Crentle Persuasion

Releasing Developmental Restrictions with Light Touch Craniosacral Therapy

By Rebecca Flowers

he spectrum of disease, trauma, and dysfunction that can affect the physiological development and health of the youngest client populations is widespread, and seems to be increasing every day. So how do we as bodyworkers step in to affect aneaningful change in the face of such prevalent chal lenges as learning disabilities, autism seizure disorder, digestive problems colie, allergies. birth trauma, and other severe

Pediatric disorders?
Through more than twenty years of practice working primarily with children, I have found craniosacral therapy (CST) to be consistently effective in restoring and maintaining health at every level. Whether I'm dealing with an essentially well baby or an adolescent suffering from seizures, CST proves time and again to be a reliable and relevant method for pinpointing and eliminating the



Because of its gentle nature, craniosacral therapy is especially suitable for children and restores health at every level. Photos courtesy of the Upledger Institute.

source of dysfunction. Perhaps most significantly, the technique generally requires no greater than five grams of pressure (the mere weight of a nickel) to deliver results, which makes CST especially suitable for children—and easy on the therapist's body.

The Basis of Craniosacral Therapy

The extremely light touch required for CST is rooted in the nature of the system that

inspired the ther apy's creationthe craniosacral system. This vital system comprises the membranes and cerebrospinal fluid that surround and protect the brain and spinal cord. It extends from the bones of the cranium (skull, face, and mouth)down to the sacrum (tailbone).

Like the cardiovascular and respiratory systems, the crautosacral system

has a rhythm that can be palpated throughout the body. It is a subtle rhythm requiring a subtle touch to perceive. CST developer John E. Upledger, an osteopathic doctor, has always asserted that body workers are especially adept at learning the technique because, in his words, "The sense of touch is already so highly developed."

At its norm, the craniosacral rhythm pulsates at a rate of six to twelve cycles per minute. The rate is determined by the production

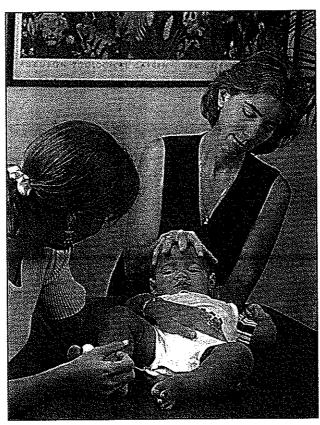
and reabsorption of cerebrospinal fluid within the ventricles of the brain, and is palpable within the movement of the attending membranes. Any imbalance in this process can cause sensory, motor, and other neurological dysfunctions.

In practice, CST generally uses very gentle pressure to access and monitor this rhythm to detect restrictions within the body that have resulted in dysfunction. While the areas most often associated with the craniosacral rhythm are the head, torso, and sacrum, the rhythm can be perceived anywhere in the body.

At the beginner's level, pathological problems are localized by feeling where there is a lack of symmetry in the rhythmic motion of the craniosacral system. The asymmetry of motion doesn't indicate what the problem is, but it does show where the problem is located. Once found, other techniques are often introduced to help determine the exact nature of the problem. As the asymmetry is eliminated and normal physiological motion is restored, the problem is resolved, or is on its way to being resolved.

The Science Behind CST

It has only been in the last thirty years that a widespread knowledge of the craniosacral system has emerged—and it began in the oddest of ways: during a neck surgery where Upledger was assisting. While trying to hold a membrane still, he observed a slow, rhythmic movement that couldn't be explained by any medical texts at the time.



CST can be utilized on a newborn within the first few days of life, working as an evaluative tool for the body's overall function.

His curiosity piqued, Upledger began searching for the answer. He started with the research of William Sutherland, the father of cranial osteopathy. For some twenty years, beginning in the early 1900s, Sutherland had explored the concept that the bones of the skull were structured to allow for movement. For decades after, this theory remained at odds with the beliefs of the scientific and medical communities. Upledger believed that if cranial bone movement existed, as Sutherland proposed, this could explain the rhythm he had encountered in surgery.

Shortly thereafter, Upledger was asked to help scientifically confirm the existence of cranial bone motion. From 1975 to 1983, he served as clinical researcher and professor of biomechanics at Michigan State University, where

he supervised a team of anatomists, physiologists, biophysicists, and bioengineers in research and testing. The results not only confirmed Sutherland's cranial bone movement theory, but also led to clarification of the mechanisms behind this motion: the craniosacral system. Upledger's continued work in the field ultimately resulted in the development of what he coined *craniosacral therapy*.

CST in Action

To be sure, Upledger's discoveries over the years have paved the way to an increased understanding of how the human body functions. Yet, he will be the first to concede that the true significance of his life's work lies in the lives changed simply by helping the body's natural healing mechanisms do their job.

Casey and Kate are two examples from my own practice. These two children came to me at different stages in their lives and presented with very different symptoms. What they shared, however, were system restrictions that were impeding their bodies' abilities to perform as they were designed. It turned out they also shared quick and dramatic responses to the effects of CST.

Casey is one of a set of twins born prematurely at thirty-two weeks and delivered by Caesarean section. Of the two boys, Casey bore the greater burden of health issues. Diagnosed with cerebral palsy (CP), he lived the first month of his life in the neonatal intensive care unit.

When I first saw Casey, he presented primarily as a spastic diplegic. This form of CP is characterized by spasticity of the lower extremities and difficulty walking,

The Twins

By Suzanne Aderholt and Sally Fryer

The twins. That is the phrase that appeared at least twice weekly in our schedule book for two years. We all know who they are even without their first names because of their unique circumstance. They were connected at the crowns of their heads in the rarest form of conjoinment, called craniopagus. These are the little boys the world came to know as "the Egyptian twins."

The World Craniofacial Foundation funded the boys' care and travel to Dallas, Texas; from their home in a remote village near Cairo, while a team of physicians, surgeons, and various specialists evaluated and discussed the possibility of separation surgery. Kenneth Salyer, a prominent craniofacial surgeon, referred the boys to us.

When we were asked if we would evaluate and treat them, we were thrilled for the opportunity. Since there was no blue-print to follow, we were learning to trust our hands with what we felt.

The first time we saw Ahmed and Mohammed Ibrahim, they were carried in the arms of their two devoted nurses who had been with them since birth Their bodies draped over the nurses' extended arms like an awkward, oversized package. We placed the twins on one of our six-foot-long padded therapy swings so we could evaluate their cranial systems and response to movement. Their eyes were wide, and they were very quiet. Ahmed sucked on his two fingers, a gesture we would come to know meant that he was scared. The boys were just fifteen months old, an age when most children have already learned to walk. They had rarely been off their backs.

Ahmed was the larger of the two boys and quite passive. He was positioned so that he could gaze straight up to the ceiling. Developmentally, he appeared to be around four months of age.

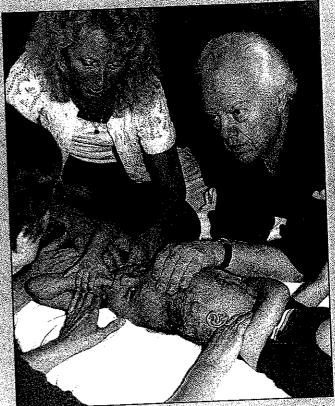
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He could move all of his extremities, although he appeared to prefer more passive social interaction. With even very slight swimming, his eyes flickered with rapid hystagmus 50 percent of the time, and he had very poor tolerance for movement. He had never played with his feet and was unable to hold his own bottle to eat. Functionally, he appeared very weak, with little

motivation to move.

Mohammed was the more active of the two boys, yet he

also had very poor tolerance to movement. Nystagmus was present 75 percent of the time, and he demonstrated a strong right-sided neglect. He also had an entrapped vagus nerve and a very difficult time eating. He seemed to be surviving primarily from the food his brother consumed.



Rebecca Flowers, left, and John Upledger, DO, work with Ahmed and Mohammed Ibrahim before the surgery to separate them.

Ahmed served as an efficient anchor for Mohammed. Despite Mohammed's attempts to roll onto his left side, he could not overpower his larger brother, who was perfectly content to lie still. When we placed both boys on their stomachs, Mohammed would push into extension,

raising Ahmed's head with him. As the boys grew, there was more than one occasion when Ahmed inadvertently manipulated Mohammed's neck with a sudden roll.

The boys each had unique cranial systems. Their anatomy was such that they shared a sagittal sinus, and each had one jugular vein draining the blood from one into the other. Early CAT scans suggested that they also shared a small portion of brain matter; by the time they had surgery, however, this did not appear to be the case. Their skulls and upper cervical verte-

skulls and upper cervical vertebrae were twisted and flattened due to their unique positioning, and none of the suture lines were in the correct place.

Ahmed's cranial rhythm ran faster than his brother's, between eight and nine cycles per minute (cpm). He had greater flexion than extension, with a strong torsion to the

right, from his sacrum all the way up into his cranial vault. His occipital base was flattened, and his head was quite wide. Mohammed's rhythm ran a little slower than Ahmed by about half a cpm (seven to eight times a minute), and he had more extension. A strong rotational force was present throughout both boys' bodies, similar to a towel being twisted initially there was minimal differentiation between their heads, where a cleft would later develop with the help of CST.

When we first started working with the boys, we believed we would either make a difference so that surgery could occur and have a greater chance of success, or we would be able to improve the quality of their lives so that they would at least be more mobile. We really didn't know what to expect. We just knew we were going to give it our best shot and provide a lot of positive intention.

After the first treatment, the boys were smiling and moving more. Their nystagmus had decreased dramatically, and they could now tolerate swimming. Mohammed appeared to notice his right arm a little more, and both boys would reach up over their heads toward the other. After six treatments, each had demonstrated a tremendous jump in development. They looked more like eight-month-old boys, and both began playing with their hands and feet. They could get onto their tummies and push up into a crawling position. Even Ahmed was moving more and attempting to crawl. Mohammed had started to eat on his own and was beginning to gain weight.

Over the next several months, the surgeons decided that operating was a viable option, and they agreed to do it. By the time the boys went into separation surgery, they had been treated a minimum of two or three times a week with CST for more than a year. All treatments included a team of two to four therapists, all of who had spent a week in Florida for an intensive program. John Upledger, DO, had also come to visit and treat the twins in Dallas.

The boys were ready. They were strong, happy, and healthy. They could stand up over a ball or swing and make walking movements. Even though they had to be in the hospital for several months while their skin was expanded to cover the incision sites, they remained infection-free and in good spirits. Whenever we came in to see them they would extend their arms to us with big smiles.

Two days after surgery we were able to get our hands on the boys, even though they would remain sedated and asleep for the next two weeks. Their rhythms were strong and we knew they were going to be all right.

The operation had gone better than anyone had ever expected (except for us). There was minimal bleeding during the procedure; they were able to come out of sedation sooner than doctors had anticipated and they progressed quickly. There were essentially no complications for the scope of the procedure, and their brains ended up being separate after all.

We continue to see the boys now as outpatients in our clinic. Mohammed is crawling well with minimal right-sided weakness and is walking with assistance. Both boys can sit independently and are talking up a storm—in three languages! Ahmed is starting to stand more. We are confident they will be walking by the time they go back to Egypt.

There is no question for us that CST made a huge impact in these two boys' lives, as well as the lives of many others. In a world of territoriality, a diverse group of people came together to share their talents and time, bridging the gap between mainstream and complementary medicine in order to improve the quality of life for these twins. This is truly a time in which anything is possible with the right intention.

Suzanne Aderholt, OTR, CST, and Sally Fryer, PT, CST, are both from Dallas, Texas, and have been craniosacral therapy practitioners since 1997 and 1998, respectively. Excerpted from Working Wonders—Changing Lives with Craniosacral Therapy. Reprinted with permission from The Upledger Institute. Copyright 2005. All rights reserved.

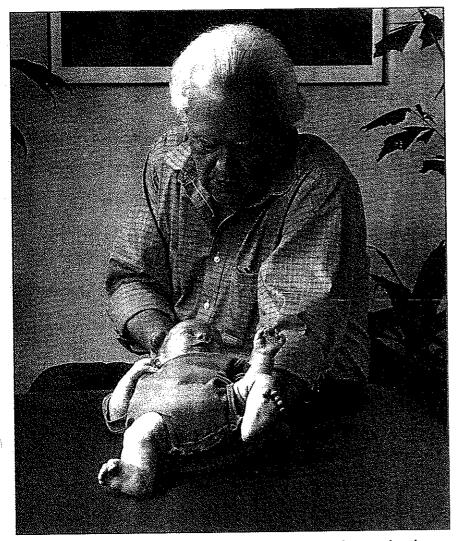
among other traits. In Casey's case, his legs moved in a scissors-like pattern when he tried to walk due to the abnormal tension in his pelvis. Aside from this, he was a very bright little boy, could feed himself, and had good age-appropriate verbal skills.

Through CST evaluation, I found a lot of abnormal tension in Casey's cranial vault. CST was used to release these tensions within the intracranial membrane system and release restrictions at the cranial base. Through this process, Casey underwent a lot of full-body unwinding of compensating patterns that mobilized his dural tube down into his sacrum and pelvis. Because the intracranial membrane system and the membrane sac holding the spinal cord are continuous fascia, the entire craniosacral system can be mobilized simply by following the body as it unwinds restrictions through the spine and dural tube.

I used CST on Casey for five consecutive days. By the end of the fifth day, he had improved ocular motor control, as well as upper extremity control. He was able not only to feed himself better, but he could also play with blocks and perform other finemotor activities. Most remarkably, he was able to abduct his hips to straddle and sit with a straight back on an elongated therapy ball (called a peanut). Now, just over two years old, Casey continues to receive CST on a regular basis and is making developmental progress.

Kate is another case of significant improvement seen within the first week of starting CST. She came to me at the age of eleven months with a diagnosis of dysgenesis (or malformation) of the corpus callosum.

At our first appointment, Kate presented as nonresponsive to sound or visual stimuli. She couldn't crawl or roll; in fact, she was extremely flaccid. She couldn't grasp objects, and she



Upledger developed CST after serving as a clinical researcher proving the existence of cranial bone motion.

had a hyperactive gag response. A CST evaluation was performed and areas of restriction were located. At the next appointment one week later, Kate was alerting to sounds and visually tracking (by moving her full head) when she saw one of her parents walk by. This was the first of many developmental milestones.

CST sessions with Kate centered largely on releasing restrictions within her dural tube, from her cranial vault all the way to the sacrum. Because of its malformed corpus callosum, Kate's brain didn't develop in a sequential, normal way. As a result, she experienced

periods of growth in one area and digression in another. The significant role of CST was in facilitating further development so she didn't get stuck in any one area.

Today, at age three and a half, Kate continues to make progress. She is able to stand up independently in the middle of the floor and walk. She can change direction and turn corners. She can climb into her high chair with just a little bit of assistance. She vocalizes, makes eye contact, enjoys music, plays with toys, swims, and loves to laugh. Kate also enjoys the preschool class she just started attending.

CST for All Levels of Health

While the conditions and outcomes cited here are dramatic in nature, they each demonstrate the basic capacity of the human body to self correct. Sometimes all that is needed—even in the relatively healthy person—is a gentle, well-placed touch to help that process along.

Using CST within the first few days of a newborn's life, for example, may reduce or avert problems that might otherwise appear later on, such as respiratory problems (e.g., asthma), hyperactivity, attention-deficit disorder, obsessive-compulsive disorder, dyslexia, seizures, allergies, and chronic ear infections.

This is why CST is always my first technique of choice as an evaluative tool for assessing the overall functioning of the body's systems. It offers an effective method not only for pinpointing existing areas of dysfunction but, better yet, preventing their formation in the first place.

No matter the case at hand, CST offers a safe and reliable way for us to use our palpatory expertise to gently facilitate the free flow and ease of movement of the body's fluids, membranes, and fascia. In doing so, we have the potential to significantly help children develop to their optimal capacity.

Rebecca Flowers, OTR, BCP, CST-D, is a certified craniosacral therapist on the clinical staff of The Upledger Clinic in Palm Beach Gardens, Florida. She holds specialty certifications in the administration and interpretation of the Sensory Integration and Praxis tests by Sensory Integration International, and has pediatric specialty certification from the American Occupational Therapy Association. She is also an instructor of CST and SomatoEmotional Release classes for The Upledger Institute.

For more information about craniosacral therapy and its application to children, contact The Upledger Institute at 800-233-5880 or visit www.upledger.com.