# SUBLUXATION:

# A SCIENTIFIC REALITY



By Keith Wassung

Gray's Anatomy states that every organ, system and function of the human body is under direct control of the central nervous system" <sup>1</sup>

"An intact nervous system will lead to optimum functioning of the human body" <sup>2</sup>

#### **Dorland's Medical Text**

"All body systems would be immobilized without the nervous system. It controls and regulates every body activity down to the workings of the tiniest cell" <sup>3</sup>

World Book Encyclopedia of Science

# **CENTRAL NERVOUS SYSTEM**

Every medical, anatomical and health related text will confirm that the central nervous system is the master control system of the human body. The central nervous system is the master control system of the body and every single function reflects its activity.



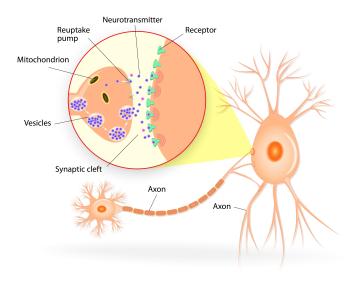
Nerve impulses travel from the brain, down the spinal cord and out through nerves to all parts of the body. Nerve Impulses then return to the brain through return pathways.

There are in excess of 100 billion neurons, or nerve cells in the human central nervous system and the number of possible interconnections between these cells is greater than the total number of electrons in the known universe.

Recent research has clearly shown that even activity that occurs at the cellular and molecular levels are controlled and coordinated by the central nervous system. At all biological levels (molecular, cellular, organ), communication between elements is essential for the proper functioning of system. This communication process is essential to the homeostasis of the body.

"No one could survive without precise signaling in cells. The body functions properly only because the cells constantly communicate with each other."

#### Scientific American



The foundation of health begins with a properly functioning nervous system, to the extent that we can equate levels of function and healing capability with the ability of the nervous system to send and receive information.

There is a greater quantity of communication in the human body than all of the combined man-made communication systems in the world and the coordination and precision of neurological and biological communication systems is unparalleled.

"To understand health is to understand the central role of the brain and nervous system in maintaining the resistance of the body. Health maintenance is the <u>primary</u> function of the brain, not educational thoughts, language, poetry and other functions usually associated with the brain."

Robert Ornstein, Ph.D. & David Sobel, M.D. The Healing Brain

# Thalamic Neuron Theory

The nervous system does much more than transmit sensory information to the brain or control motor functions. It actually controls the peripheral organs, including its biomolecular environment. The central nervous system is involved in all disease conditions as the CNS only processes incoming physical and chemical information from the body, it actually controls organs and cells to maintain health and homeostasis." <sup>5</sup>

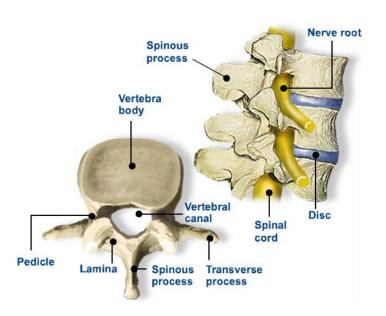
**Medical Hypothesis** 



"The quality of healing is directly proportional to the functional capability of the central nervous system to send and receive nerve messages." <sup>6</sup>

Janson Edwards, M.D. Ph.D.

Disturbances to the nervous system are referred to in scientific literature by several names; dysponesis, nerve dysfunction. neuritis, nerve impingement, double crush phenomenon, and subluxation, all of which cause interference to the nervous system.



The primary cause of nerve **interference** is found in the spinal column. When the spine is in its proper position, it protects the nerve pathways. However, when spinal vertebra become misaligned, **interference** to the nerve impulse occurs, which reduces the overall function of the nervous system and of that particular organ.



"Organs supplied by impinged nerves exhibit pathological changes and the more serious the impingement, the more serious the damage." 7

Henry Winsor, M.D.

Nerve disturbance caused by the spinal column is called a vertebral subluxation. Vertebral subluxations are often referred to as the "Silent Killer" because they can be present for long periods of time without any evidence of pain or symptoms

This is similar to a cavity eating away at a tooth long before a toothache occurs. Subluxations irritate the nerves which interfere with the flow of nerve impulses. This reduces the body's inherent natural healing ability.

Subluxations also alter the optimal structure of the spine which weakens it and increases spinal degeneration.

Vertebral subluxations are devastating to a person's health and are well documented by leading health authorities.

"Subluxation is very real. We have documented it to the extent that no one can dispute its existence. Vertebral subluxations change the entire health of the body by causing structural dysfunction of the spine and nerve interference. The weight of a dime on a spinal nerve will reduce nerve transmission by as much as sixty percent."

# Chang Ha Suh, Ph.D. Spinal Biomechanics Expert University of Colorado



"Subluxations of vertebra occur in all parts of the spine and in all degrees. When the dislocation is so slight as to not affect the spinal cord, it will still produce disturbances in the spinal nerves passing off from the foramina." 9

#### Dr. James Woddersee, Neurosurgeon



"Nerve dysfunction is stressful to the visceral nerve and other body structures and the lowered tissue resistance modifies the immune response and lessens the overall capability of the immune system." <sup>10</sup>

#### Science

"Hyper functional or Hypo functional neurons along a neural chain prevent normal nerve transmission causing disturbances in the homeostasis of the cells, tissues and organs." <sup>11</sup>

### Dr. T. N. Lee Academy of Pain Research

"Pathological changes have been observed at the cellular level after experimental compression of neural structures. These include Wallerian degeneration, dystrophic axons and occasional loss of myleniated nerve fibers." <sup>12</sup>

R. B. Delamarter, M.D. Spine



"Abnormalities of central afferent and efferent pathways have been revealed by evoked potential studies in diabetic patients. Central Nervous System abnormalities are more frequent in patients with peripheral neuropathy, but evoked potential can be abnormal even in patients without neuropathy." 13

#### **Clinical Neuroscience**





The nervous system cannot be altered locally. Local interference affects the whole nervous system network. These changes pass away gradually but not completely and give rise to a number of adaptations to the new artificial norm. The nervous system is now a new object after the local lesion and reacts to stimuli in a new fashion.<sup>14</sup>

#### A.D. SPERANKSY, M.D.

Neural dysfunction associated with acute or chronic subluxation syndromes basically manifest as abnormalities in sensory interpretation and or motor activities. These disturbances may be through one of two primary mechanisms, either direct nerve or nerve root disorders of a reflex nature.<sup>15</sup>

#### **CERVICAL SPINE TRAUMA**

In the absence of continuous transmission of nerve signals from the brain stem into the cerebrum, the brain becomes useless. <sup>16</sup>

# **GUYTON & HALL**

Neuroscience has begun to provide an understanding, in elegant detail, of the organization and physiology of the nervous system and of the alterations of nervous system function that occur in various diseases. This understanding is firmly based on an appreciation of the structure of the nervous system and of the interrelationship between structure and function.<sup>17</sup>

# STEPHEN WAXMAN, , M.D. Ph.D.

Low vagal nerve activity may interact with genetic susceptibility, which could explain why, in people with the same low vagal activity, some may develop Alzheimer's Disease whereas others develop cancer or cardiovascular disease.<sup>18</sup>

### **CLINICAL SCIENCE**

# **CAUSES OF SUBLUXATIONS**

A vertebral subluxation can be caused by any force that the human body cannot adapt to. Such examples include auto accidents, work related injuries, stress, sports, and repetitive movements and even the birth process.



# **CORRECTION OF SUBLUXATIONS**

Chiropractic is a health care system that is founded on the premise that a proper functioning nervous system is essential to overall health and function of the human body. Doctors of Chiropractic detect and correct vertebral subluxations by physically adjusting the spine. This restores the nervous system to an optimum level of function, which maximizes the body's inherent healing potential.

Chiropractic adjustments restore normal nerve function; improve spinal biomechanics, range of motion, reflex arcs, and posture, all of which are essential to a properly functioning nervous system

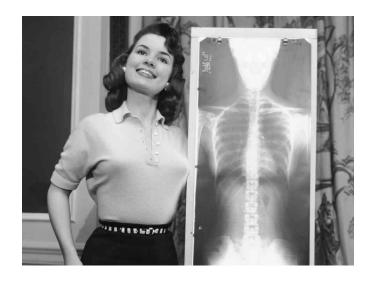
Doctors of Chiropractic have never claimed that they can "cure" illnesses and other related conditions, and not all health problems can be attributed to vertebral subluxations, but clinical and case study research has demonstrated that correcting subluxations can lead to an improvement and restoration of health.



A Doctor of Chiropractic performs an adjustment on a patient. Research has shown that all age groups can benefit from Chiropractic care.

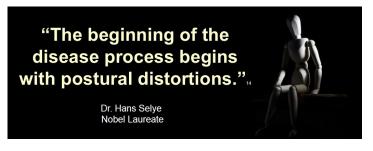
#### CHIROPRACTIC & POSTURE

Doctors of Chiropractic are experts in spinal structure and body mechanics. Chiropractic adjustments are aimed at restoring and maintaining the structural integrity of the body by correcting spinal and postural distortions. Chiropractors emphasize the importance of posture to overall health, a concept that has been often overlooked in traditional methods of health care.



"Subluxation alone is a rational reason for Chiropractic care throughout a lifetime from birth."

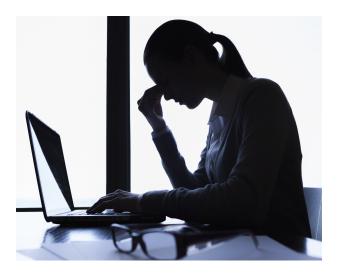
LEE HADLEY, M.D.



#### **POSTURE AND HEALTH**

- Posture and normal physiology are interrelated.
- Posture affects and moderates every physiological function from breathing to hormonal production.
- Abnormal posture is evident in patients with chronic and stress-related illnesses.
- Homeostasis and nervous system function are ultimately connected with posture.
- Despite the considerable evidence that posture affects physiology and function, the significant influence of posture on health is not addressed by most physicians.

#### **AMERICAN JOURNAL OF PAIN MANAGEMENT**



"Deviations in the body's center of gravity (read: poor posture) have resulted in intestinal problems, hemorrhoids, varicose veins, osteoporosis, hip and foot deformities,POOR HEALTH, DECREASED QUALITY OF LIFE, and a SHORTENED LIFE SPAN."<sup>20</sup>

Journal of the American Medical Association

# **CONCLUSION**

Health care is slowly changing from a symptom and disease based system to a function and performance based system in which the structure of the human body is restored and maintained. Correction and maintenance of the structure of the spine is of paramount importance in the pursuit of optimal health.

Although scientific research has validated vertebral subluxation and Chiropractic, it has been overshadowed by a health care system that is intent on finding the solution to every illness in the form of some type of chemical or pill. Good health always comes from within the body and Chiropractic is an excellent means of achieving this

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# THE EDUCATION AND TRAINING OF A DOCTOR OF CHIROPRACTIC

Educational requirements for doctors of chiropractic are among the most stringent of any of the health care professions. The typical applicant at a chiropractic college has already acquired nearly four years of pre-medical undergraduate college education, including courses in biology, inorganic and organic chemistry, physics, psychology and related lab work. Once accepted into an accredited chiropractic college, the requirements become even more demanding — four to five academic years of professional study are the standard. Because of the hands-on nature of chiropractic, and the intricate adjusting techniques, a significant portion of time is spent in clinical training.

Doctors of chiropractic — who are licensed to practice in all 50 states, the District of Columbia, and in many nations around the world — undergo a rigorous education in the healing sciences, similar to that of medical doctors. In some areas, such as anatomy, physiology, rehabilitation, nutrition and public health, they receive more intensive education than their MD counterparts.

Like other primary health care doctors, chiropractic students spend a significant portion of their curriculum studying clinical subjects related to evaluating and caring for patients. Typically, as part of their professional training, they must complete a minimum of a one-year clinical-based program dealing with actual patient care. In total, the curriculum includes a minimum of 4,200 hours of classroom, laboratory and clinical experience. The course of study is approved by an accrediting agency which is fully recognized by the U.S. Department of Education. This has been the case for more than three decades.

Records from insurance and court cases have constantly shown that chiropractic is the safest portal of entry health care available to the public today. Although no healthcare procedures are 100% safe, chiropractic stands on its record of safety and effectiveness unmatched in healthcare.

The chiropractic adjustment is a safe, efficient procedure which is performed nearly one million times every working day in the United States.

There is a singular lack of actuarial data that would justify concluding that chiropractic care is in any way harmful or dangerous. Chiropractic care is non-invasive, therefore, the body's response to chiropractic care is far more predictable than its reactions to drug treatments or surgical procedures. Of the nearly one million adjustments given every day in this country, complications are exceedingly rare.

#### COMPLIMENTS OF



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