

Holistic Approach to Immune Malfunction for Autism

Harry Hong Ph.D. L.Ac.
http://www.harryhong.com

Three Major Systems Affected

- **Nervous system**
 - Hypoperfusion (lack of circulation) in Brain Spect
 - Neuroinflammation (depletion of nutrients and oxygen)
 - Neurotoxins and Blood-Brain Barrier disruption
- **Digestive system**
 - Food indigestion/intolerance
 - Candida/bacteria/parasite (tissue damage and toxins)
 - Leaky Gut (toxin recycling and nutrient mal-absorption)
- **Immune system**
 - Allergies, sensitivities and autoimmune responses
 - Frequent infections

Harry G. Hong Ph.D. L.Ac.

2

Biomedical Treatment for Autism

- **Detoxification protocol**
 - Liver support and detoxification therapy
 - Antioxidant and anti-inflammation therapy
 - Chelation for heavy metals
- **Digestive protocol**
 - GF/CF, low sugar and other special diet plans
 - Digestive enzymes and probiotics
 - Candida, bacteria and parasite treatment
- **Nutritional supplementation**
 - Mineral, vitamin and amino acid

Harry G. Hong Ph.D. L.Ac.

3

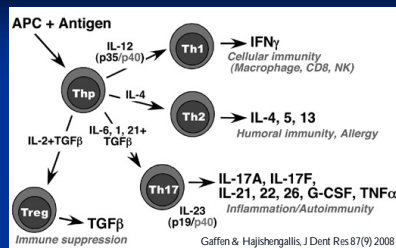
The Missing Links

- **Malfunction of the immune system**
 - Allergies, sensitivities and autoimmune inflammatory response
 - Chronic infections and associated autoimmune response (Lyme disease and PANDAS)
- **Slow healing ability**
 - Fatigued Hypothalamus-Pituitary-Adrenal (HPA) system
 - Low cellular energy and chaotic cellular communication
 - Slow metabolism and regeneration

Harry G. Hong Ph.D. L.Ac.

4

T-Helper Cell Differentiation and Regulation



Harry G. Hong Ph.D. L.Ac.

5

Recent Research on Autism (1)

- **Inflammatory immune response**
 - Neuroinflammation in cerebral cortex, white matter and cerebellum with a pro-inflammatory cytokine increase of MCP-1 and TGFβ1 (Vargas DL et al. 2005)
 - Increased pro-inflammatory cytokines TNF-2, IL-6 and BCL 2 in lymphoblasts (Malik M et al. 2011)
 - Increased pro-inflammatory cytokines TNF-α, IL-6 and GM-CSF and TH1 cytokine IFN-γ in brain tissue
 - Mast cell activation by infectious, stress, environmental or allergic factors leads to release of pro-inflammatory neurotoxins causing brain inflammation (Theoharides TC et al. 2010)
 - Mast cell activation contribute to Gut-Blood-Brain Barrier disruption and brain inflammation (Theoharides TC et al. 2009)

Harry G. Hong Ph.D. L.Ac.

6

Recent Research on Autism (2)

- **Autoimmunity**
 - Autoantibodies to cerebellum protein found in children with autism associate with behavior severity (Goines P et al. 2011)
 - Autoantibodies to Golgi cells of cerebellum detected in plasma of subjects with ASD (Wills S et al. 2009)
 - Higher rate of anti-nuclear antibodies in children with ASD (Mostafa and Kitchener 2009)
 - Serum anti-myelin-associated glycoprotein antibodies found in children with ASD (Mostafa GA et al. 2008)
 - Autistic children have reduced level of IgG and IgM, which correlates with behavioral severity, suggesting underlying defect of immune function (Heuer L 2008)
 - Autistic children harbored anti-brain-myelin-basic-protein antibodies and elevated level of antibodies to measles (Singh VK 2009)

Harry G. Hong Ph.D. L.Ac.

7

Recent Research on Autism (3)

- **Infection and mercury, are they the triggers for autoimmunity?**
 - DNA evidence for Mycoplasma, Chlamydia and HHV-6 co-infections in the blood of ASD children (Nicolson et al. 2007)
 - DNA evidence for poly-viral infection of CMV, EB virus, HSV-1 and 2, HHV-6, BK virus, JC virus and SV-40 in brain tissue from autistic children (Lintas C 2010)
 - Positive correlation in studies with ASD for Borrelia burgdorferi (22%, 26% and 20-30%) and mycoplasma (58%), suggesting Lyme plays a role in autism pathogenesis (Bransfield et al. 2008)
 - Mercury decreases detoxification capacity, inhibits methionine synthetase activity, increases oxidative stress and decreases glutathione level (Mutter J et al. 2005)
 - Mercury stimulates VEGF and IL-6 release from mast cell and may disrupt Blood-Brain Barrier, lead to brain inflammation (Kempuraj D et al. 2010)

Harry G. Hong Ph.D. L.Ac.

8

Factors Involved in Pathogenesis of Autism

- Neuroinflammatory autoimmune responses
- Blood-Brain Barrier disturbance by neuroinflammation
- Increased oxidative stress, suppressed methionine synthetase and decrease glutathione level
- Neurotoxin (heavy metal) possibly triggers autoimmunity
- Vaccination (thimerosal, live virus or possibly immune stress)
- Gastrointestinal dysfunction (dysbiosis and Gut-Blood Barrier disturbance or Leaky Gut)
- Allergy, sensitivity and food intolerance
- Infections (chronic Lyme disease co-infection and PANDAS)
- Genetic predisposition (mutated genes relevant to liver detoxification, nervous system and immune system)
- Prenatal exposure of toxins and infections as well as maternal autoantibody attack to the fetal brain proteins
- Mitochondria dysfunction (possible autoimmune attack)

Harry G. Hong Ph.D. L.Ac.

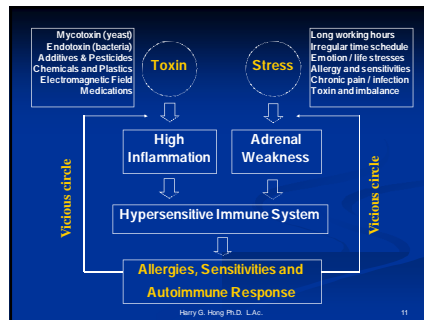
9

Challenges in Treating Immune Malfunction in Autism

- Lack of understanding of pathogenesis of autism
- Many subsets of immune dysfunction that may require different treatment plan
- Lack of reliable biomarker to identify the problem
- Difficult in addressing immune malfunction with current supplementation approach
- Clinical allergy and sensitivity towards supplements

Harry G. Hong Ph.D., L.Ac.

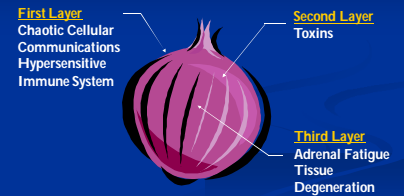
10



Harry G. Hong Ph.D., L.Ac.

11

Timing of the Healing Process--- Peeling the Onion



Harry G. Hong Ph.D., L.Ac.

12

Characteristics of Chaotic Stage

- Chaotic cellular signal communications
 - **High toxicity**
 - **High allergy and sensitivity**
 - **High inflammatory autoimmune response**
 - **Low cellular energy/metabolism/regeneration**
 - **Imbalance of cytokines, NT and hormones due to immune response and polarity switch**
- Limited response to any treatment protocols
- Adverse or allergic response to therapies

Harry G. Hong Ph.D., L.Ac.

13

Energetic Approach to Chaotic Stage

1. Energetic testing for meridian imbalance, immune response, allergy and sensitivity using **Electroacupuncture According to Voll (EAV) or Electrodermal Screening (EDS)**
2. Balance meridian and recharge cellular energy with complex homeopathy and herbs
3. Reprogram immune system, desensitize allergy and restore cellular communications with **Immune System Reprogramming (ISR)**

Harry G. Hong Ph.D., L.Ac.

14

Electrodermal Screening (EDS)

- Computerized non-invasive skin conductivity test with customized testing protocol
- Tests for meridian balance and the remedies that balance the imbalanced meridians
- Tests for sensitivities and pinpoint specific blockages and immune responses
- Automatic system, fast, non-invasive and perfect for testing children



Harry G. Hong Ph.D., L.Ac.

15

Modern Homeopathy

- Three hundred year old European healing technique
- Highly diluted remedy with energy signature but no chemicals (energy medicine or information medicine)
- Promote body's own healing ability
- Toxin and pathogen specific detoxification (nosode)
- Support drainage pathways to avoid Ping Pong Effect
- Allergy desensitization with specific potency of allergen
- Tissue or molecule specific balancing (sarcodes)
- Organ and tissue regeneration

Harry G. Hong Ph.D., L.Ac.

16

Immune System Reprogramming

- A back tapping technique originated from NAET, allergy desensitization
- **What does the tapping do?** Energetic therapy combining **acupuncture and homeopathy** to stimulate back acupuncture points and resolves energy blockages
- Perfect for children with no side effect and **non-invasive**
- Home treatment kit with instructions and children loves the tapping



Harry G. Hong Ph.D., L.Ac.

17

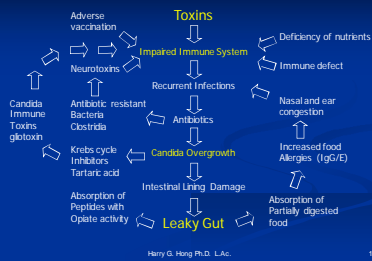
Individualized Body-Mind Therapy

1. **Chaotic Stage (1st layer, 3-6 months)**
 - Address allergies, sensitivities and inflammation
 - Recharge cellular energy, correct chaotic communication
 2. **Detoxification Stage (2nd layer)**
 - Intestinal Candida, parasite, bacterial toxins
 - Liver and kidney support, toxin-specific detoxification
 - Chronic infections (chronic Lyme disease and PADANS)
 - Emotional problems and structural issues
 3. **Regeneration Stage (3rd layer)**
 - Help to recover adrenal system and support metabolism
 - Gut-Blood-Brain-Barrier and brain tissue regeneration
- **Multiple modalities to reach synergistic effect**

Harry G. Hong Ph.D., L.Ac.

18

The Cycle of Candida and Leaky Gut



Chronic Hidden Infections

- **Lyme Disease**
 - A tick-borne bacterial infection called *Borrelia burgdorferi*
 - Chronic Lyme Disease or Post Lyme Syndrome
 - Antibiotic resistant with co-infections, Epstein Barr virus and mycoplasma
- **Pediatric Autoimmune Neuropsychiatric Disorders Associated with Streptococcal Infections (PANDAS)**
 - Obsessive-Compulsive Disorder (OCD) and tic disorder following streptococcal infection
 - Possible autoimmune reaction to neurons
- IBMT addresses the infection issue with homeopathy, herbs, enzyme therapy and Pulsed Electromagnetic Field (PEMF)

Harry G. Hong Ph.D. L.Ac.

20

Larry's Case (1)

- Larry, born in March 2000, diagnosed with PDD
- **History:**
 - Diarrhea for half a year after MMR vaccination around 18 months, indigestion, bloating and irregular bowel movement, better after CF/GF diet and digestive enzymes
 - Severe allergies with skin eczema and mild asthma, treated with allergy shot and NAET, but couldn't solve the root issue; also has family history of allergies
 - No talking until age of 3-4; at age of 5, talking only short sentences without conversation, don't follow instructions, OCD and hyperactive, emotional, anxious and easily irritated, no social desire, limited learning ability, disturbed sleeping
- Larry started my treatment from age of 5

Harry G. Hong Ph.D. L.Ac.

21

Larry's Case (2)

- During treatment, symptoms gradually under control:
 - **Allergies:** sensitivities reduced, digestion improved, sleeping better, no skin breakout and asthma, physical growth faster
 - **Emotion and behavior:** fewer breaking downs, less OCD behavior, listen to instructions better, less anxious and irritable, better relationship with friends, siblings and parents
 - **Neurological development:** focus better, learning ability improved, finish school work faster, communications and social ability improved, ability dealing with stress better, gradually moved from autism class to mainstream classroom in school
- Now Larry is 11 year old at 5th grade
 - Studying in mainstream classroom full-time with good grades; very few allergy symptoms, better communication skills with some friends, no behavior issue reported from the school. Still works with me every 1-2 months for balancing and periodically chelates using DMSA from Dr. Norman Schwartz

Harry G. Hong Ph.D. L.Ac.

22

Final Words

- Immune malfunction and stressed cellular energy are the missing links in the treatment of autism
- IBMT is a holistic all-natural program addressing these issues and is complementary to Biomedical therapies
- IBMT addresses the issues with synergetic combination of energy testing, homeopathy, Chinese medicine, allergy desensitization, nutritional supplementations and is non-invasive and children friendly
- After IBMT, patients generally respond to other therapies much more effectively

Harry G. Hong Ph.D. L.Ac.

23