The Therapeutic Value of the Craniosacral System

By John E. Upledger, D.O., O.M.M.

The very existence of the cardiovascular and respiratory rhythm is not-disputed today. But for eons, the debate raged on in medical communities around the globe concerning the reality of these systems. Even today, treatment of afflictions associated with these systems and especially health maintenance are remarkably varied, and as diverse as the numerous disciplines found throughout the world and their individual practitioners.

For nearly 25 years, I've been a chief proponent of the use of the craniosacral system as another rhythm to help evaluate the proper functioning of the body — and to help solve problems of pain and dysfunction. I've been dedicated to teaching the

apeutic value of the craniosacral system all healthcare professionals, physicians and non-physicians, including massage therapists, physical therapists, occupational therapists, chiropractors, psychiatrists, psychologists, nurses, and even dentists.

If it seems odd that so many different practices can derive benefit from an understanding of this system, an explanation of how it functions may be helpful.

The craniosacral system is a physiological system that exists in humans, as well as those animals possessing a brain and spinal cord. Its formation begins in the womb and continues to function until death. When there is an imbalance in your craniosacral system, your brain and spinal cord suffer. These organs are the core of your being. Without them, senses, emotions and motor functions would not be capable of working effectively.

CranioSacral Therapy is a method of examination and treatment that has been devised to correct problems that affect this vital system.

We call it "CranioSacral" because it involves all of the bones of your skull, face and mouth which make up the cranium and

nds by a system of hydraulics and membranes to the lower end of your spine, or the sacrum. Trauma or other things that affect the lower end of your spine, such as a fall on your "tailbone," can have adverse effects on the "cranial," or head end of the craniosacral system. The whole system and

the body parts that affect it must be evaluated and treated in order to improve the conditions or the environment in which the brain and spinal cord must do their job.

We elected to use the word "Therapy" rather than examination and treatment, because therapy implies a softer approach with more of a cooperative effect between the client and the therapist. It implies a mutual effort towards helping the craniosacral system work efficiently, rather than the more mechanical approach that would evaluate what's wrong and fix it without the help of the person who happens to own the craniosacral system.

The positive effect of CranioSacral Therapy relies to a large extent upon the client's normal self-corrective physiological activities. It relies upon the hydraulic forces inherent within the system to contribute a great deal toward the corrective process. The therapist who practices CranioSacral Therapy more or less removes obstacles that the normal selfcorrecting physiological forces have been unable to overcome. The therapist seldom dictates how the correction should be made, but rather assists the body in its own natural self-corrective activities within the craniosacral system. Therefore, when certain rules that enforce a gentle approach by a therapist are followed, there can be no serious error or side effect because the craniosacral system itself decides how the correction should be made. The therapist simply removes obstacles, activates and empowers.

How Is It Done?

CranioSacral Therapy is a gentle, non-invasive manipulative technique. Seldom does the therapist apply pressure that exceeds five grams or the equivalent weight of a nickel. Examination is done by testing for movements in various parts of the system. Oftentimes, when movement testing is done, the test has removed the restricting obstacle. The system is then able to complete its self-correction.

Experienced clinicians are able to palpate the craniosacral motion anywhere on a patient's body. Valuable examination information can be gained very quickly by palpating the craniosacral motion for rate, amplitude, symmetry and quality.

The parts of the craniosacral system that can be easily palpated by the hands of the therapist are the bones of the skull, sacrum and coccyx, because they attach to the membranes that enclose the cerebrospinal fluid. This cerebrospinal fluid is filtered out of the blood in a dynamic feedback loop. The system then acts like any semiclosed hydraulic system with pressures building as the amount of fluid increases, forcing the fluid to move up and down the spinal cord. When the fluid moves, the membranes containing the fluid moves, normally at a rate of six to twelve cycles per minute.

All of the other bones of the spine and pelvis are used in CranioSacral Therapy, but because of their less direct effect upon the hydraulic system, more expertise on the part of the therapist is required for their effective use. The same is true of the jaws and the temporomandibular joints.

Low amplitude of the craniosacral rhythm indicates a low level of vitality within the patient. That is, the patient's resistance is low and hence the susceptibility to disease is high.

Occasionally the craniosacral rate, as palpated on the head, is twice normal and the amplitude is low. But the energy internally that is attempting to drive the cranial system seems quite high. I subjectively interpret this finding as indicative that the boundary or meningeal membranes of the craniosacral system is quite restrictive and lacks accommodation to craniosacral motion. Therefore, the rate has doubled while the amplitude is reduced by approximately 50%. This condition continues at a normal range of motion per minute. We often find this situation in cases of inflammatory problems that presently involve or have involved the meninges and/or the central nervous system.

Lack of symmetry of the craniosacral rhythmical motion throughout the body is used to localize pathological problems. The problems may be of any type that cause loss of physiological motion. That is, they may be problems of the musculoskeletal system (somatic dysfunction),

inflammatory responses, adhesions, trauma with cicatrix, surgical scars, vascular accidents and others. The asymmetry of motion will not tell you what the problem is, but it will tell you where the problem is located. Once located, you must rely upon other evaluative methods to determine the exact pathological nature of the problem you have found.

Restoration of symmetrical craniosacral motion to the area of restricted motion is used as a prognostic tool. As the asymmetry is eliminated and normal physiological motion is restored, the problem is being or has been resolved.

One may consider the body fascia to be a slightly mobile, continuous-from-headto-toe sheath of connective tissue that invests in its pockets all of the somatic and visceral structures of the human body. With this model in mind, it is apparent that any loss of mobility of this tissue in any specific area can be used as an aid in the location of the disease process that has caused the lack of mobility. By some means, probably via the nervous system, this fascia system is kept in constant motion in correspondence with the craniosacral rhythmical motion. By direct connections and by common osseous anchorings, the extradural fascia and the meninges are interrelated and interdependent in terms of their motion. Therefore, the examiner is only limited by his or her palpatory skill and anatomical knowledge as to how much information can be obtained from the examination.

Abnormalities of structure and/or function of the nervous system, the musculoskeletal system, the blood vascular system, the lymphatic system, the endocrine system and the respiratory system may influence the craniosacral system.

Where Did The Craniosacral System and Its Therapy Come From?

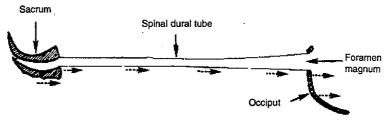
In the early 1900s, William G. Sutherland, an osteopathic student in Kirksville, Missouri, was struck by the idea that the bones of the skull were designed as they were in order to provide the opportunity for movement in relation to one another. Sutherland graduated and practiced as an osteopath in Minnesota.

For over 20 years, he thought about the prospect of movable bones in the adult human being. He did makeshift experiments on himself with helmet-like devices that could impose variable controlled and sustained pressures on different parts of his head. His wife described personality changes that he displayed in response to different pressure applications. He described various head pains and problems with coordination, which related to different pressure applications.

In the early 1930s, Dr. Sutherland published his first article about his work and ideas under a pseudonym in the *Minnesota Osteopathic Journal*. He also developed a system of examination and treatment for the bones of the skull. He had some success with patients and developed a

minute when the bones were removed to expose these membranes to the naked eye. The observation had to mean that pressure inside of the membrane sac was rhythmically fluctuating.

In 1972, I attended a seminar and explained Sutherland's ideas and taught

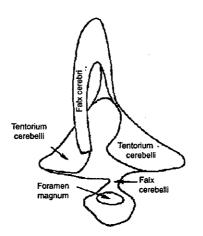


Effect of Occipital Traction on the Dural Tube and Sacrum

small cadre of osteopaths who studied cranial work with him.

Sutherland's system became known as Cranial Osteopathy. Because little was known about how it really worked, and because the results with patients seemed at times to be miraculous, Sutherland's system acquired an esoteric and cultist reputation. This reputation and the system known as Cranial Osteopathy became an embarrassment to the osteopathic medical profession that was trying to establish itself as an acceptable science.

In 1970, under specific circumstances during a surgery on a patient's neck, I was privileged to view firsthand the rhythmical movement of the membranous boundary of the hydraulic system that I later



Dural Membranes

researched scientifically. This system became known as the craniosacral system.

After first seeing the craniosacral system in action, two years had elapsed before anyone could shed any light on what I had seen. None of my colleagues nor any of the medical books had an explanation for the observation that the outer layer of the meningeal membrane (called the dura mater) in the neck visibly moved in and out rhythmically at about 10 cycles per

some of his techniques of evaluation and treatment. Coupling my tactile sensitivity with scientific background, I quickly understood how a hydraulic system might work inside of a membrane sac that was encased inside of the skull and the canal of the spinal column.

I used the techniques with success and, in 1975, was asked to join the faculty of the Osteopathic College at Michigan State University as a clinician-researcher in the Department of Biomechanics. Part of the charge of this research department was to either scientifically support or debunk once and for all the embarrassment osteopathic profession known as Cranal Osteopathy.

At Michigan State I led a multidisciplinary research team made up of anatomists, physiologists, biophysicists and bioengineers through the maze of research that first established the scientific basis of the craniosacral system. We explained the function of the system in scientific and practical terms, and showed how the system could be used to evaluate and treat poorly understood malfunctions involving the brain and spinal cord, and myriad other health problems such as chronic pain, lowered vitality and recurrent infections.

CranioSacral Therapy focuses on problem solving. It will enhance your clients' general health, improve their resistance to disease, improve their brain and spinal cord function, reduce accumulated stress, and work with the patients' own natural mechanisms to enhance effectiveness.

As you improve your level of experience in palpation, you will enhance your ability to evaluate and treat myriad problems that before may have seemed well beyond your understanding dexperience.

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