

# BIOMEDICAL TREATMENT AND AUTISM SPECTRUM DISORDER

Chun Wong, DC, ND, DABCI

Biomedical Consultant, [www.NewAutismCure.com](http://www.NewAutismCure.com)

Integrative Medical Practice

Newer Interventions In Autism and Other Degenerative Diseases, Tartu 2010

# Biomedical Treatment: The History

- Many biomedical treatment procedures started in the early 2000's
- How? Main reason is due to the cause and movement to solve autism
- It was rediscovered that autism is NOT only a neurological disorder but connected to physiological and biochemical conditions of several organs and systems
- Lots of research on many different treatment options for different disease conditions and even much more on neurological/brain damages.
- Clinicians “invented” better testing procedures, and sorted various available biomedical treatments that have proven effective for chronic degenerative diseases including: epilepsy/seizure disorders, attention deficit disorder, Parkinson's, Alzheimer's, Multiple Sclerosis, Lou Gehrig's disease

# DAN: Defeat Autism Now!

- Dr. Bernard Rimland challenged the old myth “The Refrigerator Mother Theory” that autism is NOT bad parenting or psychiatric issue but a biological condition
- In 1967, he created Autism Research Institute to conduct and foster scientific research to improve methods of diagnosing, treating and preventing autism
- In 1995, about thirty specialists gathered in Dallas, Texas USA to consult a sooner way to defeat autism and the mission statement is called “Defeat Autism Now!”
- In the following year, the first edition of diagnosis and treatment protocol titled *Biomedical Assessment Options for Children with Autism and Related Problems* was released. This is the DAN! Protocol or Biomedical Treatment
- DAN! Protocol is swiftly cross-applied by trained DAN! Practitioners for other disease conditions: diabetes, fibromyalgia, GI problems, mitochondrial dysfunctions, auto-immune diseases

# The State of Autism Spectrum Disorder

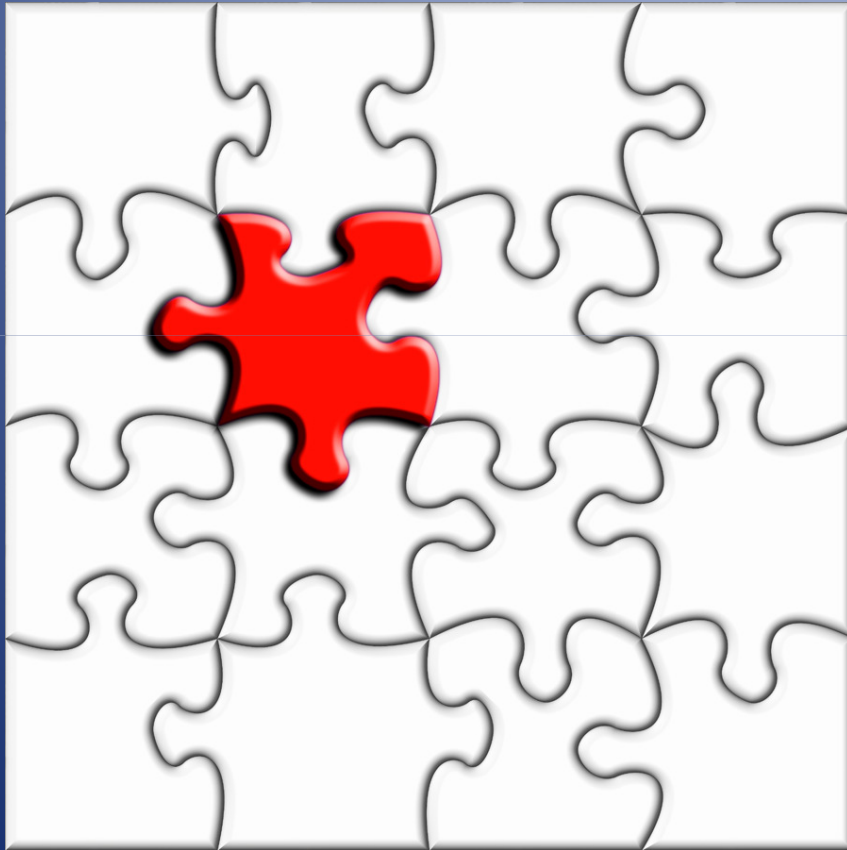
## Epidemic in USA

- Prior 1970, 1 / 10000
- 1999, 1 / 500
- 2008, 1 / 150
- one year later 2009, 1 / 110

Epidemic worldwide shows a prevalence of 0.6% to over 1%

Epidemic in Estonia; no known statistics from autism organizations and in my opinion, Estonia is more tolerant of the autism diagnosis and most children are not diagnosed properly

# MY CHALLENGE TO YOU



- Many more degenerative diseases worldwide and in Estonia are increasing
- Existing practitioners must upgrade their clinical skills
- New practitioners must learn new biomedical treatment
- **ARE YOU READY TO JOIN US? Contact us now!**

# Definition of Autism

- Autism is a form of pervasive developmental disorder with unknown origin. It can range from high functioning to severe in nature
- Symptoms are generally a marked lack of awareness of the feelings of others, and little or no social interaction or communications with others

# Autism is not Curable

Autism is a TREATABLE and RECOVERABLE disorder

Using biomedical protocols, we can enhanced the health and even improve the total individual

Recovered individuals can integrated into the societal systems and lead a normal life

# Causes of Autism

Autism is a multi-faceted disorder involving many biological systems and external factors

Successful treatment depends on studying the underlying causations, and correlating the correct treatment options

# Causes of Autism

## Genetics:

- most common theory
- in 1994, the *American Journal of Medical Genetics* suggested that autistic parents more prone to having children with autism, families with one autistic child has 4% chance of having multiple children with autism, and people with idiopathic autism more likely to carry gene(s) for autism
- in 1996, same medical journal disproved the idea that autism is chromosomally related. Autism is not related to X-chromosome. This gene is only passed from father to daughter, and more boys have autism

# Causes of Autism

## **Environmental factors:**

- most varying causes to include heavy metals, pesticides, plastics, weed killers, petrochemicals, food additives and preservatives, and industrial emissions
- health status and habits of mother during pregnancy, delivery and caring of baby can affect his developments. Connection of autism with fetal alcoholism, rubella virus, valproic acid and thalidomide exposure
- Weiss indicated in a study 1997 the effects of pesticides on developmental disorders

# Causes of Autism

## **Detoxification failures:**

- abnormal liver detoxification capability with overburdening by virus, heavy metals, decreasing glutathione and destruction of methylation pathways
- heavy metals most common direct causation. Examples include lead, mercury and others
- Mercury, a toxic substance causes brain and central nervous system damages, psychological changes, and developmental changes
- Thiomersal (composed of ethyl mercury) found in most vaccines and flu shots

# Causes of Autism

## **Metabolic abnormalities or Biochemical deficiencies:**

- also called mitochondrial dysfunction with child always appearing in hypotonic condition
- our nerve cells in brain and muscles require a great deal of energy, ATP and easily damaged by mitochondrial dysfunction
- several metabolic defects include phenylketonuria, histidinemia, adenylosuccinate lyase deficiency, dihydropyrimidine dehydrogenase deficiency, 5'-nucleotidase superactivity, and phosphoribosylpyrophosphate synthetase deficiency

# Causes of Autism

## **Immune dysregulation:**

- mostly resulting from gut inflammation
- in the autistic child, look for symptoms of skin problems, diarrhea, constipation, gas, bloating to intestinal lesions and inflammation

# Causes of Autism

## **Gastrointestinal problems:**

- Dr. Cynthia Molloy, a researcher at Children's Hospital Medical Center in Cincinnati, USA showed that autistic children have increased risk for chronic GI dysfunction, especially for those with regressive autism

# Causes of Autism

## **Neuroinflammation (Hypoxia):**

- Neonatal hypoxia or neuroinflammation is associated with aberrant neurobehaviour seen in autistic children like withdrawal in social and new situations, reduced exploration of new ideas and repetitive behaviours

Section of Behavioral Pathophysiology, Lab Fisiopatologia OS,  
Dipartimento Biologia Cellulare e Neuroscienze, Istituto Superiore di  
Sanita', viale Regina Elena 299, 00161.

# Biomedical Treatment

- Gluten-free, Casein-free diet
- Hyperbaric Oxygen Therapy (HBOT)
- Biofilm Protocol
- Vitamin and Mineral Supplements

# Biomedical Treatment

## Gluten-free, Casein-free diet:

- gluten (wheat) and casein (milk)
- in their basic peptides form, both can 'leak' through gut wall and attach to opiate receptors in brain
- similar reaction as a morphine drip – narcotic effect
- milk of A1 cow (older) vs. A2 (modern)
- A1 cows contain traces of BCM7, opiate-like effects protein – not found in goat, sheep, soy, rice or oat milk

# HYPERBARIC OXYGEN THERAPY



# Hyperbaric Oxygen Therapy

- 62 autistic children randomly assigned to forty 1-hour treatments at 1.3 ATA, 24% oxygen or 21% slightly room-pressurized oxygen.
- Significant improvements in overall functions in children at 24% oxygen.
- Include improved language, social interaction, eye contact and others

Rossignol, DA, et al “Hyperbaric treatment for children with autism: a multicenter, randomized, double-blind, controlled trial, *BMC Pediatrics*, 2009;9(21).

# Hyperbaric Oxygen Therapy

## Benefits

- Decrease inflammation of brain and gut
- Kills overgrowth of bad bacteria
- Revascularization of tissue
- Better sleep

# Biomedical Treatment

## **Biofilm protocol:**

- Dr. Anju Usman presentation at recent DAN! Think Tank conference suggested that biofilm holds heavy metals in its matrix
- modified 4 R approach (Jeffrey Bland, PhD) for gastrointestinal balancing
- usage of chelating agents with Digestive enzyme (DPP-IV), a protease for gluten

# Biomedical Treatment

## Vitamin and Mineral supplements:

- dietary approach or supplementation
- supplementation in high therapeutic dosage – individual or combined efforts
- most effective against malabsorption and nutritional deficiencies
- useful approach in chronic GI inflammation which causes disruptions in immune and general metabolic functions
- many studies point to autistic children having deficiencies in A, D, B1, B3, B5, biotin, selenium, zinc, calcium and magnesium
- elevated serum copper to zinc ratio

# Biomedical Treatment

## Vitamin and Mineral supplements:

- B vitamins important as cofactor for brain enzymes
- A and D vitamins for eye contact, behavior and gut lining
- C vitamin helps in brain function, anti-oxidant
- most minerals for mood balancing, muscle, immune system

# CASE STUDY

- 14 years old male diagnosed with ADHD, Asperger's
- treated for years with ADHD medication, occupational and social therapies
- chronic tics, simple carbohydrate cravings, bed wetting, unsociable except for direct family members, overweight
- studies: low adrenal function, elevated neurotransmitters, allergies to specific food and chemicals, no growth of bifidobacterium, lactobacillus, enterococcus and greater imbalanced flora, elevated lactoferrin, elevated Clostridia species, impaired Krebs' cycle, low BUN, high total bilirubin, low ferritin, high transferrin, low vitamin D-25 OH, high LIPID panel

## CASE STUDY (con't)

- Treatment: HBOT, drug removed, allergies avoidance strategies, basic Rotating Diet, Biofilm protocol, support adrenal gland, vitamins and minerals supplementation
- balanced posture, lost 20 lbs after gut treatment
- more sociable per teachers at school
- ADHD no longer meets criteria

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# CONCLUSION

Autism is PREVENTABLE,  
TREATABLE, and  
RECOVERABLE!

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