

Alteration of Motion Segment Integrity: The AMA's Gift to Chiropractic?

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Sometimes the internal discourse that is common in our profession seems to get in the way of our acceptance of real help so that we can expand our profession and better serve our patients. Alteration of motion segment integrity (AOMSI) is a significant gift from the AMA that allows us to methodically locate, substantiate and objectively prove the severity of [the spinal subluxation](#). Of course, it comes as a gift only as long as we handle it with a high level of responsibility.

Alteration of motion segment integrity is determined by exact mensuration procedure published in the *AMA Guides to the Evaluation of Permanent Impairment*. It is a spinal subluxation that can be objectively identified with a high degree of accuracy, especially when one acknowledges the advancements that have occurred in assessment of stress imaging (X-ray, DMX).

Please remember that some of the most significant advancements in functional radiology assessment came from information gained from our profession's very first federal research grant, awarded in the mid 1970s. It was University of Colorado scientist Chung Ha Suh, PhD, who secured the first chiropractic funding from the National Institutes of Health (NS 12226 01A1). Suh's main areas of research focused on the development of computerized, kinematic models of the spine and three-dimensional, distortion-free X-ray analysis. This research improved our ability to more accurately measure articular deformations such as AOMSI.

Historically, AOMSI first showed up in writing in June 1993, when the AMA developed the injury model of spinal assessment and listed the findings and criteria in its new DRE (Diagnosis Related Estimate) categories. This was the first open acknowledgment from the AMA that spinal subluxation's could cause significant, and perhaps permanent, reductions in a patient's health status. This meant that the AMA had validated what we had been stating for a very long time. Ironically, this validation came some six years after the resolution of the *Wilk* case.

Some in our profession understood this "open acknowledgement" for what it really was and made sure AOMSI was included in the first chiropractic practice guidelines to be published in the federal government's National Guideline Clearinghouse Project (NGC). They had the foresight to make sure, with strong peer review, that AOMSI was within the scope of chiropractic management and listed as a component of the [vertebral \(spinal\) subluxation complex](#).¹ These guidelines were first published in 1998 and have had two successful and very helpful revisions, still listed in the NGC today.

The 1990s seemed to be the explosion years for "evidence-based health care." The lynchpin was guidelines. Inherent in guidelines is that fact that they are objective. Inherent in the term *objective* is the ability to verify the presence of; anyone can read and verify what is in a guideline, which is why they are so important. Guidelines build consensus, which builds group solidarity of belief or sentiment. We often see that guidelines in one area are cited for the foundation of other guidelines. This guideline-building phenomenon has led to further validation of the significance of AOMSI findings and, if we acknowledge and apply it, leads to further credibility of our profession as the

leaders; the body with the longest and highest level of experience in spinal subluxation management.

Chiropractic was not the only profession building guidelines. All providers were engaging in this activity, including the sports medicine specialists. These providers could probably care less about [impairment ratings](#), disability ratings, or the often irrational medical-legal environment of our modern day. These providers were building guidelines to handle the health and safety of athletes who received an injury or had a condition that could affect their ability to safely participate in their chosen athletic activity. They needed to develop guidelines (consensus) as to what to do with athletes when they sustained certain types of injuries, i.e., injuries to the appendages, head injuries, brain injuries and yes, spinal injuries.

These guidelines openly acknowledged that spinal subluxations due to spinal ligament damage can be serious and included them. AOMSI findings now became either a relative or an absolute [contraindication to return to contact sports](#), which makes complete sense. Why would you put an athlete with this level of spinal ligamentous injury right back into full-contact sports, without stabilizing the injury and allowing it to heal? These guidelines provided further consensus as to the significance of the findings of AOMSI.²⁻⁶ This fact seems to go unnoticed and unacknowledged by some in our profession.

Common sense tells us that patients who have significant spinal subluxations from acute ligament trauma need to be managed by providers who understand the significance of the condition they are treating. All patients deserve this level of professionalism, as their future health status and safety depend on it.

A single, 28-year-old bank loan officer has been under your care for an auto-collision injury he received three weeks ago. Over the weekend, he played in a senior men's league rugby match, received a routine hit and sustained a severe cervical spinal cord injury. Tragically, his life is now permanently altered. His parents receive a phone call that none of us ever wants to receive.

How will you explain that you, as a spinal specialist, did not take his auto-collision injuries seriously enough to work them up to the highest level of professionalism established today? How do you explain that you took stress X-rays (flexion-extension) of the area, but you did not seek to have the highest level of functional radiology available to measure for AOMSI? How do you explain that there were two levels of AOMSI present and you did not apprise their son about the risk of participation in contact sports just 20 days after receiving the earlier injury? How do we as a profession explain that? How do we explain to our medical counterparts that we are the experts here?

The chiropractic profession established the technology to assist with accurately and reliably locating AOMSI. The AMA gave it a name and credibility, and established its significance. It is now time for our profession to fully endorse and incorporate the evaluation of AOMSI in every one of our patients who has suffered a traumatic injury to their spine.

References

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