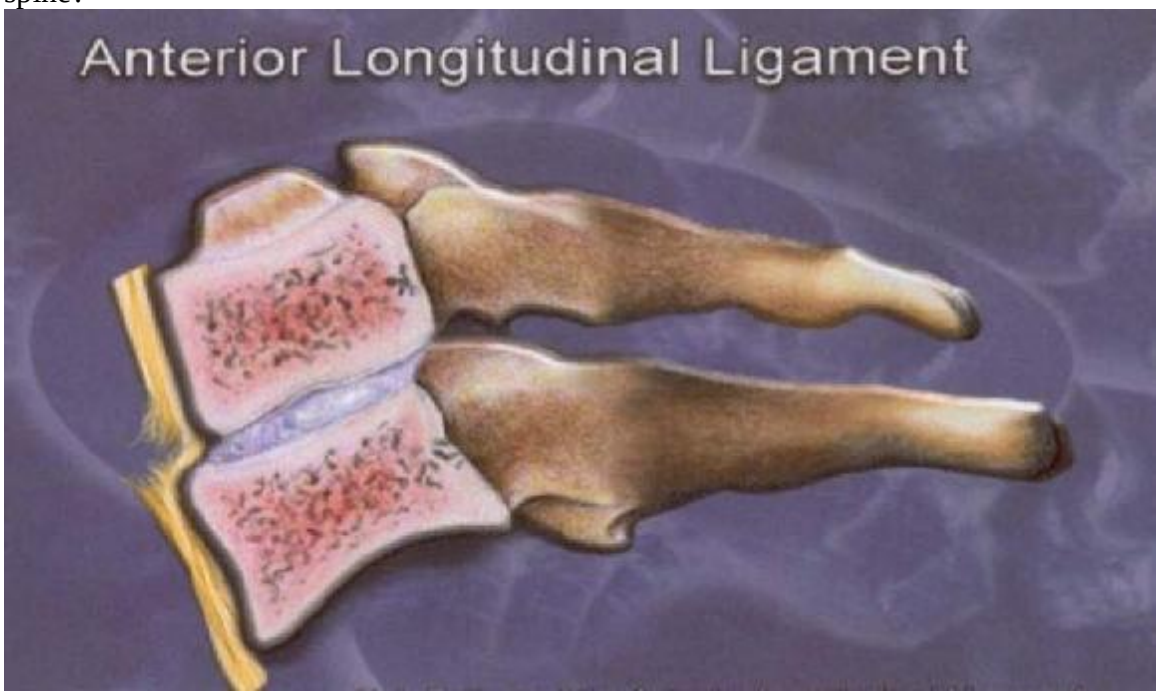
Loss of Motion Segment Integrity-The Short Version to the Most Powerful Tool in Clinical Practice Today

There is a lot of talk these days about "Evidenced Based Procedures" and becoming more "Evidenced Based" in our approaches in everything from diagnostics, treatment, and our final prognosis as to the future of our patients. "Evidenced Based" means just that, using information that is agreed upon to be the most accepted criteria that we can rely on in making our clinical decisions. It means coming up and practicing in real time, using up to the date, real time information, and it is where we want to be. It means replacing "personal opinion" with the terms like "consensus driven". For those who utilize and come from an "Evidence Based Approach", it really levels the playing field and helps to make general clinical practice much easier in a great many ways.

Remember just a few short years ago, maybe seven to eight, we were still having our care judged and determined by "orthopedists" or "neurologists," when our patient's injury cases went to court? I can still hear the old line up of questions that we had to endure as chiropractors in the courtroom; Doctor can you prescribe drugs? Doctor can you admit anyone to a hospital? Can you perform surgery? Have you attended a medical school? Do you remember those days? This was a line of questions to make us, the treating chiropractors seem like we were second class professionals, rendering our opinions just that as well--second class. Then some of us got smart and had our patient's attorneys separate out the fact that we were the experts in the courtroom on chiropractic. We had them ask the so-called medical experts a serious of our own questions? Doctor how many spinal adjustments have you performed? Doctor did you go to an accredited chiropractic school? Have you attended seminar on spinal manipulation? Do you regularly upgrade your training in spinal manipulation? Can you tell me what a subluxation is and how it is determined? Can you tell me what a spinal listing system is? Can you tell me what the most common techniques for spinal adjusting are? The result; of course when they said they did not know, they would then be asked if it would be safe to assume that they were not an expert on chiropractic? **When they agreed that they were not experts in chiropractic, the days of the medical experts judging us were done!**

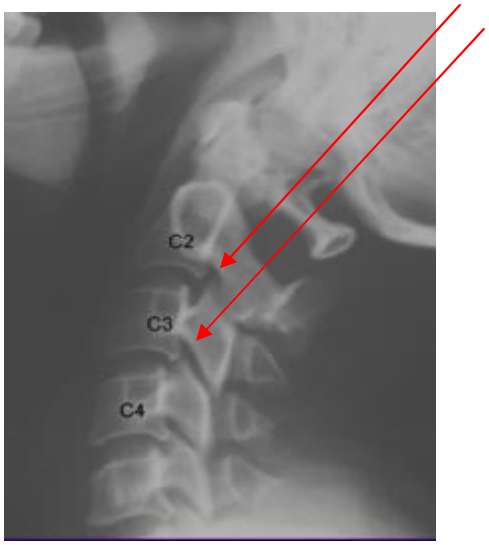
This evolved into laws, and policies, that made it so that professionals had to be judged by like professionals. This opened the door to individual chiropractors being hired and paid to evaluate the care of others in a procedure called "independent file reviews" or "independent chiropractic evaluations". Which is an upgrade to an old game called, "my personal opinion" vs. "your personal opinion". Which is a very frustrating game for those of us that have been in the ring with it, and we find out that anyone can say anything, because it is just that, "their personal opinion", no matter how crazy or against the consensus their opinion goes! Today we in the field have a weapon to use against this procedure, which is simply to not give our opinion, but rather to state the consensus opinion, and let the "expert" try to fight that. There is no better place that this is demonstrated than in the diagnosis of spinal ligament problems. Once you see this and see how simple it is, it becomes a very effective way to conduct your injury practice!

We all know that there are only four tissues involved with the spine; bone, muscle, nerve and ligament. Further, we all know routine ways, accepted ways, of examining the bone, muscle and nerve—but what about the ligaments of the spine?



How do we examine and determine the status of these ligaments, one of which is shown above? Can we feel it with motion palpation or static palpations—perhaps we can feel the effects of damage by feeling the inflammation, but we really cannot feel it, suspect it yes—feel it, no. Is there an orthopedic test for it…no there is not? This being the case how do we diagnose this? Well in the past we have just said there were breaks in "George's Line", however there is a much better way to determine and examine this that is "evidence based".

Here are examples of breaks in "George's Line"



Now look below at page 392 out of the AMA Guides to the Evaluation of Permanent Impairment, 5th Edition. Specifically look at Category IV (DRE) diagnosis related estimate. Pay attention when you read, **"alteration of motion segment integrity is defined from flexion extension radiographs"** and then it proceeds to give the exact NUMBERS. Look to the left at that x-ray, does it meet that criteria? Can't tell can you? You can guess but you can't tell? Well we can because we have sophisticated software that can accurately measure that, which is what we do, when you send us your films.

Table 15-5 Criteria for Rating Impairment Due to Cervical Disorders

DRE Cervical Category I 0% Impairment of the Whole Person	DRE Cervical Category II 5% - 8% Impairment of the Whole Person	DRE Cervical Category III 15% - 18% Impairment of the Whole Person	DRE Cervical Category IV 25% - 28% Impairment of the Whole Person	DRE Cervical Category V 35% - 38% Impairment of the Whole Person
No significant clinical Findings, no observed Muscle guarding or Spasm, no documentable Neurologic impairment, no significant loss of motion segment integrity, and no other indication of impairment related to injury or illness; no fractures	Clinical history and examination findings are compatible with a specific injury; findings my include muscle guarding or spasm observed at the time of the examination by a physician, asymmetric loss of range of motion or nonverifiable radicular complaints, defined as complaints of radicular pain without objective findings; no alteration of the structural integrity **Or** Individual had a clinically significant radiculopathy and has an imaging study that demonstrates a herniated disk at the level and on the side that would be expected based on previous radiculopathy, but no longer has the radiculopathy following conservative treatment **Or** Fractures: (1) less than 25% compression of one vertebral body; (2) posterior element fracture without dislocation that has healed without alteration of motion segment integrity or radiculopathy; (3) a spinous or transverse process fracture with displacement	Significant signs of radiculopathy, such as pain and/or sensory loss in a dermatomal distribution, loss of relevant reflex(es), loss of muscle strength or unilateral atrophy compared with the unaffected side, measured at same distance above or below the elbow; the neurologic impairment may be verified by electrodiagnostic findings **Or** Individual had clinically significant radiculopathy, verified by an imaging study that demonstrates a herniated disk at the level and on the side expected from objective clinical findings with radiculopathy or with improvement of radiculopathy following surgery **Or** Fracture: (1) 25% to 50% compression of one vertebral body; (2) posterior element fracture with displacement disrupting the spinal canal; in both cases, the fracture has healed without alteration of structural integrity	Alteration of motion segment integrity or bilateral or multilevel radiculopathy; alteration of motion segment integrity is defined from flexion and extension radiographs as at lease 3.5 mm of translation of one vertebra on another or angular motion greater than 11 degrees greater than at each adjacent level (Figures 15-3a and 15-3b); alternatively, the individual may have loss of motion of a motion segment due to a developmental fusion, or successful or unsuccessful attempt at surgical arthrodesis; radiculopathy as defined in cervical category III need not be present if there is alteration of motion segment integrity **Or** Fractures: (1) more than 50% compression or one vertebral body without residual neural compromise	Significant upper extremity impairment requiring the use of upper extremity external functional or adaptive device(s); there may be total neurologic loss at a single level or severe, multilevel neurologic dysfunction **Or** Fractures: structural compromise of the spinal canal is present with severe upper extremity motor and sensory deficits but without lower extremity involvement

You want to become more evidenced based? Start testing the spine for "alteration of motion segment integrity". First if it is there with your patient find it! Don't your patient's want you to know? Don't they want to come and be handled by a professional that is confident and can accurately determine the nature and extent of their injuries? Doctor they want you to know because they want you to manage them; they want you to tell them what they should do and guide them back to health. How can you do this if you do not know the status of the spinal ligaments? Patient's with ligament damage are more serious than patient's without, aren't they? Doesn't it make clinical sense that these patient's are going to need more care, and or more physical therapy or active care? How can we keep talking about "soft tissue injuries" and just how debilitating they are to our patient's, both now and in the future, through the use of personal opinion, which can and is blasted right out of the water, when we have a procedure that can accurately validate ligament injury, and have had this quite frankly for decades. (The AMA Guides have been published since the seventies.)

When I say this, I mean the ability to accurately and objectively diagnose and document "alteration of motion segment integrity"—ligament damage. This is our most sophisticated objective documentation procedure that we have. Patient can't symptom amplify it, patient can't fake an x-ray finding! If the criterion of "alteration of motion segment integrity" is met, it is not the doctor's opinion anymore, so it cannot be fought with another expert's opinion, especially when it was arrived at through and unbiased second opinion.

The procedure that does this is called X-Ray Digitization. Digitization is a funny word, because most doctors think that it has something to do with digital images—it does not! The word digitization comes from the word digit; which means finger or toe, or an Arabic numeral 1-9, which is our current number system. Digitization is a verb and it means to place a numerical value on a desired spatial relationship, which in this case are vertebral relationships.

X-ray digitization then is a very accurate way to measure altered vertebral relationships. It can accurately access for "alteration of motion segment integrity" listed in the category IV DRE listing above, and tell you if you have a ratable level of spinal instability or not, which is what our service provides at Diagnostic Imaging of Wisconsin, Inc. Please do not be mislead that this same procedure can be produced by drawing lines on your films in private practice, as that has been clearly shown to be inaccurate. To get ratable levels of ligament dysfunction, we are talking millimeters and tenths of millimeters. The lines with a standard marking pencil is .75 mm if it is sharp and around 1 mm if it has been used, so there is no way to do this accurately by hand, plus using a service gives you and unbiased, second opinion.

A word of advice…

Stop listening to expert opinions when they do not make sense—common sense! If your patient has ligament damage are they the same as one who does not? Of course they are not and I know as I treated them for over 16 years and I have real in the trenches experience. Like many of you I have performed well over a million spinal adjustments and like many of you there was a time when I just knew the spine was injured—knew the ligaments we damaged—but did not know how to test for it—how to document it. I also knew that generally these patients's required more

care and that they would generally experience more problems in the future and have more future care requirements. A long time ago I found out how to test for this and document it, and that is what I am trying to explain to you now. That is why I started Diagnostic Imaging of Wisconsin, Inc., to deliver both the message and the service to provide you with this, and I am here to help.

This is my job now, and you doctors are my patients; and when you really get how this works you are lifetime patients, when you think it sounds good but do not really understand it, you will try it and go away—reappearing when you have the pain of needing documentation help because you have treated your patient for a long time but have little clinical objective proof as to why--and when you do not get it at all, you will continue to sit on the sidelines and wait—I don't know I guess trying to see if you know someone else that is successfully using this procedure? Doesn't this sound like your patient's that you have under care, the patient's that are coming into your office? Who becomes the lifetime patient, isn't it the educated one who by intellectual or experiential discovery finds out that chiropractic really works and they understand what it is and how valuable it is? How about the patient that comes in, listens to what you have to say, uses you for a few adjustments, get better and then leaves, maybe never to come back—did they get it? How about the patient who could be helped but never shows up to get help—just keeps doing the same old thing?

Doctor who are you going to test? Well let me ask you this, which injured patient do you not want to know the ligament status of? Tell me which one? Further, which traumatized patient if explained in simple terms what we do **("Mrs. Smith ligaments hold the bones together and are the supporting tissue that keeps the spine stable, so we are going to send out to see if there are any areas of the spine where these ligaments are damaged and not performing the way that they should so that we can provide you with better care")** is not going to say, wow that sounds like a great procedure, I understand and appreciate how thorough you are doctor, how come my medical doctor did not know about this? How come my physical therapist did not check this before they put me through six months of care? How come my last chiropractor or osteopath in some cases, did not check to see if I had ligament damage? The last part of this doctor is this; knowing where spinal instability is provides another level of safety for your patient's. Do not get me wrong spinal adjusting is one of the safest procedures in health care today, but know where your patient's spinal instabilities are gives you another level of safety and certainty.

When you get this, your practice life will change forever and so will the lives of your patients, as you will become more clinically proficient, and professionally confident, even more than you already are! As long as you practice you will never be in a position to stop learning and we are here to help. You may have questions, lots of questions—good so does your patient that just walked through the door and is on their way to receiving the benefits of chiropractic from this point forward.

Call me and I will help, and I really mean that, call me anytime. This procedure of testing and assessing ligaments is too good clinically so find out about and understand it. It will change the way that you practice and it will help you to become a better professional, so call me with any questions you may have regardless of whether you are already a liberal lifer (lifetime maintenance doctor), a conservative see what it can do on my tough cases or cases where I need

help (acute care doctor) or a sitting on the fence critic who has no personal experience but has heard every criticism there is with no actual practical experience. Call me and I can and will help. As I said before I am here to help you make your practice life a better and less stressful experience.

Anyone from any state can utilize our service, and I think you will quickly find that we offer the best support service, of any digitization service in the country. We have a monthly newsletter that goes over different documentation problems and tips every month. We also get you reports back to you fast, as I was in private practice for years, and I fully understand that when you are managing patients you need the information fast. I also am very accessible for questions, and I would value the opportunity to serve you.

Let's get off to a great 2006 together!

Sincerely,

Jeffrey A Cronk, DC

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