

## A Challenge to the Profession -- Detection of the Vertebral Subluxation Complex, Part II

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The following is a review of the clinical tools and procedures available for the detection of the vertebral subluxation complex (VSC):

### 1. Inspection and Observation

This process of analysis can be considered an art that is objective in the trained senses of a chiropractor. The use of a goniometer, plumb line, twin scales, etc., is valuable in measuring the biomechanical components of VSC. The identification of tissue tone, color, and fluid retention or privation, along with gait analysis, is an objective finding of innate's adaptation and response to VSC. Inspection and observation is a crude but artistic evaluation of the neurophysiologic effects and biomechanical aberrations seen with VSC. Additional research in this area is needed, to reveal the variables in false positives and the sequelae to VSC.

### 2. Palpation

Static and/or dynamic palpation will reveal equivocal biomechanical irregularities, not neurodystrophic situations. Palpation is an art that must be learned by repetition and the precarious trial and error experiences. Palpation can be an objective finding in the hands of a chiropractor who practices the art of palpation. It is emphatic that palpation is not reciprocal to inspection and observation, and its efficacy is subjective in most situations. To give a specific vertebral adjustment based on palpation alone would be precarious in this day of technology.

### 3. Spinographic Examination

Spinographs are vital for the measurements of the relative positions of the surface of one vertebra to the contiguous surface of the vertebra with which it articulates, and the evidence of alteration of the lumen of the intervertebral foramen.<sup>7</sup> The radiograph gives the chiropractor a permanent record, and if executed in a proper manner is profoundly objective for documenting the biomechanical aspect of VSC.

The study and use of videofluoroscopy<sup>11</sup> and stress load of the vertebral column in documenting positional dyskinesia<sup>13</sup> is inestimable to future research of VSC. There may be additional knowledge disseminated from special imaging procedures such as MRI and CT studies concerning the intricate effects of VSC.

### 4. Structural Measurements

Contracted leg complex has multiple synonyms in scientific articles, such as leg length differentials, short-leg syndrome, Derefield/Thompson leg check and leg length insufficiency.<sup>14</sup> This contracted leg complex can be due to spastic muscular contractions and has been part of chiropractic for over 50 years. This legacy was given to us by such great men as J.B. Logan,

Grostick, Gonstead, Blair, Thompson, and Derefield, to name a few. This is an excellent procedure to measure both the biomechanical and neurophysiological components of the VSC. With the proper training and equipment, this procedure is invaluable for the search of VSC. Ongoing research in the field of structural measurements cannot be overemphasized.

## 5. Relative Muscle Testing

Muscle testing is a functional tool to measure the sequel of VSC.

Goodhart's work with applied kinesiology shows that the neurodynamics of VSC can be detected.

The art of interpretation and objectivity is incumbent on the examiner doing the relative muscle testing. The different instruments available to measure muscle strength are congruent to research, both basic and clinical, for today and the future.

Today's fantasies are tomorrow's innovations.

## 6. Case History Symptomatology and Laboratory Analysis

This area has been considered concomitant to the practice of medicine, specifically the process of diagnosis. With the realization of the heinous ramifications of VSC, this area can be of value to the chiropractor to understand the origin and evolution of VSC. To know the etiology of the VSC will be a cognitive factor for future detection and eventual stabilization and/or correction of VSC.

Case history can be an arduous procedure for the etiology of VSC. Concerning the subject of case history, Major and Delp explain in their text, *Physical Diagnosis*: "The amount of detail to be recorded poses a vexing problem."<sup>15</sup> Case history may lead our practitioners into precious curiosity of the VSC. Beware that diagnosis is based on more than case history alone. If the chiropractor can use case history to extrapolate the VSC, he will be doing more for the patient's welfare than any allopath.

Symptomatology has been incorporated into allopathic and chiropractic sciences from their beginnings. The Meric Generic Table used by B.J. Palmer before his specific HIO procedures is an exercise in physiology and neurology. Simply put, it is classifying effects for the purpose of finding the cause of VSC.<sup>16</sup> Symptoms may wax and wane, be vague or just so unpredictable that they must be classed purely subjective. However, it must be remembered that symptoms are what initially bring patients into our offices. Allopathic practitioners depend more strongly in the field of symptom treating than their opposites -- the chiropractor in the correction of cause.

Laboratory tests are considered well within the ranks of medical science. The medical doctor would have a bewildering task to practice without a laboratory, i.e., complete blood count (CBC). Laboratories are such an appendage of medicine that it has its own specialist -- the clinical pathologist.

If the chiropractic profession realizes the pathodynamics of VSC, both spinovisceral and spinosomatic, the laboratory may be one answer to validate this profession's purpose. If VSC makes healthy people into sick people -- the breakdown in homeostasis -- then this sequelae is a reflection of VSC and must be studied and researched to make sick people healthy again.

## 7. Instrumentation

This has been an area of bitter controversy since B.J. Palmer introduced the neurocalometer (NCM) at the 1922 lyceum.<sup>17</sup> Instrumentation is the quintessence of objective measurement of the neurophysiologic component of the VSC. The chiropractic profession desperately needs independent objective input on the presence of neurophysiologic and/or neuropathologic elements

of VSC. If we agree on the hypothesis of the relationship between the integrity of the nervous system and the homeostasis of the organism, then it is pre-eminent to search for the tool that will reflect the qualitative and quantitative function of the nervous system.

Calorific changes have been reported in chiropractic literature since D.D. Palmer:<sup>5</sup> Janse expounded on variations in temperature as symptomatology for subluxation;<sup>7</sup> Thompson advocates the use of calorimeter type instrumentation;<sup>18</sup> Pierce is actively researching the field of thermoregulation, derema therm-o-graph, and thermography;<sup>19</sup> Stillwagon is investigating yet another heat-sensing instrument.

Available at this time to the chiropractic profession are three basic instruments to monitor thermoregulation. The dual-probed thermocouple galvanometer is designed to measure paraspinal skin temperature differential. This is seen in such instruments as the NCM, nervoscope, and thermometer. Also, the single-probe thermocouple such as the chirotherm will relate localized spot temperatures. The most recent development, as of 1950, is the measurement of infrared heat radiation by the use of the dermathermograph. This will measure skin temperature differential between the vertemere (dermatomes).<sup>10</sup> This list may not be all inclusive, but includes some of the orthodox instruments available to the field doctor and the student.

Other instruments of ambiguous efficacy or cost prohibited for the individual practitioner include liquid crystal 17 thermography and the electroencephaloneurotempograph.<sup>20</sup> The latter was developed in part by B.J. Palmer, in 1935. This nine-channel instrument was to measure the qualitative and quantitative elements of mental impulses being transmitted through the organism. The results are, to say the least, esoteric. Most people in the field of research, from 1935 to present, are mute due to the ambiguous results.

A philosophical question: Can an instrument developed by the finite mind of man be able to conceive the infinite of innate's mental impulses? However, an arduous pursuit of knowledge may result in "... the right adjustment, at the right place, in the right direction, and at the right time."<sup>6</sup>

Interference with the mental impulses from brain cell to tissue cell is the missing link in today's detection of the VSC. Upper cervical proponents profess to the "pattern analysis," using the dual-probe instrument such as the NCM. Full spine advocates relate to the "break theory," supported by Duff, Gonstead, and others. The chiropractor using the thermoradiation system states that capricious changes from one vertemere to another is indicative of VSC.<sup>17</sup>

Skin differential temperatures have been noted in the healing arts since Hippocrates: "Wheresoever an excess of heat or cold is felt, there the disease is to be discovered." Dossa Evans developed the NCM with B.J. Palmer in 1922. B.J. Palmer developed the acclaimed pattern analysis using the NCM. Clarence Gonstead refined the break system for full spine technique in the 1950s. The infrared thermograph is the most recent developed by Pierce and Stillwagon in the 60s.<sup>17</sup>

## Conclusion

There is a definite need that is resulting in a vacuum for improved technology and statistical data concerning non-invasive objectivity relating to the two components of the neurophysiologic character of the subluxation: impingement of nerves; and interference or interruption of normal mental impulses.

In 25 years of practice I have developed, and am still refining, the art of chiropractic in the detection and correction of the VSC. With the understanding of limitation of matter and adaptability of the organism, there have been many successes in chiropractic. However, identifying and correcting all VSC will result in improvement of mankind on a global level. "... the adjustment with something extra"<sup>6</sup> is what this profession and this planet needs.

There are people in chiropractic and adjacent to the profession that feel we should do away with the archaic term subluxation, most recently, Dr. Barrett. If we abandon the VSC, as we know it, we dilute chiropractic to a second-rate allopathic practice. The subluxation or VSC is the cornerstone of chiropractic. Let it not be the stone the builders reject.<sup>1</sup>

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