The Breath of Life | Page One

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Introduction

The cranial concept was originally brought forth by William Garner Sutherland, DO, a student of Andrew Taylor Still, MD, DO. Cranial Osteopathy involves the application of Dr. Still's Osteopathic principles to the cranium (head) and sacrum (tailbone). It is based on the Five Phenomena of the Primary Respiratory Mechanism (PRM). The palpable sensation of the PRM was later named the Cranial Rhythmic Impulse (CRI). When treating using Cranial Osteopathy, the Osteopath shows no preference towards the head or the sacrum, but rather integrates them to show the body functioning as one functional unit. The 5 Phenomena of the PRM are:

1) The Inherent Motility of the Brain and Spinal Cord

Dr. Harold Magoun wrote that "Every organ in the body exhibits the phenomenon of pulsation or rhythmic action, and the brain is no exception." [1] We have all felt our heart beating and our lungs expanding. But, there is another pulsation that occurs independently from those, which maintains its own cycle. Embryologically, we know that our brain is positioned much like the horns of a ram. The independent pulsation is that of the brain coiling and uncoiling. Dr. Magoun wrote that, "Life means motion in the brain as well as the heart and other organs." [1] In 2001, Dr. Kenneth Nelson DO, et al, researched the rate and rhythm of the PRM/CRI vs. that of the Traube-Hering-Mayer oscillation (THM). The THM was reported in the late 1800's as a fluctuation in pulse pressure after respiration had been stopped. Using laser-Doppler flowmetry, Dr. Nelson concluded that the CRI and THM occur simultaneously. However, they may or may not be the same thing. [2]

2) The Fluctuation of the Cerebrospinal Fluid (CSF)

Fluctuation is like a pulsation. The CSF is the fluid around the brain and spinal cord that moves within the membranes. The CSF does not just flow, but actually has a rhythm to its motion. This pulsation has been shown to be a separate pulse than that of the cardiac pulse. It is believed that the inherent motion of the brain, mention previously, is acting like a pump on the CSF. [3] Many authors have noted that certain cells in the brain, called oligodendoglia, pulsate. These pulsations have been shown to be independent of cardiac and respiratory pulsations. [1] These pulsations of the oligodendroglia are said to be responsible for the fluctuation of the CSF.

3) The mobility of the intracranial and intraspinal membranes

Mobility means that some "force" is controlling the motion. In the body, we have membranes (meninges) that surround the brain and spinal cord. The Dura Mater, which is the outermost of these membranes, is a very thick and inelastic membrane. The Dura Mater attaches to the bones of the head, upper cervical vertebrae, and to the sacrum. It is the motion of this membrane that controls that movement of the cranial bones and sacrum. [4]

4) The Articular Mobility of the cranial bones

There has been previous argument that the bones of the skull fuse into one solid structure, and that motion was not possible. There has been research done to test the truth to this thought. In 1979, one certain study was published that states, "Gross and microscopic examination of the parieto-parietal and parieto-temporal cranial sutures obtained by autopsy from 17 human cadavers with age range of 7-78 years shows that these sutures remain as clearly identifiable structures even in the oldest of samples." [3] What this means, is that the cranial bones are in fact still separate bones capable of motion.

5) The involuntary mobility of the sacrum between the ilia

The sacrum is attached to the head by way of the dura mater. The sacrum moves as an extension of the cranium. As the bones of the head move, so does the sacrum. The sacrum involuntarily rocks back and forth in rhythm with the bones of the head.

While the 5 Phenomena mention only the head, spine, and sacrum; we must not forget that the body is a unit. Cranial Osteopathy is not only used to treat problems with head, spine, and sacrum. Since everything in the human body is connected by membranes, muscles, or fascia, Cranial Osteopathy can be used to treat problem in the arms, legs, chest, pelvis, etc. Cranial Osteopathy can be used to treat acute problems, such as headaches, muscle spasms, sinusitis, ear infections, or birth trauma. It can also be used to treat chronic things like: migraine headaches, herniated discs in the spine, TMJ, joint pain, cerebral palsy, asthma, etc. People of any age can benefit from treatment with Cranial Osteopathy.

Osteopaths believe in the 4 tenets of Osteopathy:

1) The body is a unit
2) The body possesses a self-regulatory mechanism
3) Structure and function are reciprocally inter-related
4) Rational therapy is based upon an understanding of body unity, self-regulatory mechanism, and inter-relation of structure and function.

The PRM is the body's own way of maintaining health. If the PRM is altered in any way, the body would not be able to heal itself. Cranial Osteopathy is used to restore the PRM in all areas of the body so that the body may be able to heal itself, and function will be restored.

The PRM is believed to have begun in each person when God breathed the "Breath of Life" into them, upon birth. It was this breath of life that began life, not the first breath of air. It is called Primary Respiration because of this. The term respiration in this sense is given because of the bones in the head. A.T. Still noticed that the borders of the bones were beveled, like the gills of a fish. Therefore, they must be used for respiration.

One cycle of the CRI includes 2 phases, flexion (inhalation) and extension (exhalation). During the flexion phase, the bones of the head move to make the cranium shorter and wider. In extension, the opposite occurs. The "normal" CRI has been reported to be 8-14 times per minute. The movement of the CRI is very small; it has been measured in millimeters. It takes a very fine, sensitive touch to be able to feel the CRI.

Cranial treatments can last anywhere from 10-30 minutes. Cranial Osteopathy is a very gentle form of manipulation. Many effects can be felt immediately. The results can last from hours to days, but remain longer after successive treatments. In time, the results may be permanent relief of symptoms.

References

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