CranioSacral Therapy

Applications for Autism

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remember the day my daughter, Heather, was diagnosed with autism. The news was frightening to hear and the task to provide services seemed daunting. At the time, I did not have a health care background so I didn't have the insights I now have from working professionally with this population for almost 14 years.

CST is a light-touch therapy that can detect and correct restrictions in the craniosacral system that cause sensory, motor or mental dysfunction.

No one I knew had autism. None of my friends' children had autism. Heather's diagnosis from a developmental pediatrician was in January 2000, and she was almost 13 years old. The last time I had heard the term *autism*, I was in 7th grade in 1972 writing a paper on autism, and I remember reading in the encyclopedia that autism prevalence was 1 in 10,000.

After Heather's diagnosis, I visited the U.S. Centers for Disease Control and Prevention website, which showed autism prevalence was around 1 in 2,500—but the site also noted that the prevalence study was conducted in 1985. In 2017, current CDC statistics indicate autism prevalence at 1 in 68.

The day of the diagnosis, we were not given options for recovery. There weren't discussions about CranioSacral Therapy (CST) or any other type of bodywork. I had no idea, yet, how beneficial CST could be or the importance of adding it as a multidisciplinary approach toward functioning recovery.

Autism Explained

Autism spectrum disorder affects boys 4 to 1 over girls. It is a complex developmental disability that affects an individual's ability to communicate or interact with other people and the environment, which may include restrictive and repetitive behaviors. Some affected areas associated with autism include the pragmatics of language; speech delayed or nonverbal; learning differences; difficulty making eye contact or holding a conversation; narrow interests or focus; and executive functioning, which includes reasoning and planning. Many people diagnosed with autism have motor skills difficulty and sensory processing disorders.

A study conducted by Harvard University researchers in 2009 entitled "Sensory Processing in Adults with Autism Spectrum Disorders" indicated that 96 percent of autism spectrum disorder patients reported altered sensitivity to sensory stimuli, and most of those cases included tactile sensitivities.

Many individuals on the spectrum have concurrent medical issues that could include full-body tics, seizures, environmental and or food allergies, sleep disorders, biomedical issues, gastrointestinal issues or pica. (Pica is a tendency to eat things that are not food related. This is a normal part of development between ages 18 and 24 months, but some individuals with autism spectrum disorder continue this behavior into adulthood.)

These concurrent conditions make caring for an autistic child challenging.

My daughter's characteristics of autism included diagnosis of attention deficient disorder, attention deficient hyperactive disorder, obsessive compulsive disorder (OCD), obsessive defiance disorder, severe environmental and food allergies, full-body tics and 40 seizures a day.

Heather's body produced lifethreatening levels of stress hormones. She experienced serotonin disorders, neurotransmitters disorders, auto immune disorder, and sensory processing disorders. Her care required a team of eight to 10 medical professionals at any given time.

Hands-On Help

The first time I heard the term *craniosacral therapy* was from Susan Kratz, O.T.R., C.S.T.-D., the occupational therapist who was working with Heather for her sensory processing disorder. Susan explained that this type of bodywork could improve Heather's sensory system, reduce her seizure activity and may improve her OCD. She advised that it should be part of Heather's multidisciplinary approach toward recovery.

John E. Upledger, D.O., developed CST after he discovered the craniosacral system through research at Michigan State University in the mid-1970s. CST is a light-touch therapy that can detect and correct restrictions in the craniosacral system that cause sensory, motor or mental dysfunction. The craniosacral system is made up of the brain, the cerebral spinal fluid that nourishes the brain, the membrane system that protects the brain, the bones of the skull, face and mouth, and the spine.

CST is rooted in osteopathy and follows the philosophy that structure and function are interrelated. In developing CST, Upledger realized you could use the bones of the skull to make corrections to the structures beneath. It is in these corrections that restriction patterns that impact the behavior areas of the brain provide benefit in reducing behaviors associated with autism.

Fluid Movement

It's important to share two other physiological concerns for individuals on the spectrum. First is inflammation within brain tissue and the impact that has on brain structures. We know from recent studies and books like *The Autistic Brain* by Temple Grandin that the brain of an individual on the spectrum grows differently. It grows larger, matures earlier, and there is inflammation within the cytokines or cells within the brain. The second concern is Arbuckle fibers, which are a tight band of connective tissue that wraps around the brain.

With Arbuckle fibers, the brain, which is like an overinflated water balloon, is in a one-size-too-small container, which has a rubber band wrapped around it creating further restrictions. The questions here are, *how does that impact symmetry?* And *Is there appropriate room inside the environment of the cranium for the structures within to function?*

These two concerns influence the body's ability to regulate production and reabsorption of cerebral spinal fluid. Further, imagine what these conditions do to the five major brain systems that relate to behavior—not just behaviors like executive motor skills, speech or decision-making, but for some individuals, behaviors like head banging, chewing or sucking on skin or pushing on the roofs of their mouths.

When he testified before Congress on autism, to the government reform committee of the U.S. House of Representatives' 106th Congress (1999–2000), Upledger said, "We have observed that, when specific corrections of the craniosacral therapy are successfully carried out, these behaviors spontaneously cease."

A primary focus of CST is enhancing fluid movement. This reduces the pressures within the cranium that cause some of these self-inflicted behaviors. (This assertion is based on work performed by Upledger at The Genesee County Center for Autistic Children in Flint, Michigan. These were his findings after facilitation of CST twice per week during the school year, for three years.)

Craniosacral therapists use various evaluation tools to identify restriction patterns. The 10-step protocol is designed to mobilize connective and meningeal tissue in a structural progression to identify restrictions throughout the entire anatomical fascia. Another good evaluation tool is of the craniosacral rhythm.

The craniosacral rhythm is generated by the body's response to the mechanisms in the brain that are responsible for production and reabsorption of the CSF fluid. Craniosacral therapists facilitate therapy and techniques based on where the restriction patterns lead them.

The study, "The Use of CranioSacral Therapy for Autism Spectrum Disorders; Benefits from the viewpoints of Parents, Clients and Therapists," published in January 2017 in the *Journal of Bodywork* & Movement Therapies, supports the benefits of CST. This was a year-long study involving 264 CST therapists from around the world.

Clinical findings showed restriction patterns, compromised fluid flow and restricted diaphragms in subjects, and it was noted every presentation was different. Behavioral changes following CST indicated improvement in general behaviors, sensory reaction, social skills, cognitive function and emotional stability, as well as biologically.

CST Application

Tad Wanveer, L.M.T., U.-C.S.T.-D., is an

educator on what links fascia and the membrane system in the brain and how CST facilitates correction.

He explains in his book, *Brain Stars*, *Glia Illuminating CranioSacral Therapy*, that CST facilitates central nervous system (CNS) correction by lessening adverse stress of the craniosacral system membrane layers.

In this way, CST helps the CNS correct both structurally and functionally. What links fascia and the CNS? The parenchyma, or specific tissue of an organ; in this case, the pia mater membrane. The pia mater membrane is the inner most meningeal membrane. Wanveer refers to this as *the pia mater membrane to glial interconnection*.

The CNS glial cells—glia are key components in the production of cerebrospinal fluid—called astrocytes have projections from their cell body outward to attach to the pia mater membrane.

CST application for this is like loosening saran wrap on sticky, raw bread dough when you feel the dough stuck to the wrap. Upledger CranioSacral therapists are taught to fine-tune their light touch palpation skills to facilitate this work.

My experience has taught me that if you improve the environment of the brain, it improves brain function; hence, all the other systems of the body improve. Autism is a disability about brain function, and craniosacral therapy improves brain function.

Real-World Examples

I have been honored to witness a child begin to speak during therapy or exhibit new skills. I have watched lowfunctioning children at a young age who now as adults are working and living independently.

Parents of individuals with autism spectrum disorder that I work with tell me frequently how CST has helped their children.

Kim Bauer, the mother of a 24-yearold son, Travis, who has been receiving therapy for almost five years, told me, "CST improved Travis's general behaviors and quality of life."

Emily Francis, a mother, author and clinical massage therapist, had a daughter diagnosed with autism and speech apraxia. Her daughter had a 14-month developmental increase in a six-month period with the addition of CST. After the first six months of receiving CST, her daughter no longer had speech apraxia, and a year after that her developmental pediatrician removed her autism diagnosis completely.

Francis told me that watching her daughter receive CranioSacral Therapy "was like watching her brain open up like a lotus flower."

I am also one of those parents that would tell you how beneficial CST was for my child. It controlled Heather's seizures, improved her sensory system, reduced her maladaptive behaviors and continues to be a crucial therapy in order to help her maintain her functioning recovery.

Open the World

If you've met one person with autism, you've met *one person*. Every presentation of autism is different. The presentation of two individuals with high-functioning autism can look significantly different from each other and their responses may be significantly different from each other as well. These are concerns for many therapists interested in working with this population.

Additionally, physicians are beginning to recognize CST for addressing conditions such as autism. I had the opportunity to educate Geoffrey Bouc, M.D., who practices in Beloit, Wisconsin, about CST. I asked him why he now recommends CST for an individual with autism and he said, "It is an invaluable part of recovery and maximizing potential function."

Upledger said, "The shortest distance between two points is intention." It is my intention to teach the world how to connect with those on the autism spectrum. If you understand autism spectrum disorder and sensory processing disorders, and have the intention to help those with autism through CranioSacral Therapy, you can open the world for these beautiful individuals who often live trapped inside themselves.

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