

Helping Children with Autism, a Chinese Medical Perspective

By Lola Burmeister, L.Ac.



Autism is a condition present from early childhood. It is characterized by difficulty in any of the following: verbal and nonverbal communication, forming relationships to self and others and using language or abstract concepts. Autism is called the spectrum disorder as there is a grade of severity in disorder and in level of function unique to each individual and formerly separate diagnoses such as Asperger's are now included within the broader category of Autism.¹ Autism affects 1 in 68 children and every year this number changes to include more diagnosed children. Autism has been most commonly treated by behavior modification therapies such as Discrete Trial Training or Applied Behavior Analysis. Second generation antipsychotics like Risperidone and Aripiprazole are also used to manage symptoms.² While these therapies have been shown to increase prosocial behavior, they have not been proven to effect positive change in a child's disorder.

Parents who have a child or children with Autism typically have concerns with the child's behavior, their rejection to affection, food aversions at mealtime, toileting issues or sleep disturbances. Chinese medicine addresses all of the above concerns through its medical modalities. According to the Qigong Sensory Training Institute for example, medical qi gong massage has

been documented to give a 30 percent decrease in Autism presentation after 3 months of children receiving a specific daily massage from their parents.³ In my experience in using the same standardized tests of behavior and developmental abilities used by the institute, there can be up to a 50 percent decrease in Autism presentation when the medical qi gong daily massage is coupled with herbal and diet therapies. Some children on the lesser end of the spectrum were relieved of their Autism symptoms.³ In this article I will address how all the faculties of Chinese medicine help a child with Autism, with the primary focus on Chinese herbal medicine.

Formulas for children with Autism will vary according to the defining symptoms. A typical pattern in Autism is Shen disturbance and a deficient middle jiao, accompanied by impeded movement of qi and Blood resulting in blocks in the meridians and collaterals, and Liver and Kidney deficiency. For these children, toxins accumulate and sensory input is diminished. Herbs should be used to tonify the Liver and Kidney and strengthen the free coursing of the Liver Qi. Draining is allowed if the child holds dampness. Additionally, the Jing should always be supported when working with an Autistic child. As Autism is a spectrum disorder, it should be expected that the western medical diagnosis of the child will shift as treatments progress. Finally, most children with Autism have a simultaneous excess and deficiency pattern that involves multiple organs. It is not uncommon to see three or four patterns evolve as the child recovers.

Chinese herbal medicine begins to address Autism by engendering a healthy middle jiao, supporting proper circulation and clearing Shen disturbance. The middle jiao is usually addressed first for all children as impeded flow in the jingluo affects the middle jiao foremost. Shen disturbance and adverse behavior are also treated primarily as this aspect of the spectrum disorder affects the well-being of the family as a whole and, once managed, all other patterns correct with more ease. In

¹ National Institute of Mental Health, <http://www.nimh.nih.gov/health/topics/autism-spectrum-disorders-asd/index.shtml>

² Brendan Ryan, *Autism Society, Improving lives of All Affected by Autism*, www.autism-society.org

³ Dr. Louisa Silva, Qi Gong Sensory Training Institute, www.qsti.org

Autism, the whole household is affected in all aspects of daily living. It should be noted here that the whole family should be supported in healing.

Clearing heat-toxins and expelling phlegm are also important treatment goals when helping children with Autism. These patterns often overlap and again, treatment is almost always begun by addressing the middle jiao. The exception here is for a child with significant blockages (no social engagement or vocal expression) in which case, the Liver's free coursing and detoxification ability may need to be addressed first. A child with a bright red tongue or tongue tip will often show aggression in behavior and have difficulty in transitions. This child should be treated for heat-toxins in addition to addressing their middle jiao function. A child with a thick tongue coat will often show signs of slow receptive language; they may take a long time to respond to directives or be lethargic or antisocial or show perseverating (repetitive) behaviors. This child should be treated for phlegm and dampness in addition to other presenting patterns.

Some goals in addressing the middle jiao of a child with Autism are to heal inflammation, improve digestive efficiency and promote the elimination of heavy metals, accumulated food by-products, environmental toxins and trans-fats from the system. It should be noted that success is found when herbs are paired with an organic and low glutamate diet so as to discontinue toxic insult to the body. Chinese herbs are chosen for a custom formula depending on the state of the middle jiao, the severity of immune deficiency, and all other presenting symptoms.

Additionally, we can look at the condition from a western medical perspective and include herbs to both support the middle jiao and support a healthy immune system. Children with Autism typically have chronic inflammation in the intestines. Western medicine is now showing a direct relationship between immune health and healthy intestinal flora; the two are on a biofeedback system, the health of one depends upon the other. When the bowel lining is inflamed, there is less efficiency with intracellular exchange and some of the contents of the intestines leak into the systemic circulation. Excitotoxins leaked into the peritoneal cavity may then cross the blood-brain barrier from the systemic circulation. This condition is seen in many neurological diseases and it causes behavioral disorders as well as

immune deficiency symptoms. Scientists have shown that children with Autism display the inflammatory symptoms of a Th1 immune compromise due to a failure of the Th1 arm of the immune system and an overactive Th2 arm.⁴ There is a large body of current evidence that shows that this may be largely due to exposure to environmental pollutants such as pesticides, flea and tick medications, food preservatives and artificial additives such as color or synthesized supplements.⁵

In my practice working with families, I have found using *Xiao Yao Wan* as a base formula for most children both supports immune function and addresses the most frequently seen constitutional diagnoses with great success. Other classical base formulas to consider, depending on the complete Chinese medical diagnosis, include *Xiao Chai Hu Tang*⁶, *Zhu Ru Wen Dan Tang*⁷, *Sheng Mai San*⁸, and *Huo Luo Xiao Ling Dan*⁹.

Supporting Th1 function helps children with Autism in two ways; it aids in transporting foreign and possibly toxic particulates out of the body while healing the lining of the gastrointestinal tract. Common culinary herbs such as Ba Jiao Hui Xiang/Asini stellani/star anise, Gui Zhi/Cinnamomi cassia/cinnamon twig, Ding Xiang/Syzygium aromaticum/clove bud, Yan Sui/Coriandrum sativum/coriander, Long Hao/Artemesia vulagris/tarragon, Niu Zhi/Ocimum basilicum/oregano, Bo He/Menthe haplocalyx/mint, Xiang Mao/Cymbopogon nardus/lemongrass, and She Xiang Cao/Thymus vulgaris/thyme can be added in to the formula and/or included in the child's diet to help heal the gastrointestinal lining. Herbs such as Du Song Zi/Juniperus communis Linn, Xiang Mao/Cymbopogon martinii, Ning Meng Pi/Citrus limon, You Zi Pi/Citrus grandis and Ju Hua/Chrysanthemum morifolium may be added in as needed, and it should be recommended that the child take the formula with very pure fish or algae oils. Omega 3 fatty acids are known to significantly benefit various inflammatory and autoimmune conditions and support Th1 cytokines.¹⁰

Herbs should also be added as needed to address slow transit time in the large intestine and thereby reduce chronic inflammation, such as Huo Ma Ren/Cannabis indica and Hei Zhi Ma/Sesamum indicum. These herbs are most successfully incorporated into the diet if they are mixed in a salt shaker and shaken over meals. Fan xie ye/Senna alexandrina leaves can be used in small sips to gently move the bowels if there is

⁴ Evidence of oxidative damage and inflammation associated with low glutathione redox status in the autism brain. <http://www.ncbi.nlm.nih.gov/pubmed/22781167>, The role of immune dysfunction in the pathophysiology of autism. <http://www.ncbi.nlm.nih.gov/pubmed/21906670>, Elevated plasma cytokines in autism spectrum disorders provide evidence of immune dysfunction and are associated with impaired behavioral outcome. <http://www.ncbi.nlm.nih.gov/pubmed/20705131>

⁵ Autism spectrum disorder, flea and tick medication, and adjustments for exposure misclassification: the CHARGE (Childhood Autism Risks from Genetics and Environment) case-control study. <http://www.ncbi.nlm.nih.gov/pubmed/24456651>, Neurodevelopmental disorders and prenatal residential proximity to agricultural pesticides: the CHARGE study. <http://www.ncbi.nlm.nih.gov/pubmed/24954055>

⁶ Dr. Phil Garrison and Ancient Chinese Medical Theory: <https://chinesemedicalclassics.wordpress.com/2014/10/07/autism-as-a-shao-yang-disorder-a-chinese-medicine-perspective/>

⁷ Subhuti Dharmananda, Ph.D., Director, Institute for Traditional Medicine, Portland, Oregon, <http://www.itmonline.org/arts/autism.htm>

⁸ Amy Hanks, Cancer and Traditional Chinese Medicine – Eastland Press, www.eastlandpress.com/upload_pdf_1...1/AmyHanks.pdf

⁹ David Y.W. Lee, PhD; Xuejun Kong, MD, Potential Treatment of Autism with Traditional Chinese Medicine, N A J Med Sci. 2012;5(3):189-192. <http://najms.net/v05i03p189w/>

¹⁰ Modulation of DNA methylation states and infant immune system by dietary supplementation with ω-3 PUFA during pregnancy in an intervention study. <http://www.ncbi.nlm.nih.gov/pubmed/23761484>

actual constipation. Again, a few of these herbs should be selected as needed to add to a custom formula according to the presenting pattern.

Another primary focus in the herbal treatment plan is to expel accumulated toxins. A simple combination of Pu Gong Ying/*Taraxicum sinicum* extract powder or granules and bentonite clay may be encapsulated and administered during the initial stages of treatment. All exogenous factors in the diet and daily life of the child should be monitored to avoid further toxic exposure.

It is commonly seen that children with Autism have compromised liver and kidney function. The human genome project isolated the MTHFR gene that is almost always involved in Autism. This gene mutation is responsible for an inability to produce proper enzymes for detoxification and digestion.¹¹ This phenomena is reflected in both the Western medicine and the Chinese medicine diagnosis and treatment of Autism, as both agree there is impairment of liver and kidney function. In Western medicine, compromised liver and kidney function leads to the inability to detoxify and filter the blood and body fluids. In the Chinese medicine view, this enzyme deficiency is seen to cause an impairment of the Liver's free coursing ability, blocks are formed and there are further impediments in the flow of Qi and Blood in the jingluo. The Kidney's insufficiency will lead to any of the 5 delays of child development (delays in fontanel closure, standing, walking, speaking, and growth of hair and teeth), some of which may be present in the Autistic child. An inefficient Mingmen fire will lead to an inefficient and cold middle jiao, and therefore improper transformation, assimilation and distribution of nutrients.

The resulting problem is two-fold; the middle jiao is inefficient at transforming and transporting nutrients and the nutrients are contaminated with waste that is not properly metabolized or excreted. This problem is further compounded if the child incurs exogenous factors such as food allergies, pesticides, hormones, preservatives or additives in their diet and pollutants in their air or water.

Single herbs to consider for the base formula to aid the Liver if not starting with *Xiao Yao Wan* base include Chai Hu/*Bupleurum chinensis*, Dang Gui/*Angelica sinensis*, and Bai Shao Yao/*Paeoniae lactiflora*, and Bai Zhu/*Atractylodes macrocephala*. Additional herbs are used to further support Liver and Kidney function and circulate Qi and Blood in the jingluo. The Jing and Blood are aided by increasing vitality with a couple of single herbs such as Wu Wei Zi/*Schisandra chinensis*, Shan Zhu Yu/*Cornus officinalis*, He Shou Wu/*Polygonum multiflorum*, Gou Qi Zi/*Lycium chinensis*, Yin Yang Huo/*Epimedium*

brevicornum and Tu Si Zi/*Cuscutae chinensis*. Once Blood has been engendered, it can be gently moved by Liver herbs like Chai Hu and Dang Gui. Additional herbs such as Dan Shen/*Salvia miltiorrhiza* or Yan Hu Suo/*Corydalis yanhusuomay* be added if stronger Blood invigoration is needed. If phlegm has accumulated due to qi blockage and middle jiao deficiency, herbs should be used to promote the transformation and transportation of fluids, such as Fu Ling/*Poria cocos*, Bai Zhu/*Atractylodes macrocephala*, Sheng Jiang/*Zingiberis Officinalis* and Yi Yi Ren/*Coix lacryma-Jobi*. These mild and bland Spleen tonic herbs should be used in food preparation as much as possible as well as distributed in the diet through extract powder or granules mixed in food.

The root of an Autistic pattern tends to be Heart Shen disturbance compounded by a deficient middle jiao and Liver and Kidney impediment. This pattern results in a dull Shen and with a child who is underdeveloped physically as well as emotionally. The child may present with aversion to touch, diminished attempts for joint attention (child pointing/asking nonverbally for another to join their attention to an object or person), anger, frustration or sadness, perseveration (excessive focus) on particulars or difficulty with transitions.¹² To address this, herbs should be used to anchor the Shen and smooth the qi. In my experience, herbs like Suan Zao Ren/*Ziziphus jujube spinosa*, Hu Po/*Succinus* and Tai Zhi Shen/*Pseudostellaria heterophylla* should be combined with Xiang Fu/*Cyperus rotundi*, Ling Zhi/*Ganoderma lucidum* and Bing Pian/*Borneolum* (this last one not to be used long term) to calm the mind and open the orifices to allow for a greater ease with sensory input and self-regulation.

To enhance the efficacy of Chinese herbs to address Autism, other modalities of Chinese medicine should be employed. For best results, a Chinese herbal remedy should be combined with medical Qi Gong therapy, Tui Na, and acupressure using pediatric Sho Ni Shin techniques. Scalp acupuncture is also very beneficial.

A child with Autism who is being treated with Chinese medicine should be given Tui Na tapping in the form of Qi Gong Sensory Therapy to allow for free flow of Qi and Blood in the Ren and Du meridians. This addresses the blocked collaterals and allows for sensory input. It is traditional to instruct the parent of the child to administer a twelve step prescription once a day. The child may have an aversion to the therapy initially. However, it is seen that with repeated strategic attempts, the child begins to accept and eventually to request the daily therapy. Dr. Louisa Silva's research shows that her therapy administered for 3 months can lessen the Autism diagnosis by 30% up the spectrum of the disorder. An additional benefit of Qi Gong Sensory Tui Na is the opportunity for parent bonding. A child with Autism

¹¹. Talk About Curing Autism, Detoxification and Methylation, www.tacanow.org

¹². Dr. Louisa Silva, Qi Gong Sensory Training Institute, www.qsti.org

who is treated with Traditional Chinese Medicine (TCM) will typically have their digestive system regulated and specific digestive complaints such as diarrhea or constipation eliminated. The amount of time needed for these children to fall asleep decreases and they sleep longer through the night. Dr. Silva's research of 130 cases shows that all the children who received TCM treatment decreased violent behavior and a large percentage of children began making eye contact and asking for joint attention (child pointing/asking nonverbally for another to join their attention to an object or person) where they hadn't before.

It is important to remember that children have a great opportunity for healing as their developing brain is constantly pruning its synapses in response to the environment and all potential brain connections that haven't been made in development merely lie dormant. These dormant and sometimes vital connections may be connected by the child's brain through therapy.¹³ It is never too late to make progress and positive change. In this truth, there is always hope that health and balance can be achieved.

Finally, it is worth noting that children may refuse many of the modalities of Chinese medicine initially. Strategic introduction to therapy should be paired with the child's most concerning presenting symptoms. Compassion, flexibility and persistence are key in the success of treatment. To increase compliance in taking herbs, extract powders or granules should be obtained to blend with preferred beverages or to be taken in foods. The parents of the child in therapy should be closely mentored on how to offer herbs to their child. Many of the recommended herbs can be found as essential oils or used as a food or simple tea. Certain brands of essential oils can be taken internally and should be added to beverages, foods, or administered from an air diffuser. All herbal formulas should focus first on addressing the deficient middle jiao, and then secondarily on clearing blockages, clearing heat-toxins, etc. depending on the presenting pattern. Later formulas should strengthen the Jing, soothe the Heart, engender the course of the Liver and strengthen the foundational Kidney yin and yang.

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Author Bio:

Lola Burmeister has a Bachelor's of Science in Human Development from UW Madison. She is a licensed acupuncturist and herbalist specializing in family practice with a focus in pediatrics. Lola has been treating symptoms of Autism with an array of therapies for 15 years. She has been active in healthy family planning and doula service since 2008 and has been teaching Medical Qi Gong since 2012. Lola is currently in practice in Madison, WI and can be reached at 507.993.8911 or lolaburmeister@hotmail.com.

¹³ Myron Hofer M.D., Neurobiology of Parent-Child Bonding, Rockefeller University Parent Series, 2007