

School of Health Sciences - Discipline of Chiropractic

Position Statement on the Vertebral Subluxation Complex

for the RMIT chiropractic program

October 2010

Dear Colleague

This paper reinforces the RMIT Model of Chiropractic that has been in place for over a year. The Model is on the Discipline's website and this paper will join it as a public statement on how this Discipline applies its understanding of the Vertebral Subluxation Complex (VSC) to both its teaching and clinical learning activities.

However it takes another important step in that it emphasises the need for clinical evidence to support a diagnosis that leads to intervention by adjustment.

Simplistic statement:

The most acceptable form of simplistic statement about the vertebral subluxation complex is emerging in the scientific and educational communities as being:

"Something in the spinal column or other joints that alters the flow of information to and from the brain."

RMIT Position Statement on the Vertebral Subluxation Complex:

RMIT University's position on the clinical entity that is central to the practice of chiropractic is based on a contemporary interpretation, understanding and application of the historical premise of chiropractic. This is explored more fully in the Position Statement on the RMIT Model of Chiropractic.

The Discipline understands that functional derangement of the spine and other articulations may occur; where spinal we call this a vertebral subluxation complex (VSC) and where elsewhere we use a range of terms suited to the presentation that clearly describe the functional articulation disorder.

The Discipline only accepts a working diagnosis of VSC when it is supported by clinical evidence. We use the suffix 'change' against each of the five historical elements instead of the older term 'pathology' because not all change is pathologic; an example being kinematic change that is a benign compensation at one spinal level for kinematic change at another spinal level that has the evidence it is a VSC. Similarly we do not use the U.S. acronym PARTS because of its inability to thoroughly capture all clinical evidence due to its reductionistic approach to Pain, Asymmetry, Range of Motion, Tone/Texture, and Special tests. We see the VSC as greater than a simplistic biomechanical concept.

We recognise that the historical elements are weakened by suggesting each may be an individual element and see the clinical reality as an interconnectedness where, for example, muscle change can not exist without neural change, and connective tissue change can not exist without vascular change, and so on.

However for the express purpose of looking for and then documenting clinical evidence to support a diagnosis that warrants our intervention, we are obliged to

provide a framework for learners and teachers.

Within RMIT University's Discipline of Chiropractic the framework we use to reach a working diagnosis of VSC can be thought of as being:

- 1. A statement of kinematic change that may eventually be represented as a listing in either Diversified or Gonstead dialects. Our knowledge and understanding of developing the listing subsumes the detailed diagnostic palpation skills and mental interpretation of our findings to allow us to capture these as a standardised listing. We see Motion Palpation as a propriety technique therefore we use movement palpation that ranges from inducing micro to macro movements within a spinal motion unit (SMU) to identify the quantity of movement (and thus restriction due to fixation), the quality of movement (through whatever range of movement is present) and the quality of end-feel (at the end of the presenting range of movement). We appreciate many of these aspects are subjective and combine such findings with objective data where possible, such as a measurement of regional range of motion;
- 2. A statement of neural change following the assessment of all dimensions from the quantitative (Newtonian) elements of pain to the qualitative elements (cognitive, affective) of human function. In this sense our model moves beyond pain and into the realm of functional neurology and wellness. We appreciate that neural change typically exists in multiple combinations with other changes and we seek to explore these in an inter-connected sense;
- 3. A statement of muscle change following the assessment of indicator muscles for the SMU under question, and related muscles. We are interested in not only differences of left/right strength but also in left/right functionality, including speed of 'lock-in' (indicative of functional neurologic processing of hearing the auditory command, processing the information, signalling the response, and the actual response of the muscle during the test). We are interested in hypertrophy and atrophy, trigger points, and other characteristics that may signal VSC. We appreciate that muscle change typically exists in multiple combinations with other changes and we seek to explore these in an inter-connected sense;
- 4. A statement of connective tissue change, where these tissues include z-joint capsules, the intervertebral disc, associated ligaments and tendons, and other connective structures that may be affected by injury or other assault; and
- 5. A statement of vascular change that describes a range of findings related to structures such as arterioles influenced by the SMU, both arterial and venous and represented by cutaneous warmth or coolness; lymphatic drainage which has been recently shown to have segments under neural control; gross change such as oedema and inflammation; and larger-scope elements such as cervico-cranial vascular insufficiency. We appreciate there is a range of instruments with varying degrees of known validity that may be useful in the clinical context to support the search for vascular change.

A chiropractic adjustment to an SMU should not be delivered in the absence of thoughtful consideration to identifying, describing, understanding and inter-relating the above elements and the documentation of these elements.

The working diagnosis that indicates chiropractic adjustment as the preferred intervention will include summary statements of findings in the above categories which in turn form the outcomes measures against which the clinical effects of the adjustment are measured.

Functional articulation presentations away from the spine require a similar assessment, analysis, description, understanding and inter-relating before a mechanical intervention is considered to be an appropriate trial intervention.

RMIT University appreciates there are many approaches to chiropractic intervention and their delivery systems and that no one program is able to teach all of them at the standard each deserves. We encourage our students and graduates to pursue areas of special interest to them with a view to further refining their individual approach to identifying, describing and optimally treating the VSC.

RMIT University holds the view that to achieve this capability in its graduates requires a skills-set based on the above foundation.

Documentation of Clinical Findings

The following describes the manner in which the registered student chiropractor will record in the patient Health Care Record the SMUs they wish to adjust, why they wish to adjust them, and how.

Clinical experience suggests it is most unusual for a patient to present with many levels of VSC. Accordingly the visit-specific record allows for no more than 5 suggestions to be made by a registered student chiropractor. The supervising clinical educator should confirm then approve as appropriate the level/s nominated for therapeutic intervention, and then approve the indicated method of delivery (for example, manual Diversified, manual Gonstead, drop-piece, Activator, flexion-distraction, and so on).

The student will record the required findings in a manner similar to that given below. At the initial patient visit each spinal level will be assessed and documented; as the patient becomes familiar to the clinician the spinal levels for assessment will become targeted by the history.

Clinical findings relative to the VSC will be recorded in a manner that includes reference to:

The SMU: identification of the spinal motion unit (SMU) where the fixated segment is given as the superior segment.

There will then be descriptive statements that should make reference to findings in the following categories. These categories are not individually segregated; however the registered student chiropractor is expected to consider these elements in their thought process about identifying subluxation.

Kinematic change: Fixation is translated into a listing and using the principle above, Occ/C1 would imply occipital contact, C1/C2 a C1 contact, and L5/S1 an L5 contact. Where a listing such as L) SIJ is given to identify fixation in a left sacro-iliac joint it implies the segmental contact point (SCP) is the ilium, therefore if the SCP is actually the sacrum the listing would be LP sacrum to imply a contact of the left sacral alar. The first key principle underlying kinematic change is that restriction of movement in one direction, palpated as a mix of reduced quantity, altered quality, or different endfeel, implies fixation in the opposite direction. Hence reduced movement (restriction) of a spinous process to the right implies fixation in a left position. The second key principle is that the vectors of the adjustive thrust will always be to reduce fixation and restore normal movement.

Neural change: This term subsumes neurologic and orthopaedic tests and allows documentation of a left/right asymmetry or, at an advanced level, any systemic change, to be attributed to the VSC. An example is pain referred to the iliac crest as being suggestive of Maigne's Syndrome at T12/L1.

Muscle change: This term also subsumes neurologic and orthopaedic tests with an emphasis on function, such as a deltoid weak on the right compared to the left suggesting VSC in the low cervical spine around the C5 spinal nerve. It also captures trigger points and statements about muscle tone.

Connective tissue change: This term collects findings related to tendons, fascial planes, joint capsules, disc, and so on. In relation to the SIJ it helps differentiate between articular fixation and ligamentous fixation, and should always be included in a diagnosis when evident on imaging as a disc bulge.

Vascular change: This term allows the inclusion of findings from a range of instruments that indicate left/right thermal asymmetries attributed to different arteriolar flow but it goes further to include oedema, inflammation and rubor, major signs such as cervico-cranial insufficiency evidenced by certain tests in cases where such insufficiency may be evident, and autonomic findings such as decreased patency in an auditory tube or decreased drainage within the lymphatic system.

The two final elements are decisions on the delivery system, and confirmation as approval by the registered chiropractor.

Delivery system: This describes the delivery system used for the therapeutic intervention, and ranges from manual Diversified thrust to blocking by wedges, and so on.

Approved: The signature of the senior person responsible for the care of the patient, in most cases the Clinical Educator.

Use of this statement:

This statement replaces individual teaching about the VSC with a uniform Discipline perspective.

This position is the substantive position to be presented to students at all year levels and in all learning environments, including clinic.

This statement is to be read and understood alongside RMIT's Model of Chiropractic.

This statement will inform the teaching of diagnosis and technique in the chiropractic program at RMIT University.

This statement will inform the philosophical concepts presented to students within all courses delivered by the Discipline of Chiropractic.

This statement describes the definitive behaviours of clinicians and registered student chiropractors with regard to identifying and describing the VSC in the patient health care record.

I welcome your embrace of this statement.

Assoc Prof Phillip Ebrall Discipline Head, Chiropractic October 2010