## Autism Spectrum Disorder: How CranioSacral Therapy Can Help By John Upledger, DO, OMM May 29, 2009

*Editor's note:* Dr. John Upledger has asked Tad Wanveer, LMT, CST-D, to share his insights in this month's column. Tad has been the guest author for previous "CranioSacrally Speaking" columns.

CranioSacral Therapy (CST) has been shown to help the autistic individual find greater ease, both within themselves and in the world around them, by decreasing structural stress and strain on their central nervous system.

Autism spectrum disorder (ASD) is estimated to affect one child in every 150 births. It's the fastest growing developmental disability, with a diagnosis rate rising 10 to 17 percent each year. ASD is considered to be a result of biological and/or neurological disorders that affect the functioning of the brain. To date, there is no known single cause of ASD.

## The CST Model of ASD

Dr. Upledger's recent model of autism is based on his hands-on experience with autistic children and their responses to therapy. It's supported by research at Johns Hopkins University showing "increased levels of proinflammatory cytokines, neuroglial activation and inflammatory changes" in the cerebrospinal fluid of the autistic patients studied.<sup>1</sup> Simply stated, ASD is partially caused by a loss of flexibility and probable inflammation of the membrane layers surrounding the brain.

This compromise can create restrictive force on the brain tissue leading to adverse strain on the internal body-regulating components of the hypothalamus, the reticular activating system and the autonomic nervous system; irritation and hypersensitivity of neurons, glial cells and neurological pathways; abnormal pressure change within the brain tissue; adverse effect on the limbic (emotional) system; over-heightened central nervous system immune response; brain tissue congestion and toxicity; and endocrine system compromise.

What is observed as typical ASD behavioral impairment in social relationships, social communication and imaginative thought might be the effects of inner chaos created by the abnormal grasp, squeeze and irritation of the membrane on the brain. Combining the extreme tension caused by an abnormally inflexible brain container with inflammation can lead to a brain confined within biomechanical and biochemical turmoil.

## The CST Approach to ASD

The focus of CranioSacral Therapy is to enhance the balanced motion of:

- The membrane layers surrounding the brain;
- The fluid (blood and cerebrospinal fluid) moving into the cranium, out of the cranium, and throughout the brain tissue; and

• The areas of the body that do not show normal response to the craniosacral rhythm, which might be straining the craniosacral system and the brain.

When working with an ASD individual, the initial focus often is on the cranium to locate an area that has the greatest motion response to the craniosacral rhythm. Delicate release and pumping techniques are used to create more motion in that area.

The increased motion is used as a dynamic biomechanical tool - one hand is used to continue to increase motion and direct fluid flow, while the other hand is used to encourage motion in non-moving areas. Little by little, small changes create larger changes that enhance the mobility of the brain's container (the craniosacral system).

Increased balanced motion of the membrane surrounding the brain helps flush toxins and inflammation out of the brain tissue. As this occurs, it naturally can elevate biochemical processing, which increases the function of neurons and neurological pathways.

Newfound motion of the brain tissue and fluid helps decrease the abnormal and often enormous strain the brain has been under. This allows the brain cells a greater ability to process and react to information of all sorts. As Donna Williams states in her book, *Autism: An Inside-Out Approach,* "When I was an infant, my senses didn't work right and my response to light and sound and touch were not just meaningless, but too acute. I could not only, not understand the world, but I also could not stand it."<sup>2</sup> CST gently can help the ASD person come to newfound levels of tolerance, understanding and response within themselves and with the world around them.

While this article has been focusing on the brain, CranioSacral Therapy also is directed to the whole body, since tissue restrictions anywhere can adversely affect the membrane surrounding the brain. CST helps elevate the body's natural healing and compensatory mechanisms by facilitating neurological function. This, in turn, can elevate the structure and function of the body as a whole, thereby aiding the correction of dysfunctional systems such as the digestive and immune systems that seem to often be involved in ASD.

CranioSacral Therapy also combines well with and can enhance other forms of therapy the ASD person might be using, such as sensory integration therapy, neurodevelopmental therapy, speech therapy, occupational therapy, physical therapy, diet programs, detoxification programs and homeopathy. When working with a child, it's helpful to maintain a program of consistent CST, since there is a tendency for the membrane of an ASD child to tighten as growth spurts occur.

## CST Is a Sensitive Pathway to Nervous System Correction

CranioSacral Therapy gently and fully embraces each individual as unique. Through this type of acceptance, sensitive touch and delicate application of technique, pathways of change can form. CST can help the brain decrease levels of abnormal inflammation,

sensation, tension, toxicity and chaos. This can lead to greater ease and efficiency of nervous system processing, which often manifests as a reduction of ASD symptoms. *References* 

- 1. Upledger JE. *CranioSacral Therapy and the Reversal of Pathogenic Processes* Study Guide. Upledger Institute Publishing: 2005.
- 2. Williams D. Autism: An Inside-Out Approach. Jessica Kingsley Publishers: 1996.

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