



Committee Meeting

on

Topic of Autism before the Government Reform Committee of the U.S. House of Representatives, 106th Congress (1999-2000). Dr Upledger testified in the day-long session which featured testimonies from leaders in autism research and treatment, as well as from the parents of autistic children.

*LOCATION: Capitol Hill
Washington, DC*

*DATE: April 6, 2000
12:00 P.M.*

MEMBERS OF COMMITTEE PRESENT:

DAN BURTON, Indiana, Chairman

BENJAMIN A. GILMAN, New York
CONSTANCE A. MORELLA, Maryland
CHRISTOPHER SHAYS, Connecticut
ILEANA ROS-LEHTINEN, Florida
JOHN M. McHUGH, New York
STEPHEN HORN, California
JOHN L. MICA, Florida
THOMAS M. DAVIS, Virginia
DAVID M. McINTOSH, Indiana
MARK E. SOUDER, Indiana
CHAKA FATTAH, Pennsylvania
ELIJAH E. CUMMINGS, Maryland
MARSHALL "MARK" SANFORD, South Carolina
BOB BARR, Georgia
DAN MILLER, Florida
ASA HUTCHINSON, Arkansas
LEE TERRY, Nebraska
JUDY BIGGERT, Illinois
GREG WALDEN, Oregon
DOUG OSE, California
BERNARD SANDERS, Vermont
DAVID VITTER, Louisiana

HENRY A. WAXMAN, California
TOM LANTOS, California
ROBERT E. WISE, Jr., West Virginia
MAJOR R. OWENS, New York
EDOLPHUS TOWNS, New York
PAUL E. KANJORSKI, Pennsylvania
PATSY T. MINK, Hawaii
CAROLYN B. MALONEY, New York
ELEANOR HOLMES NORTON, Washington, DC
JOE SCARBOROUGH, Florida
STEVEN C. LaTOURETTE, Ohio
DENNIS J. KUCINICH, Ohio
ROD R. BLAGOJEVICH, Illinois
DANNY K. DAVIS, Illinois
JOHN F. TIERNEY, Massachusetts
JIM TURNER, Texas
THOMAS H. ALLEN, Maine
HAROLD E. FORD, Jr., Tennessee
JANICE D. SCHAKOWSKY, Illinois
PAUL RYAN, Wisconsin
HELEN CHENOWETH-HAGE, Idaho (Independent)

ALSO PRESENT:

KEVIN BINGER, Staff Director
DANIEL R. MOLL, Deputy Staff Director
DAVID A. KASS, Deputy Counsel and Parliamentarian
LISA SMITH ARAFUNE, Chief Clerk
PHIL SCHILIRO, Minority Staff Director

Following is the transcript of Dr. Upledger's presentation.

CranioSacral Therapy and Autism: Observations, Experiences and Concepts

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

On April 6, 2000, Dr. Upledger testified on the topic of autism before the Government Reform Committee of the U.S. House of Representatives, 106th Congress (1999-2000). The day-long session featured testimonies from leaders in autism research and treatment, as well as from the parents of autistic children. Following is the transcript of Dr. Upledger's presentation.

An Etiologic Model for Autism

The following model was first formulated based upon hands-on experience with autistic children, historical information gained from their parents, observations of the children's behaviors, their responses to treatments, and our laboratory results.

During the normal, physical growth period of the child's brain and cranium, it is necessary that the meningeal membranes that line the cranial vault and cover the surface of the brain grow and expand in synchrony with the growth of these structures in order to accommodate the natural maturation process. For some reason the meningeal membranes, especially the dura mater, lose their accommodative growth abilities, thereby disrupting the normal expansion of brain and cranial vault. This loss of accommodative quality of the dura mater is most likely due to biochemical changes in its make-up. These biochemical changes may be the result of febrile stressor episodes for any reason, such as viral infections, vaccine reactions and so on.

The manual stretching of the restrictive dura mater by the use of CranioSacral Therapy techniques has provided impressive improvement in autism. The therapy must be continued until the child has reached full

growth, because once the dura mater has lost its accommodative ability, it must be physically stretched by a therapist. CranioSacral Therapy accomplishes this task non-invasively by using the various related bones to which the dura mater attaches as handles to stretch the membranes.

Background

In the fall of 1976, as a clinician-researcher at Michigan State University (MSU), I began a study of autism at the Genessee County Center for Autistic Children in Flint, Michigan. My co-investigators included Ernest Retzlaff, Ph.D. in neurophysiology, Jon Vredevoogd, M.F.A. associate professor of design at MSU, and a wide array of graduate students in the MSU colleges of osteopathic and allopathic medicine, as well as a few in the department of psychology. Our research project lasted three school years (September – June). We worked onsite two days per week during these school years. The center for autism was a day school and it was closed during the summer. We consistently averaged 28 to 30 autistic children in our program. About two-thirds of these children were in this study for at least two of the three years.

The grant support for the study was awarded on an annual basis. It is my understanding that the monies originated from NIMH and were funneled to me as principal investigator via the state of Michigan and Genessee County. The funding ended at the end of the third year quite abruptly. My understanding at that time was that the state chose to put the monies into other more pressing projects. I was told by the Genessee County officials that autism was not the

highest priority and that the tax base in the state was not very stable.

During these three years and subsequently, I saw private patients diagnosed as autistic coming from a variety of sources. These children were seen at the university clinic.

After leaving MSU in 1983 I moved to Florida where, in 1985, we founded The Upledger Institute. During the interim, 1983 to 1985, I developed a prototype wholistic healthcare center for Unity Church of Palm Beach. During this period with Unity Church I treated only a few autistic children. Shortly after The Upledger Institute was begun we developed a one-week intensive treatment program for autistic children, which is still in operation. It is offered three or four times each year for only autistic children. The program is a five-day week, with approximately six hours per day of hands-on treatment. Parents are included and offered training in the treatment and management of their autistic children.

Since the beginning of my work with autistic children, CranioSacral Therapy has been the main therapeutic focus, coupled with nutritional supplements as they seem indicated.

Observations

Since my first experiences with autistic children I have made several observations that have been consistent and have influenced my concepts of etiology and therapeutic management.

These observations are as follows:

Historically, the onset of autistic behaviors is often preceded by some sort of febrile episode. This febrile episode occurs most often about two weeks prior to the parent noticing behavioral changes. However, the time between the fever and the onset of

noticed symptoms may vary from a few days up to a few months. Certainly, the length of time reported is dependent upon the powers of observation by the parents, their level of denial and so on. The fever could be resultant to viral infection, a vaccine reaction or any other cause. Our historical information comes from parents interviewed by me personally in the US, Canada, England and Belgium. In all of these places I took histories from parents. I also evaluated the children from a craniosacral system perspective.

Some of the behaviors observed in autistic children are attempts to change/correct physiological and/or anatomical dysfunctions that may be causing pain or discomfort. Many autistic children are known to bang their heads, chew on their wrists and/or the bases of their thumbs until deep tissue (tendon sheath) is visible, and/or they may suck on their thumbs so vigorously that the front upper teeth begin to displace forward. Actually, these thumb-sucking children are pressing on the roof of the mouth as hard as they can.

We have observed that, when specific corrections of the craniosacral system are successfully carried out, these behaviors spontaneously cease. It is my opinion that the head-banging child is trying to release a compressive force in the head that is quite painful. When we release this compression, head banging stops. This compression is from the front to the back of the head.

Regarding the chewing on the wrist and thumb base, there are three theoretical possibilities that may be valid. First, this self-mutilating activity may be a substitution of a controlled pain that overrides and is more acceptable than a head pain that is not controllable. Second, the self-mutilation may also serve to stimulate the synthesis and

release of the natural pain relievers (endorphins) that are nature's way of offering relief from pain biochemically. Also, there is a gate theory of pain developed by Melzack and Wall that suggests that, when the quantity of pain impulses coming into the brain exceeds an upper threshold, all impulses are blocked from entry into pain-perception centers in the brain. The autistic child may have found that when he/she inflicts more and more injury/pain upon himself/herself, the pain is no longer present.

I have seen consistently that, when we are able to release reactions of the membranous lining of the floor of the cranial vault in a front to back direction, these "autistic" behaviors (listed above) disappear "spontaneously."

It was consistently observed that CranioSacral Therapy directed at alleviation of abnormal transverse (side to side) compression of the cranial vault resulted in the child immediately demonstrating love and affection. The child will often hug and kiss the therapist after the compression has been released. Subsequently, improved socialization is often demonstrated by showing love and affection to parents and caretakers, as well as beginning to interact with other children and adults, whereas previously their interactions were with inanimate objects. Additionally, during the CranioSacral Therapy session the child often releases a lot of emotion.

Thermographic monitoring of the autistic child's hand during successful but basic CranioSacral Therapy sessions demonstrates hand warming, often as much as 2 to 3 degrees Fahrenheit. This offers evidence of increased blood flow to the hand resultant to the CranioSacral Therapy that is applied to the head. The increased blood flow is

necessarily related to relaxation of the autonomic (sympathetic) nerve control of the blood vessels. This sympathetic nervous system relaxation results in a reduction of internal physiological and emotional stress factors.

It has been noted that most autistic children are very shallow breathers. While working at the Genessee County Center for Autism, I had the children breath 10% carbon dioxide in 90% oxygen for about five minutes in the morning, five days per week. This seemed to enhance the breathing activity for an extended period of time after the five-minute session was completed.

Hair analysis for toxic minerals was done on all children in the Genessee County study. We could see no consistent patterns of abnormality in mineral levels in the hair of the children.

Extensive blood analysis was done on all children in the Genessee County study. This analysis included standard blood-cell counts, routine blood-chemistry studies, isoenzyme studies, and protein electrophoresis studies. No consistent patterns of abnormality were seen.

Ultimately, all of our examinations consistently revealed that the intracranial membranes were very tight. Our findings suggested that for some reason the meningeal intracranial membranes, especially the dura mater that is very tough and waterproof, were not expanding along with the normal growth of the skull bones and the brain. I tested this concept by examining 63 children who had been rated as either autistic or childhood schizophrenic by Dr. Bernard Rimland who directed the Child Behavioral Research Center in San Diego. I had seen none of these children, nor their records, previously. I was able to pick out the autistic children from the sample

with over 90% accuracy simply by manually evaluating each child's craniosacral system. Favorable responses to CranioSacral Therapy were often lost when there was no treatment for three or four months. This suggests the lack of growth of the dura mater while the skull and brain grow as a contributing cause for autism.

Suggested Conclusions

The aforementioned observations, coupled with the observed clinical responses to CranioSacral Therapy, suggest that compromise of the accommodative quality of the intracranial meningeal system, especially the dura mater, to growth of the skull and brain is at the very least a large contributor to the problems of the autistic child. The dura mater can be stretched by the use of CranioSacral manual techniques applied to the external surface of the cranium. This work affords some relief from the membranous restriction imposed upon brain and skull bones. The treatment must be continued regularly because the accommodative enlargement of the membrane compartment is quickly used up as the child and his/her brain and skull continue to grow.

The Treatment

The treatment that I suggest is regular CranioSacral Therapy until the child is fully grown. This treatment is best administered on a weekly basis. However, it can be administered at longer intervals if close watch is kept for signs of regression. When these signs do appear, treatment should be resumed. If signs of regression appear, it may take up to five or ten sessions to re-establish the accommodations for brain and skull growth by the dura mater membrane. On a weekly basis, one treatment is usually enough to maintain favorable growth conditions.

It is also suggested that nutritional supplements be given in order to ensure the restoration of vitality of a brain that has been compressed for a significant amount of time. Among the suggested nutrients are B complex, B12, docosahexaenoic acid (Neuromins), alpha lipoic acid, and a good multivitamin and mineral preparation.

We have had some success in teaching parents to treat their autistic children using CranioSacral Therapy. This offers them some degree of independence from geographical location requirements near CranioSacral Therapists. If the child shows reasonable progress using parental treatment, we suggest re-evaluation by a skilled CranioSacral Therapist about every six months.