IT IS TIME TO THINK IN DIFFERENT TERMS: RE-CONSIDERING SUBLUXATION

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Subluxation: "A partial dislocation, a sprain." First used in 1688, "a dislocation or putting out of joint" (1).

Subluxation: "Semiluxation; an incomplete luxation or dislocation; though a relationship is altered, contact between joint surfaces remains" (2).

Subluxation: "Sub-luxation is a partial or incomplete separation; one in which the articulating surfaces remain in partial contact. This latter condition is the one so often referred to and known by chiropractors as sub-luxations" (3).

Subluxation: "The alteration of the normal dynamics, anatomical or physiological relationships of contiguous articular structures" (4).

Subluxation: "A complex of functional and/or structural and/or pathological changes that compromise neural integrity and may influence organ system function and general health" (5).

I was present at the Houston Conference, (6) and following that conference, Joe Howe and I wrote the section on radiographic manifestations of spinal subluxation. (7) The drawings were mine and the radiographs came from my office. We did this work and submitted it because there was a "political need" for this kind of evidence. Neither Joe Howe nor I were convinced that this was a good direction to take, because it placed us in a legislative box, which neither of us could support from any kind of scientific evidence.

I remember the development of the ACC definition very well because it happened that I offered the following definition: "A subluxation is any articular change that alters the ability of the nervous system to integrate organ systems." Naturally, our group could not let it be that simple, though I surely wish we had. Regardless, what we have done during the past century is adopt a word that has specific meaning to the rest of the scientific and health care community and tried to change its

meaning into something much more complex than the word itself implies.

By simple word breakdown, the word must mean only one thing; **"less than a luxation."** It cannot be a complex, it cannot truly be defined as we (ACC) have defined it. We would have been much better off if we had said "a subluxation is a joint that is slightly dislocated." At least then, we would have been accurate. Then, if we had continued by saying that we believe that this "slight dislocation can result in a host of abnormalities in the human being," we would at least have made sense.

The problem with the latter statement is that we have no evidence that it is true. So, I believe, in our attempts to assuage the various members of our group including those, who like me, think the subluxation is part of a bygone era as well as those who believe the "slightly dislocated vertebra is an entity that impedes the flow of innate intelligence from brain cell to tissue cell," we compromised our principles and came out with a definition that neither makes sense, nor can be supported by any kind of scientific evidence to which we might refer.

Still, we continue to support the use of a word which does not mean what we want it to mean, and a concept for which there is no viable scientific evidence. I think this places us in a vulnerable situation, both within the scientific community and, eventually in the legal community.

The Canadian neurologists (8) are not the first ones to suggest that there is no rational clinical reason for chiropractors to adjust the cervical spine, thus placing us in the potential position of causing even 1 cerebral vascular accident for no good reason. For those among us who would base the reason for adjustment of the cervical spine on the "subluxation," I think there is precious little, if any evidence. While I realize that the neurologists have their own axe to grind, they raise a legitimate point - namely, "what are the clinical reasons for adjusting the cervical spine?"

While all of us would doubtless fall back upon our experience with patients and the sometimes amazing

results we have obtained with various clinical syndromes, we are very short on scientific evidence to support the practice and, to my knowledge have none to support the concept that there exist within the patient, "functional and/or structural and/or pathological changes that compromise neural integrity and may influence organ system function and general health," and furthermore, that by adjusting or manipulating the neck or other articulations, we are able to **correct** these "structural or pathological changes."

You will notice that I did not include "functional changes" in that group and I did that for a reason, which I believe makes sense (an *a priori* position until such time as we can develop more science).

Inasmuch as we place such great emphasis upon the spine as a central (or in some cases, perhaps the only) concern for the chiropractic physician, we must articulate a position that can be understood, at least as an acceptable hypothetical basis for our practice.

If some kind of spinal lesion is believed to be responsible for some adverse changes in human function, then it is incumbent upon us to present a concept that could be supported by known anatomy and physiology such as that which follows:

Functional Articular Lesion - an abnormally functioning motor unit involving the spine, pelvis or extremities. This is in specific contradistinction to the concept of 2 vertebra which are slightly "out of joint," and need to be "adjusted back into anatomical alignment." Instead, we are saying this joint does not work correctly.

1. **Significance of the functional articular lesion** - here, we must articulate what we know, what we think we know, and what is purely hypothetical, and it cannot be that the vertebra impinges upon the nerve root, inhibiting the flow of mental impulses from brain cell to tissue cell. What ever we state must possess some anatomical and physiological evidence as its foundation. An abnormally functioning articulation may, for example effectuate a barrage of mechanoreceptor-mediated neurological impulses into the cord with potentially far-reaching effects.
2. **Evidence of its existence** - determined by patient history, physical examination, static palpation, motion palpation, range of motion assessment, possibly by radiographic indicators, and other procedures for which we can find legitimate evidence.

3. **Correction of the lesion** - by articular adjusting and/or manipulation to restore normal function, as well as by other procedures of a physical nature.
4. **Evidence of its correction** - re-evaluation using the same procedures required to determine its presence.

The current reality is that we do not know if there is a specific "lesion" within the spinal column that we adjust; thus, we do not know what the real target of the adjustment is. This is the primary reason why there are so many different approaches to the same symptom complex presented by a patient. It is also the reason why some among us resist all efforts to engage in diagnosis and treatment, taking the position that "subluxations are detrimental to health and their correction is beneficial to human health."

These positions are interesting and in some ways mysterious, but they are not rooted in reality. We do not know if a "subluxation" (whatever that is) is detrimental to human health. Because we do not know what a subluxation is, we cannot know how to detect it. If we cannot detect it, we cannot know how to correct it, and we surely cannot know if it has been corrected. The result of this lack of knowledge is that each chiropractor fundamentally determines for him or herself where and when to adjust the spine based upon some very blurred system of evaluation for which there is no supporting evidence.

None of this awareness changes the fact that we do adjust or manipulate the spine and that this procedure most often produces positive outcomes for our patients. Unfortunately, we have tied our entire "reason for being" to an entity for which we do not have evidence, when we should have emphasized the procedure rather than the believed lesion. At least, the research we have developed supports the use of the procedure - spinal manipulation - in symptom-specific conditions.

To make matters worse, we have tied the "subluxation" to our politics, to our legislative efforts and most recently, to our legal efforts. We are currently fighting a legal battle to be the only practitioners who should have the legal right to manipulate the spine to correct a spinal subluxation. If we win this position, our detractors only need to conduct a single research protocol - the 1 that demonstrates that there is no anatomical ability for spinal joints to "subluxate" in the chiropractic sense - no way to detect this entity and no way to correct it. With that scientific information in hand, where will we be? We would find ourselves in the position of those who used various medical procedures which proved to be

ineffective or even harmful. For us, our very reason for existence would be gone.

I recognize there are those among us who will take the position that we must hold on to this terminology at all costs – that we must not let others get the right to “correct subluxation,” and that anyone with the temerity to suggest otherwise should not be allowed to call him or herself a chiropractor. Unfortunately, that position will make no difference to those who are our detractors. Frankly, I think we are fortunate that to date, no legitimate scientist has really taken on the issue of demonstrating the invalidity of the subluxation concept. All those who proclaim that, such as Barrett and Chotkowski, are not really considered to be dependable reporters of the facts in any case. One can only imagine the impact of a well done protocol reported in the *New England Journal of Medicine*, for example.

CONCLUSION

It is my opinion that the term “subluxation” has specific definitional problems for our profession which result in a misconception regarding what we do as chiropractic

physicians. It is not my purpose to suggest here that our practices should be more broad than the application of spinal adjustments or manipulations even though that is my personal preference. My purpose is to suggest that we should change the terminology to 1 that is at least correct from the definitional perspective and then we must begin to seriously refocus our research efforts toward evaluating that lesion and its effects on human health.

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