



the perfect storm

EVENT



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A VISION OF WORLD
WIDE WELLNESS

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Dr. Thomas Tuzzolino, D.C

- Husband
- Father
- B.Sc - AZ State University
- DC - Southern California University of Health Sciences
- Pediatric & Family Chiropractor
- The National Wellness Foundation Member

The National Wellness Foundation is a non-profit organization who's mission is to provide education, information and resources to raise Healthy Kids and Healthy Families



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drtuzzolino@nsfamilychiro.com

My why...



“It’s not about what you take away from a child and a family, but what you give TO them!”

BUILDING HEALTH FROM WITHIN



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The Plan

- Awareness
- Answers
- Action Steps



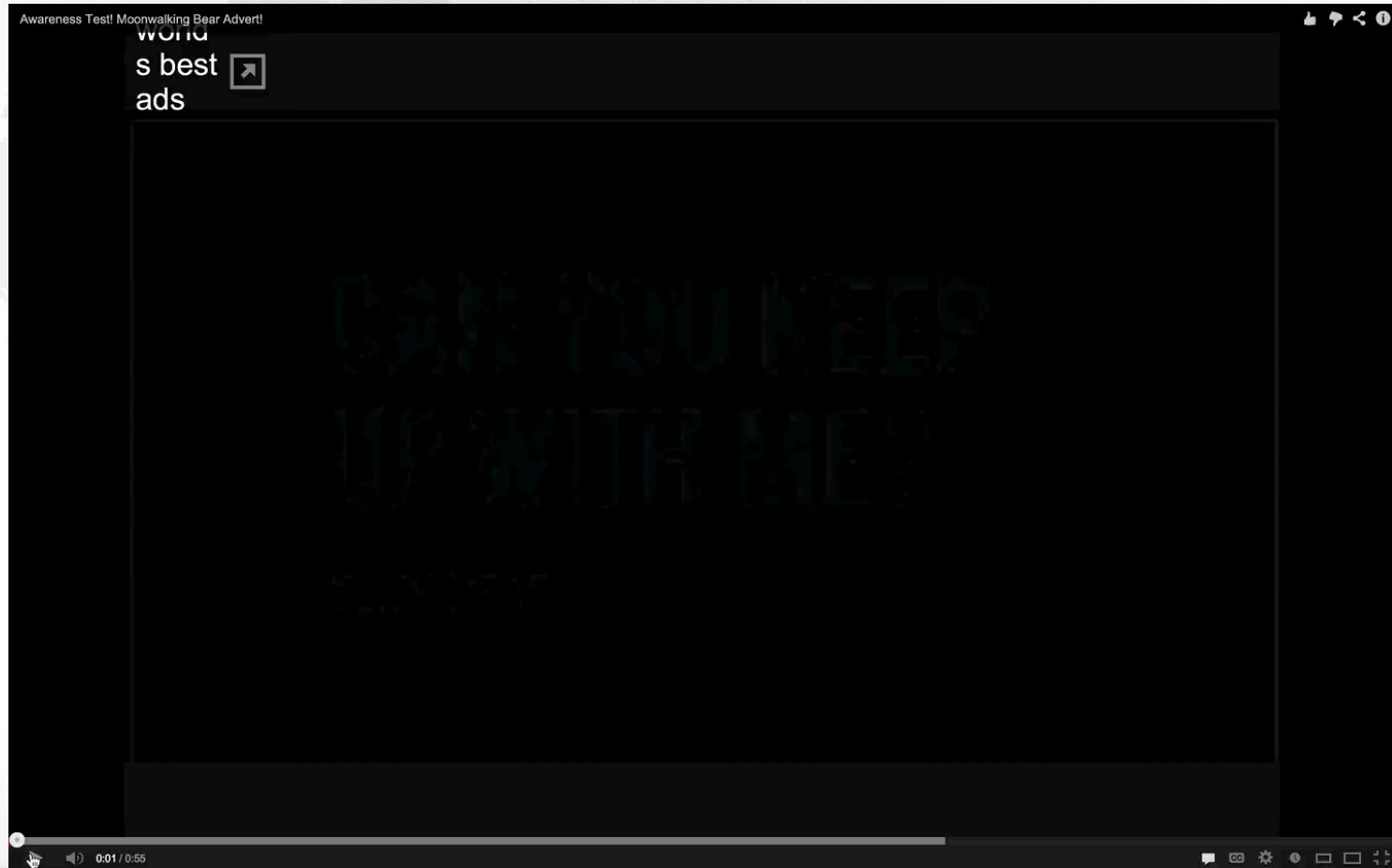
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Awareness Test



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Childhood Memories...

Don't Call Kids Names

Autism, ADHD, Sensory Processing Disorder, Asperger's, Oppositional Defiance, OCD, Anxiety, Bipolar, Allergies, Asthma

Don't Do Drugs

Ritalin, Strattera, Prozac, Concerta, Adderal, Focalin, Zoloft, Clonipine, Abilify, Phenobarbital, Keppra



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Proper care requires proper understanding of the CAUSE

While modern medicine has gotten very good at “calling children names” (diagnosing), they have talked miserably at addressing, AND REMOVING, the true cause of childhood neurological disorders...In my opinion, no matter what “name” you call it, the cause is multi-factorial and often related...



What are we talking about?

ADHD/ADD

LEARNING & READING CHALLENGES

AUTISM

OCD, ODD, ETC...

SENSORY PROCESSING DISORDER



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Physical Stress (Trauma)

- In-utero constraint
- Birth trauma
 - Forceps
 - Vacuum
 - Cord-wrapped
 - C-section (esp. emergency)
- Childhood falls
- Car seats, Baby Bjorn, Bouncy Seats..



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“Funniest” Home Videos



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Chemical Stress (Toxins)

- Preservatives, Pesticides, Processed Foods, Food Coloring, GMO
- Sugar, Grains, Dairy based diets (formula)
- Environmental chemicals EVERYWHERE
 - Household cleaners, detergents, plastic off-gasing, etc.
- Vaccine ingredients, adjuvants, fillers
 - Mercury, aluminum, sorbitol, propylene glycol, egg & animal proteins, and much more...



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Mental/Emotional Stress (Thoughts)

- Stressful, fear-based pregnancies
- Stressful, forced, emergency deliveries
- NICU stays
- Fast-paced, high stress life
- Getting labeled (“diagnosed”)
- Bullying



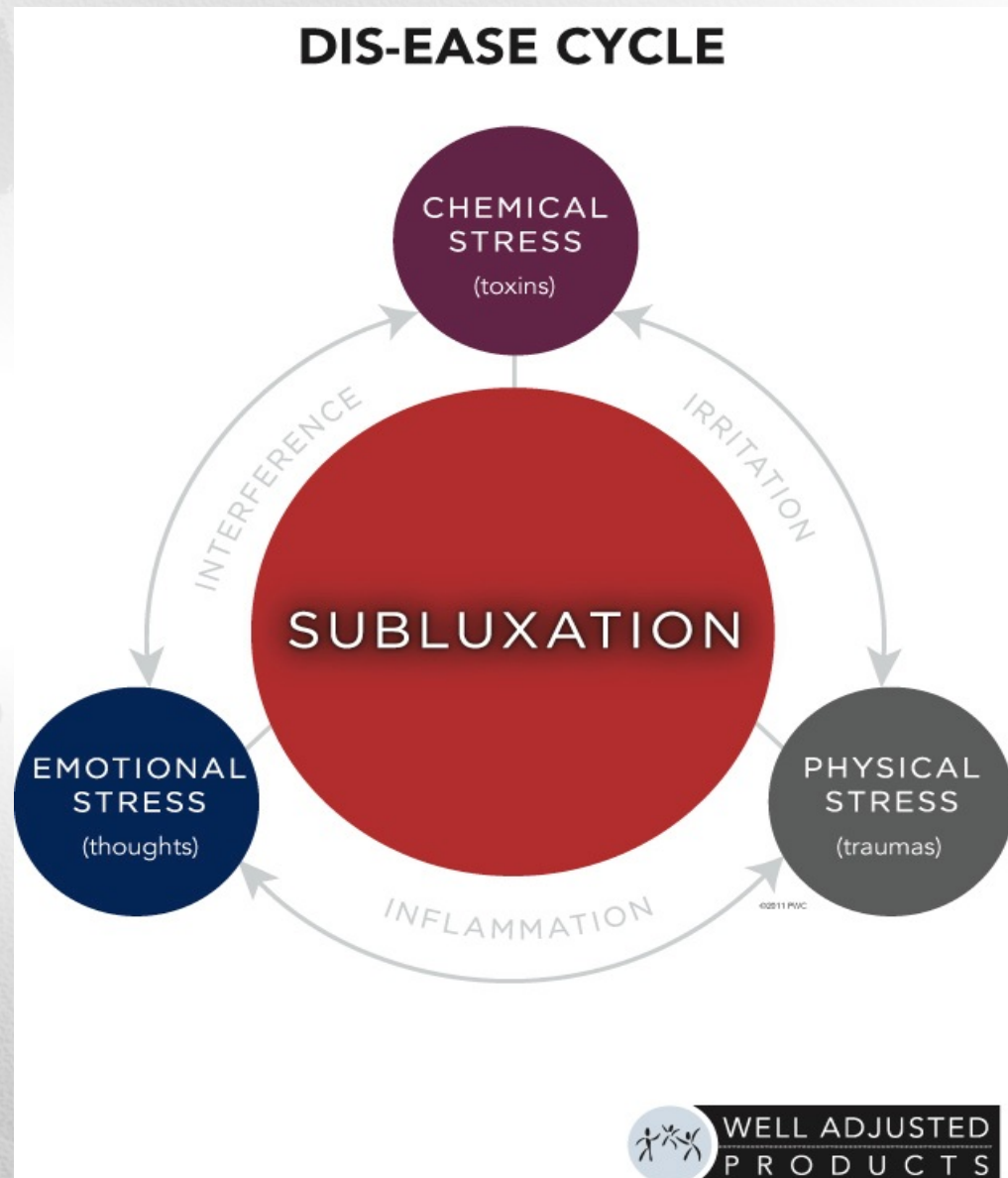
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What is The Perfect Storm?



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**WELL ADJUSTED
PRODUCTS**

The New Normal... The Perfect Storm

FEAR & INTERVENTION BASED
PREGNANCY

FEAR & INTERVENTION BASED
DELIVERY

DIFFICULTY NURSING-
FORMULA FED

COLIC
(DIFFICULTY SLEEPING)

CHRONIC EAR INFECTIONS
ANTIBIOTICS

TOXIC FOOD & ENVIRONMENT

3-4X'S THE # OF VACCINES



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Understanding Chiropractic

Chiropractors are nerve doctors,
not just back doctors...

“The function of the nervous system is to
perceive the environment and coordinate
the behavior of all other cells.”

- Dr. Bruce Lipton, PhD Biologist



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The Effects of Subluxation/ Nerve Interference

AREAS/PARTS OF BODY	POSSIBLE SYMPTOMS
SKULL ATLAS AXIS C1 C2 C3 C4 C5 C6 C7 T1 T2 T3 T4 T5 T6 T7 T8 T9 T10 T11 T12 L1 L2 L3 L4 L5 PELVIS SACRUM COCYX	UPPER CERVICAL <ul style="list-style-type: none"> Autonomic nervous system (fight/flight) Brainstem Pituitary Gland Inner/Middle Ear Optic Nerve/Eyes Facial Nerve Jaw/Teeth Sinuses Vagus Nerve LOWER CERVICAL <ul style="list-style-type: none"> Eustachian Tube Tonsils Nose Mouth Vocal Cords Neck Glands Pharynx Neck Muscles/Shoulders Thyroid Gland Nerves to Arms THORACIC/G.L. <ul style="list-style-type: none"> Nerves to Elbow and Below (Hands/Wrists) Esophagus Trachea Lungs/Bronchi/Pleura Heart/Coronary Arteries and Valves Chest/Sternum Breast Gallbladder, Common Duct Lower Heart/Lungs Liver, Solar Plexus Lower Esophagus Pancreas Spleen Duodenum MID THORACIC/G.L. <ul style="list-style-type: none"> Gallbladder Issues Reflux/GERD Jaundice Liver Conditions Stomach Blood Pressure/Circulation Issues THORACIC/LUMBAR <ul style="list-style-type: none"> Allergies Poor Sympathetic Response Immunity Issues Excess Stress/Cortisol Poor Metabolism Hyperactivity Kidney Troubles Nephritis Pyelitis Chronic Fatigue Rheumatism Minor Varicose Veins Skin Issues: Acne/Rash/Eczema/Boils Constipation/Gas Pains Irritable Bowel Syndrome Colitis Cramps Diarrhea Dysentery Hernias Bladder Issues Menstrual Problems Reproductive Issues/Infertility Impotency THORACIC/G.L. <ul style="list-style-type: none"> Asthma Cough/Cold Breathing Trouble Radiating Pain in Forearms/Wrists/Hands Functional Heart Conditions Chest Pain Bronchitis Pneumonia Congestion Chronic Colds/Flu Reflux/GERD THORACIC/LUMBAR <ul style="list-style-type: none"> Heartburn Stomach Problems: Pain/Indigestion/Ulcers Blood Sugar Problems/Diabetes Lowered Resistance Shingles LUMBAR SPINE <ul style="list-style-type: none"> Muscles of Low Back/Pelvis Hip Bones Buttocks Sciatic Nerve Lower Legs Ankles Feet/Arches Parasympathetic Plexus Lumbar Discs Prostate Gland Rectum, Anus Sciatica/Radiating pain Lumbopelvic Pain Poor Circulation in Legs Leg Weakness/Cramps Foot/Ankle/Knee Pain Constipation Bladder/Bedwetting Sacro-Iliac Pain Spinal Curvatures Disc Degeneration/Herniation Hemorrhoids Erectile Dysfunction Prostate Cold Feet Swollen Ankles Weak Ankles and Arches Difficult, Painful, or Too Frequent Urination

According to Grey's Anatomy textbook, "The nervous system controls and coordinates all organs and structures of the human body."

When a spinal vertebra becomes subluxated, it acts similar to a "blown fuse" and interferes with the function of that nerve. If the fuse supplying your air conditioner became overstressed and "blew" how well would that air conditioner work? The nerves branching from the spine can act in a similar manner, meaning that if the nerve(s) supplying the stomach are overstressed and interfered with, the stomach may not "work" as well as it should.

Symptoms such as upset stomach, indigestion, and reflux may show up over time but does taking drugs to deal with those symptoms deal with the TRUE CAUSE of the issue ("blown fuse"), or simply attempt to cover them up? Chiropractic gets to the root CAUSE of the problem by removing interference from the system that "controls and coordinates all organs and structures of the body."

Your scans show the stress that is present on your nervous system, this chart shows what it may be doing to you.



balance is the key CENTRAL NERVOUS SYSTEM

SYMPATHETIC (GAS PEDAL)

- Fight or flight response
- Protection and survival
- Stress response
- Adrenal (stress) glands activated

PARASYMPATHETIC (BRAKE PEDAL)

- Rest
- Digest
- Relax
- Growth & development

"You can't be in growth and protection at the same time."
— Dr. Bruce Lipton

TRAUMAS
PHYSICAL STRESS

TOXINS
CHEMICAL STRESS

THOUGHTS
EMOTIONAL STRESS

These activate a chronic fight/flight response and CAUSE

SUBLUXATION

SYMPATHETIC OVERDRIVE LEADS TO CHRONIC STRESS RESPONSE

autism spectrum, anxiety, bipolar, ADHD, cancer, allergies, asthma, depression, acid reflux, fatigue, behavioral issues, ear infections, sinus congestion, heart disease, bed wetting, GI issues, seizures, sensory processing disorders, eczema, insomnia, sleep issues, headaches, ASHPERGERS, constipation, high blood pressure, high cholesterol, muscle spasms/pain, OHI, well adjusted products

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Subluxation: Cause and Effect (Nerd Time!)

THE CAUSE:

1. Physical Stress
(Trauma)
2. Chemical Stress
(Toxins)
3. Emotional Stress
(Thoughts)



THE EFFECT:

1. Dys-kinesia
2. Dys-afferentation
3. Dys-autonomia
4. Dys-ponesis



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DYS-KINESIA

Subluxation occurs when a joint becomes MISALIGNED and FIXATED losing its ability to go through proper range of motion.



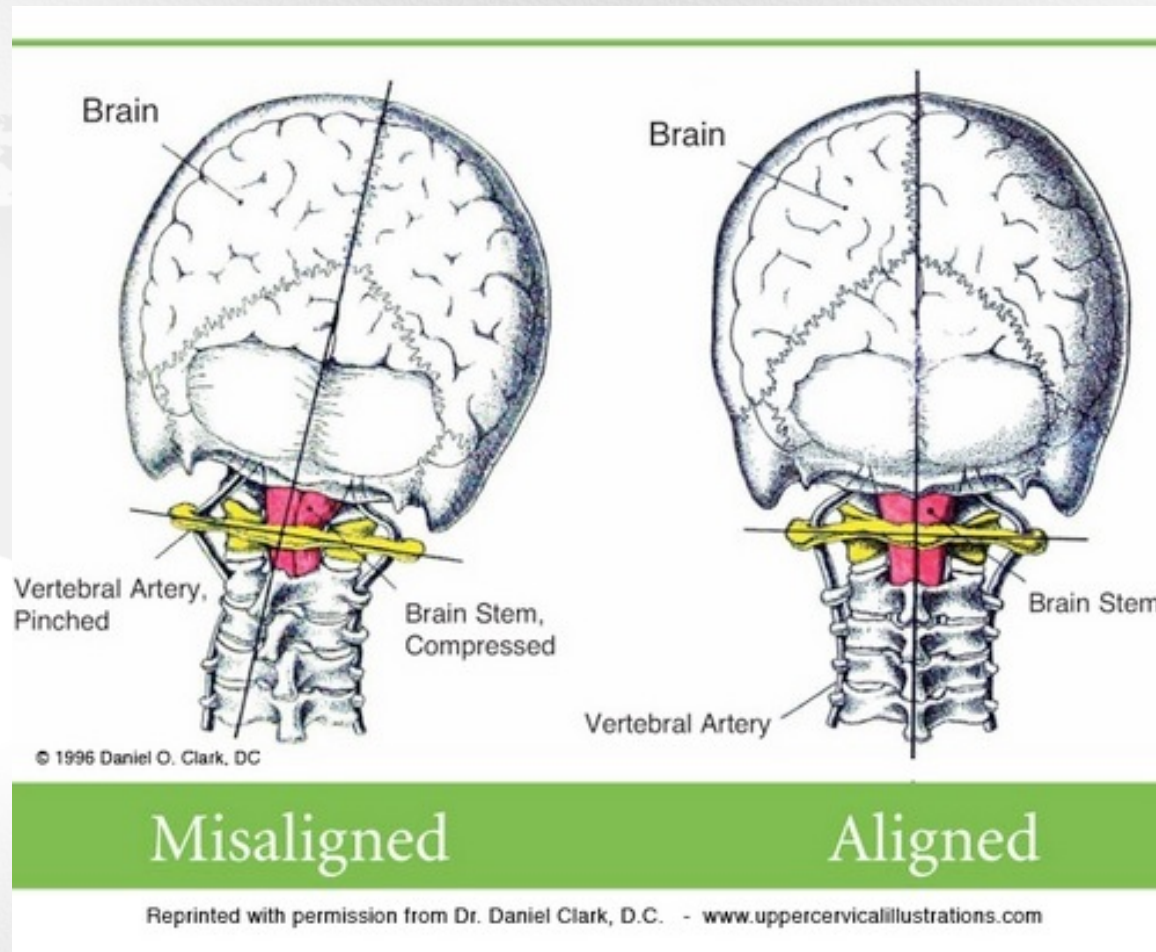
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The “Main Breaker”



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The Real Pandemic...

- In his research , Gottfried Guttman MD, found that spinal injury was present in 80% of the infants he examined shortly after birth, causing interference to neurologic and immune function.
- Concludes that “observations of motor development and manual control of the occipito-atlanto-axial joint complex should be obligatory after every difficult birth.”
- Furthermore, this occipito-atlanto-axial joint complex “should be examined and, if required, specifically adjusted... (as) the success of adjustment overshadows every other type of treatment.”

Where does it start?



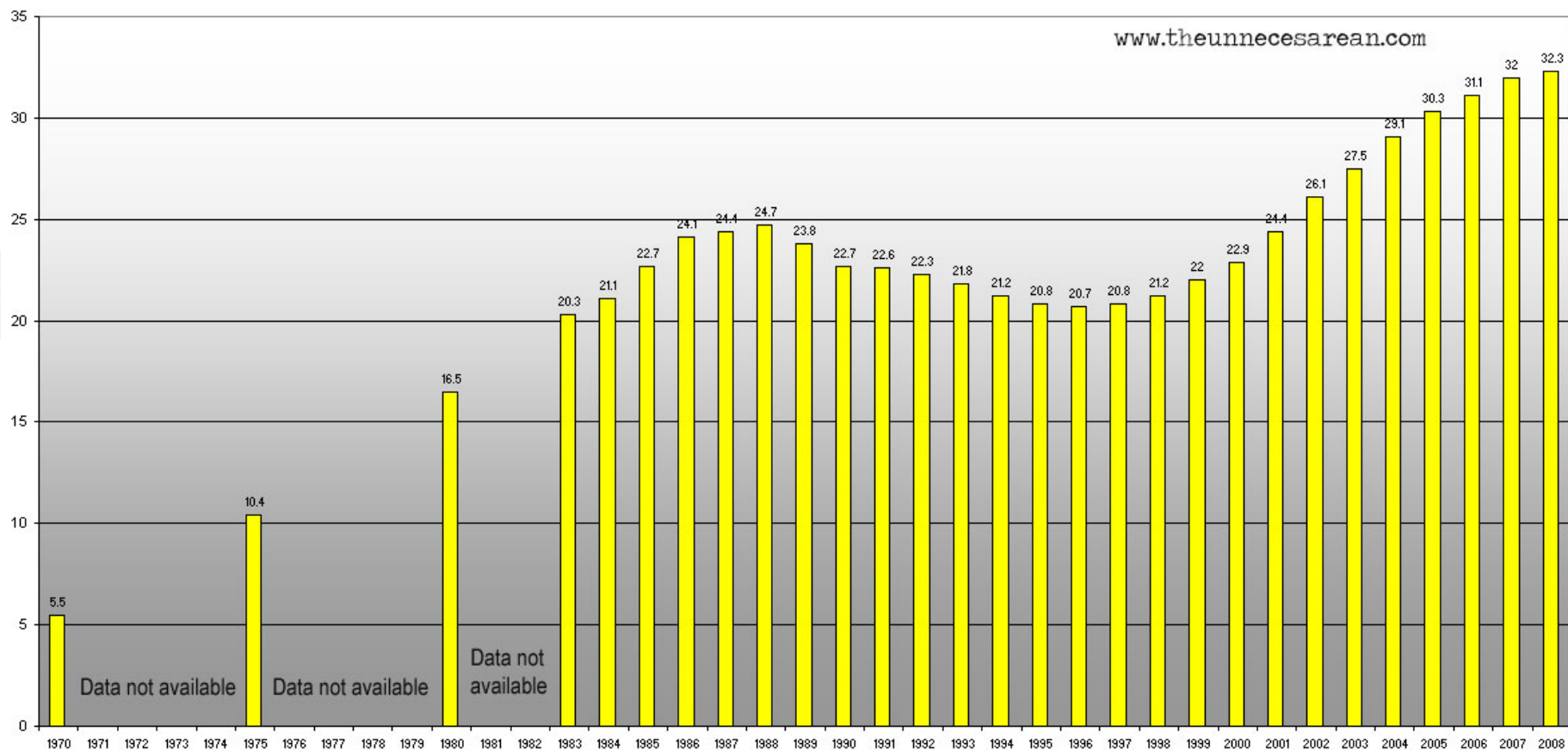
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U.S. Cesarean Rate 1970 - 2008



SOURCES: http://www.cdc.gov/nchs/data/nvsr/nvsr58/nvsr58_16.pdf
http://www.cdc.gov/nchs/data/nvsr/nvsr54/nvsr54_04.pdf
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1647267/?page=2>
<http://www.cdc.gov/mmwr/preview/mmwrhtml/00036845.htm>



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The Cerebellum, Sensitive Periods, and Autism

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Cerebellar research has focused principally on adult motor function. However, the cerebellum also maintains abundant connections with nonmotor brain regions throughout postnatal life. Here we review evidence that the cerebellum may guide the maturation of remote nonmotor neural circuitry and influence cognitive development, with a focus on its relationship with autism. Specific cerebellar zones influence neocortical substrates for social interaction, and we propose that sensitive-period disruption of such internal brain communication can account for autism's key features.

In recent decades, much neuroscience research has focused narrowly on the cerebellum's role in balance, posture, and motor control. This framework has been explored in the greatest detail in cases where input pathways convey sensory information to the cerebellum, and outputs influence motor effectors. Emerging from this program is the view that the cerebellum acts as a processor that uses a variety of inputs to guide movement.

Receiving much less emphasis has been the role of the cerebellum in higher function. This idea is not new: cognitive roles for the cerebellum have been discussed since the 19th century (reviewed in Steinlin and Wingate, 2013). However, a resurgence of interest in recent years (Wingate et al., 2010; Koziol et al., 2014; Mariën et al., 2014). Evidence for cerebellar lesions leading to nonmotor deficits has come from adult cases showing subtle cognitive and affective changes (Stoodley et al., 2012) and congenital cerebellar defects, where deficits are much more pronounced (Basson and Wingate, 2013; Steinlin et al., 2013).

Two facts have stood in the way of wider recognition of nonmotor aspects of cerebellar function. First, prominent deficits in acute cerebellar injury in adults are rare. Monitoring the short-term results of injury and the long-term consequences that can accumulate over time. Consequences of cerebellar deficit are highly variable when the outcome is assessed. Second, cerebellar function is highly differentiated, and focal injury typically produces specific deficits (Romaniella and Borgatti, 2012). While some regions project predominantly to sensorimotor areas, others project to cognitive and affective areas and comprise a large fraction of cerebellar connectivity (Koziol et al., 2009). Recently, the extension of this paradigm to nonmotor brain structures has become clearer with new methods (Buckner et al., 2011; Strick et al., 2009). The cortex and nuclei have a distinctive circuitry that is repeated in a modular fashion throughout the brain. This is highly conserved among vertebrates (Appel et al., 2009). This has led to the proposal that the cerebellum is a common algorithm upon a variety of inputs, whether motor, cognitive, or affective.

In this Perspective, we outline a developmental framework for understanding the nonmotor roles of the cerebellum. A variety of observations can be explained by the

hypothesis: in addition to its role in the mature brain, the cerebellum acts in early life to shape the function of other brain regions, especially those relating to cognition and affect. We propose that the cerebellum takes an early role in processing external sensory and internally generated information to influence neocortical circuit maturation during developmental sensitive periods. We argue by describing how new methods for brain mapping, and modeling neural circuits can be used to explore the complex role of the cerebellum in guiding nonmotor function.

As part of this framework, we propose that cerebellar dysfunction may disrupt the maturation of distant neocortical circuits. To summarize the concept of developmental influence between brain regions, we use the term *developmental diaschisis*. Diaschisis (*\di-as'-kə-səs*; Gr. *dia*: across, *schisis*: break) is an existing neurological term indicating a sharp in-

LATEST RESEARCH!



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DIASCHISIS

(From Greek meaning “Shocked Throughout”) is a sudden loss (or change) of function in a portion of the brain connected to a distant, but damaged, brain area. The site of the originally **DAMAGED** area and of the Diaschisis are connected to each other by neurons.

“DISTORTION & DISRUPTION”
of “Brain and Body” communication and cross-talk

End Result:
Brain (stem) Injury



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DEVELOPMENTAL DIASCHISIS

sensory and other
information

CEREBELLUM

X focal injury

THALAMUS

ASSOCIATION
CORTEX

genes

stress

environment

?



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DYS-AFFERENTATION

“NOISY BRAIN”

INPUT CONTROLS OUTPUT

- There are actually 7 senses!
- Taste, Touch, Smell, Hear, See....AND....
 - Movement
 - Proprioception (good)
 - Nociception (bad)
 - Balance/Coordination
 - Vestibular



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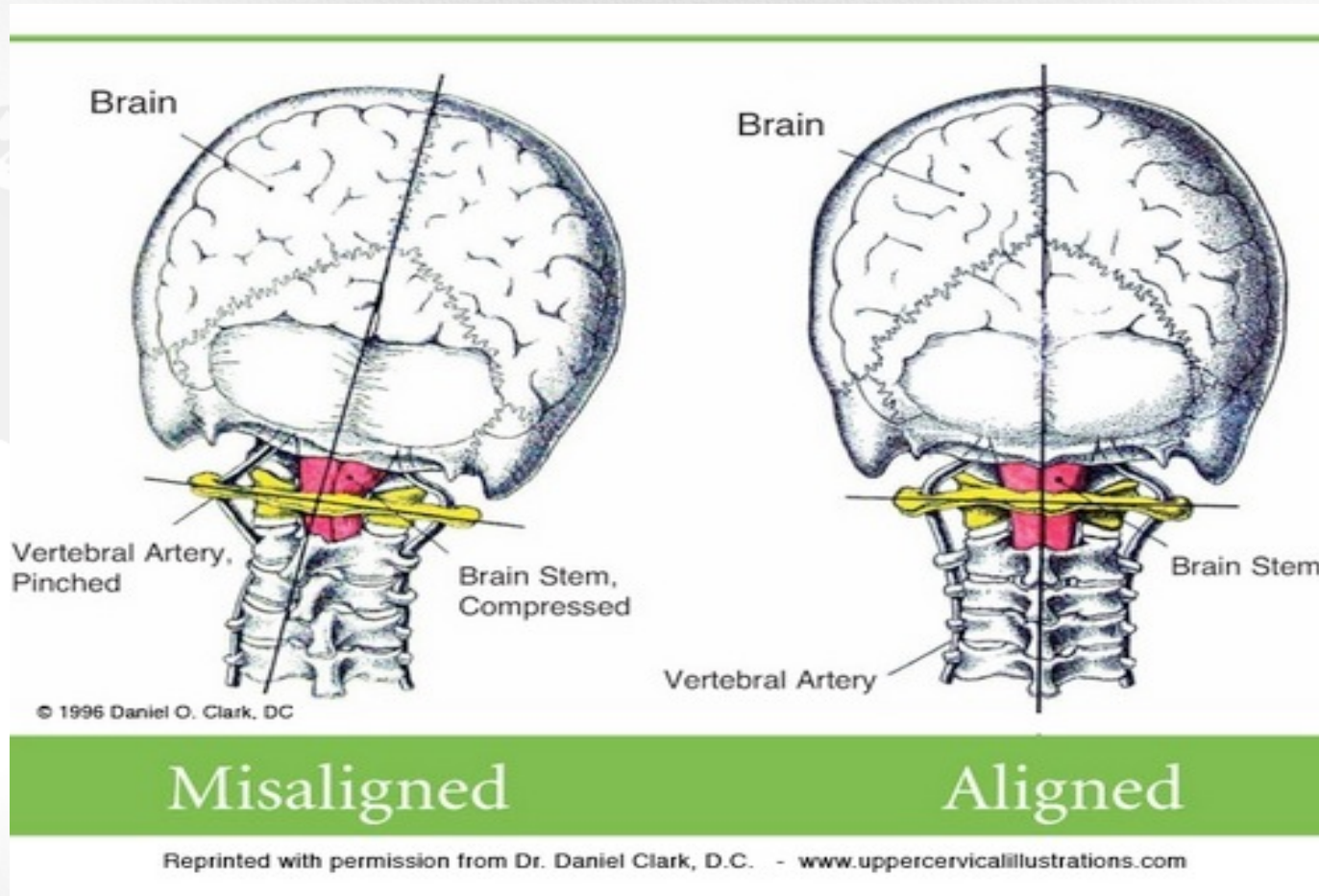
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Proprioception- The Role Of The Spine...

- Neurological stimulation from MOVEMENT “charges the brain’s batteries”
- Over half of the neurons in the spinal cord are there for this specific function
- 60% of proprioceptive input comes from spine
- 33% of it just from the upper neck / brainstem

Road Block? Communication is “jammed”



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The Gate Theory

SUBLUXATION



DECREASED PROPRIOCEPTION



INCREASED NOCICEPTION



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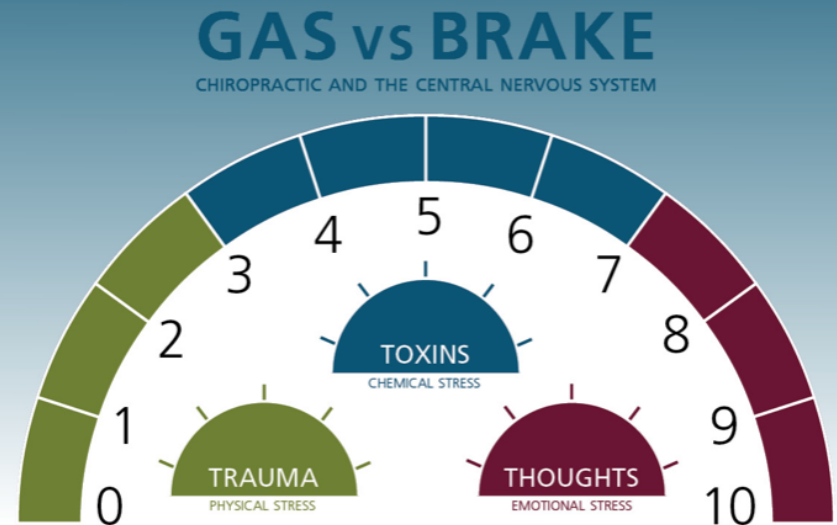
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“You can’t be in growth (development) and protection at the same time.”

-Dr. Bruce Lipton, PhD



Subluxation occurs when a **misalignment** and **fixation** within the spine creates stress and tension on the nerves. This stress causes the Central Nervous System to go into a protective state of **fight or flight**.

BRAKE PEDAL

PARASYMPATHETIC

1. Chiropractic adjustment removes subluxation (stress)
2. Rest, relaxation, digestion, and immune function resume
3. Growth, healing, and development are restored

"Oh my gosh, he's been on the gas pedal his whole life."

"My daughter is so much more calm, connected, and happy than she's ever been."

"I've been stressed for so long, it's almost hard to describe how great I feel now!"

GAS PEDAL

SYMPATHETIC

1. Misalignment, tension, and fixation occur within the spine (subluxation)
2. Stress response (adrenal glands) activated
3. Central Nervous System 'gets stuck' in fight or flight

ADHD
EAR INFECTIONS
sensory processing disorders
asthma
MUSCLE SPASMS/PAIN
high blood pressure
COLD/Flu
seizures
REFLUX
BEHAVIOR ISSUES
bed wetting
CONSTIPATION
anxiety
COLIC
insomnia
HEADACHES
allergies
DEPRESSION
AUTISM

"You can't be in growth and protection at the same time." - Dr. Bruce Lipton



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DYS-AUTONOMIA

Leads to Dis-Organization & Dis-Regulation

Autonomic Nervous System



Immune System

Ear Infections
Strep Throat
Eczema
Asthma
Allergies
Chronic Colds

Digestive System

Constipation
Colic
Acid Reflux
Cramping/Pain
Inflammation
IBS/Chrohn's

Endocrine System

CHEMICAL IMBALANCES???

1. Stimulus detected by N.S.
 - Sympathetic system engages
 - Directly influences visceral function
 - Adrenals produce stress hormones
2. Dysafferntation reaches CNS
 - Amygdala...stress/anxiety center
 - Hippocampus...learning center
3. Continues the cycle
 - HPA Axis

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**Majority of Serotonin
& Dopamine is made
in the gut**



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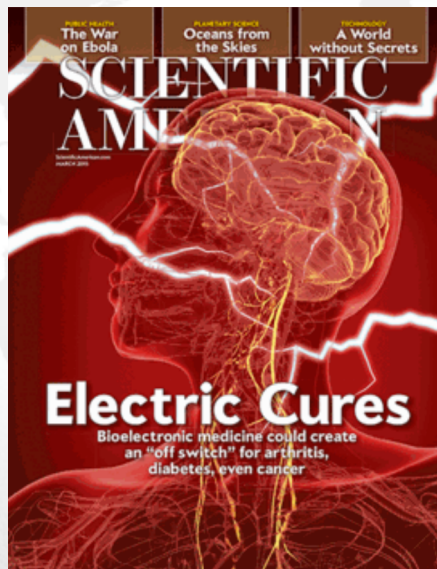
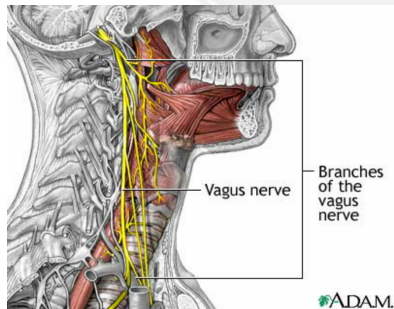
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The Vagus Nerve

Connects Gut & Brain

Parasympathetic (Break Pedal)

Modulates Inflammation



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Recent advances in basic science



OPEN ACCESS

The vagal innervation of the gut and immune homeostasis

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ABSTRACT

The central nervous system interacts dynamically with the immune system to modulate inflammation through humoral and neural pathways. Recently, in animal models of sepsis, the vagus nerve (VN) has been proposed to play a crucial role in the regulation of the immune response, also referred to as the cholinergic anti-inflammatory pathway. The VN, through release of acetylcholine, dampens immune cell activation by interacting with α -7 nicotinic acetylcholine receptors. Recent evidence suggests that the vagal innervation of the gastrointestinal tract also plays a major role in controlling intestinal immune activation. Indeed, VN electrical stimulation potentially reduces intestinal inflammation restoring intestinal homeostasis, whereas vagotomy has the reverse effect. In this review, we will discuss the current understanding concerning the mechanisms and effects involved in the cholinergic anti-inflammatory pathway in the gastrointestinal tract. Deeper investigation on this counter-regulatory neuroimmune mechanism will provide new insights in the cross-talk between the nervous and immune system leading to the identification of new therapeutic targets to treat intestinal immune disease.

INTRODUCTION

Accumulating evidence supports the idea that an intricate communication network exists between the nervous and immune systems, and that this crosstalk could play a crucial role in the regulation of the immune response.¹ The interplay between those diverse systems occurs through a complex set of neurotransmitters, cytokines and hormones that act as counter-regulatory mechanisms able to dampen inflammation and restore homeostasis.^{2–4} On a systemic level, neuroendocrine mechanisms reduce inflammation by the hypothalamic-pituitary-adrenal (HPA) axis through the anti-inflammatory effect of glucocorticoids, by the hypothalamic-pituitary-gonadal axis through sex hormones, and by the hypothalamic-pituitary-thyroid hormone axis through thyroid hormones.^{3–4} Although modulation of the immune system by the nervous system, in particular the adrenergic nervous system, has been introduced decades ago,⁵ interest in the role of the autonomic nervous system as a key player in immune homeostasis has recently increased exponentially. In 2000, Tracey and coworkers demonstrated that vagus nerve (VN) stimulation potentially suppresses cytokine production in a rodent model of sepsis.⁶ This discovery has led to the introduction of the concept of the cholinergic anti-inflammatory pathway,⁷ a hard-wired connection between the immune and nervous systems closely interacting to regulate inflammation. It is currently supposed that

inflammatory mediators activate sensory nerves and send signals concerning the state of the inflammation to the central nervous system. The latter, through efferent nerves, releases neuromediators that influence immune cells and modulates local inflammation.⁸ Consequently, it is now clear that the nervous system is able to regulate inflammation in peripheral tissues and to restore local immune homeostasis.

In the present review, the current knowledge and the clinical implication of the intestinal cholinergic anti-inflammatory pathway will be discussed. Readers interested in the sympathetic modulation of the immune response are referred to excellent reviews on this topic.^{9–11}

THE CHOLINERGIC ANTI-INFLAMMATORY PATHWAY

While studying the anti-inflammatory effect of the inhibitor of p38 MAP kinase, CNI-1493, it became clear that this compound suppressed carrageenan-induced paw oedema at doses at least 6-logs lower when injected intracerebroventricularly than required for a systemic effect.¹² This potent anti-inflammatory effect was abrogated after bilateral vagotomy. Conversely, recording of the efferent VN electrical activity revealed an increase in discharge rate after infusion of CNI-1493, suggesting anti-inflammatory properties of VN activation. Similarly, electrical stimulation of the transected peripheral VN for 20 min prevented the development of an acute inflammation in response to carrageenan injection in the paw and increased survival in a model of sepsis⁶ by reducing cytokine (tumor necrosis factor (TNF)) production of splenic macrophages. This anti-inflammatory effect could be reproduced in vitro using isolated human macrophage cultures; the release of TNF, interleukin (IL)-1 β , IL-6 and IL-18 in response to endotoxin was significantly reduced by acetylcholine (ACh) and nicotine. In a search to pharmacologically mimic the effect of VN stimulation, Wang *et al* identified the α 7 subtype of the nicotinic acetylcholine receptor (α 7nAChR) as the main receptor by which splenic macrophages are modulated.¹³ The anti-inflammatory effect of VN stimulation is lost in α 7nAChR knock-out mice, can be blocked by specific antagonists α 7nAChR, and is mimicked both in vivo and in vitro by α 7nAChR agonists.¹³ Based on these findings, the 'cholinergic anti-inflammatory pathway' was introduced, whereby the VN modulates the immune response in the spleen providing an additional protective mechanism to the host (figure 1). This mechanism protects against the lethal effects of cytokines by restraining the magnitude of a potentially fatal peripheral immune response.^{6–8}



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Antibiotics, Pediatric Dysbiosis, and Disease

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Antibiotics are by far the most common medications prescribed for children. Recent epidemiological data suggests an association between early antibiotic use and disease phenotypes in adulthood. Antibiotic use during infancy induces imbalances in gut microbiota, called dysbiosis. The gut microbiome's responses to antibiotics and its potential link to disease development are especially complex to study in the changing infant gut. Here, we synthesize current knowledge linking antibiotics, dysbiosis, and disease and propose a framework for studying antibiotic-related dysbiosis in children. We recommend future studies into the microbiome-mediated effects of antibiotics focused on four types of dysbiosis: loss of keystone taxa, loss of diversity, shifts in metabolic capacity, and blooms of pathogens. Establishment of a large and diverse baseline cohort to define healthy infant microbiome development is essential to advancing diagnosis, interpretation, and eventual treatment of pediatric dysbiosis. This approach will also help provide evidence-based recommendations for antibiotic usage in infancy.

Introduction

Antibiotics are by far the most common prescription drugs given to children (Chai et al., 2012). Epidemiological studies have identified associations between antibiotic usage in early infancy and occurrence of diseases such as obesity, diabetes, and asthma in later life. Longitudinal studies of antibiotic usage have demonstrated profound short- and long-term effects of antibiotics on the diversity and composition of the gut microbiota. Finally, a large and growing number of studies implicate a causal role for microbiome imbalance (dysbiosis) in numerous diseases (Biedermann and Rogler, 2015). Understanding the short- and long-term effects of early life antibiotic use on the diversity and composition of the gut microbiota is critical in identifying the risks associated with the emerging prescription trends. However, the existing literature is limited in directly implicating microbial dysbiosis as the link between childhood antibiotics and development of disease in later life.

In this review, we synthesize numerous complementary sources, including microecological studies linking antibiotics and dysbiosis, mechanistic studies linking specific types of dysbiosis to specific disease outcomes, and reviews of epidemiological studies supporting antibiotics and increased disease risk. By this approach, we have identified four major types of antibiotic-related dysbiosis, and we have presented a framework for discussing and measuring pediatric dysbiosis in the context of several major diseases. Our analyses indicate substantial existing evidence for a number of causal mechanisms by which the microbiome mediates antibiotic-related disease risk.

Overuse of Antibiotics

The vast majority of antibiotic use occurs in the outpatient setting, where up to a third of prescriptions are unnecessary. In 2010, children received 74.5 million outpatient antibiotic prescriptions—one for every child in the US—accounting for one fourth of all medications prescribed to children (Hicks et al., 2013).

Numerous studies have demonstrated that antibiotics are often prescribed unnecessarily (Gonzales et al., 2001; McCaig et al., 2003; Nash et al., 2002), with estimates as high as 50% (Kronman et al., 2014). Nearly 30% of children receive an antibiotic prescription during an outpatient primary care visit (McCaig et al., 2003), most often inappropriately, for viral upper respiratory tract infections (Gonzales et al., 2001; Nash et al., 2002; Nyquist et al., 1998). Overuse of broad-spectrum antibiotics for conditions responsive to narrow-spectrum agents has been dramatically increasing (Hersh et al., 2013). Even after adjusting for differences in patient age, comorbidities, and sociodemographic factors, children with the same infections can receive vastly different rates of antibiotic prescriptions depending upon the practice or clinician visited (Fierro et al., 2014; Gerber et al., 2014). This phenomenon also seems to be universal: per capita antibiotic prescribing rates vary widely across US states (Hicks et al., 2013) and European countries (Goossens et al., 2005) without reasonable cause for geographic differences in bacterial infection rates.

In addition to the gut-microbiome-mediated effects as discussed in detail below, inappropriate prescribing of antibiotics can lead to both drug-related adverse effects and the promotion of antibiotic resistance. More than 140,000 emergency department (ED) visits occur annually in the US for antimicrobial-related adverse effects, comprising almost 20% of all ED visits for drug-related adverse effects (Shehab et al., 2008). In addition to this direct patient harm, antibiotic use has been associated with the emergence of antimicrobial resistance, identified by the World Health Organization (WHO) as “one of the three greatest threats to human health.” Importantly, a recent study found that the prevalence of antibiotic resistance genes in the infant gut microbiome increases with age, and infants born via C-section harbored a larger proportion of antibiotic resistance genes (Bäckhed et al., 2015). Infections with resistant bacteria increase morbidity and mortality, and greatly increase the cost of medical care. In the United States, the rate of antibiotic resistance in 2010, roughly

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DYS-PONESIS

Defined as a reversible physiological state consisting of unnoticed, misdirected neurophysical reactions to various agents (environmental events, bodily sensations, emotions, and thoughts) and the repercussions of these reactions throughout the organism.

ERRORS IN ENERGY OUTPUT

DISORGANIZED ENERGY

LOSS OF BALANCE

“NERVES THAT FIRE TOGETHER,
WIRE TOGETHER”



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1. Raging Bull Kid

Stuck on the "gas pedal" at all times (fight/flight)
ADHD (hyper/behavior type), anxiety, etc.

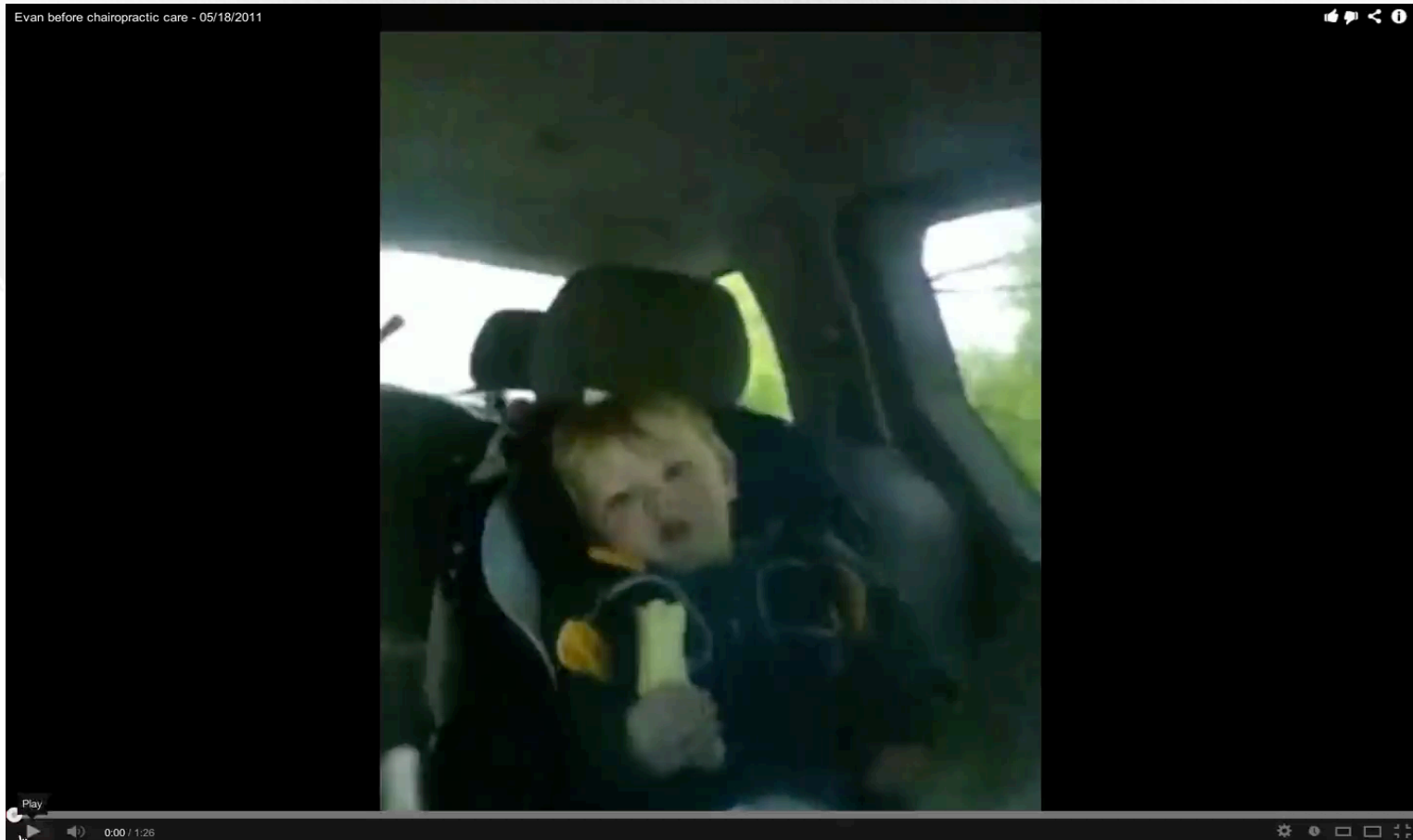
2. Drunken Bull Kid

Brain is disorganized and disconnected
Sensory Processing Disorder, ADD, balance/motor
issues

3. Drunken Raging Bull Kid

Is both "stuck on" and disorganized
Autism Spectrum Disorder, epilepsy

Autism: “Locked in” (Evan’s Story)



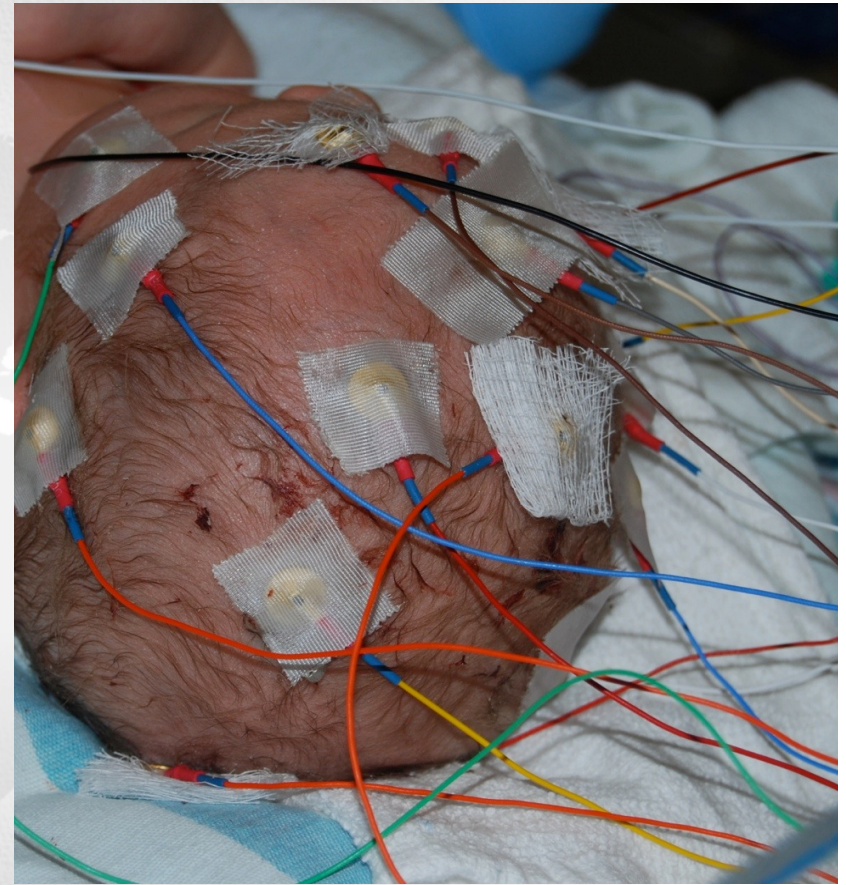
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Autism: Where It Starts...



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Autism- The 4 D's

- Mostly non-verbal
- 3-5 words
- Unable to follow directions
- No eye contact, perception, etc.
- Very emotional, disruptive
- Horrible sleeper
- No interaction with parents and siblings
- Dx'd with "autism" in July
- Started care that day

Patient Number:

Patient Identifier:

62278968

Practice Address:

411 Congress Pkwy
Suite C
Crystal Lake, IL 600

Rolling Thermal Scan NCM Bar Graph on (07/07/2011 11:16 AM)
6 degrees Fahrenheit

1.2
1.6

0.1
2.3
0.1

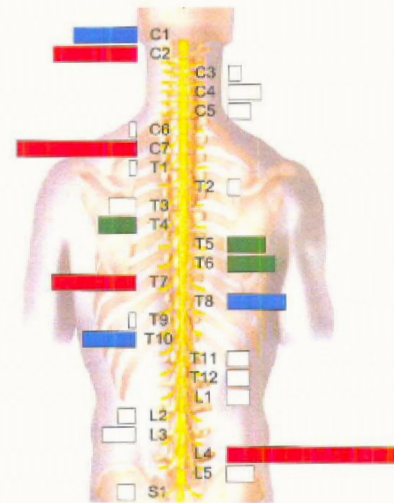
0.5
0.7

1.6

0.1
1.0

0.3
0.6

0.3



+1 +2 +3

0.2
0.6
0.4

0.2

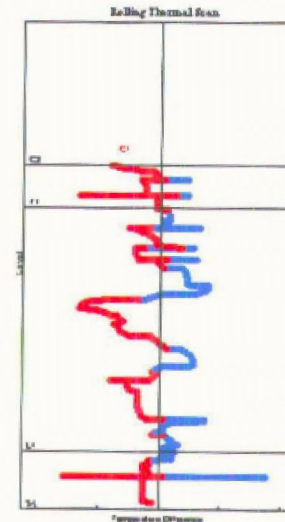
0.7
0.9

1.1

0.4
0.4
0.4

3.4
0.5

Rolling Thermal Scan NCM Line Graph on (07/07/2011 11:16 AM)
6 degrees Fahrenheit



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Evan's Results:

After 2 Weeks:

- fell asleep in parking lot, 4PM-7AM
- began talking more within days
- imitating speech for the first time
- playing with his brother and sister and imitating their play
- doing funny things purposely to engage us
- pooping a ton - detoxing!
- developed a fever -
HEALING!

After 2 Months

- speaking in full sentences
- exploding with development and speech
- sleeping better
- behaving better
- potty-trained
- never sick
- nearly back on track!!!



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Autism Unlocked... (Evan After Just 2 months)



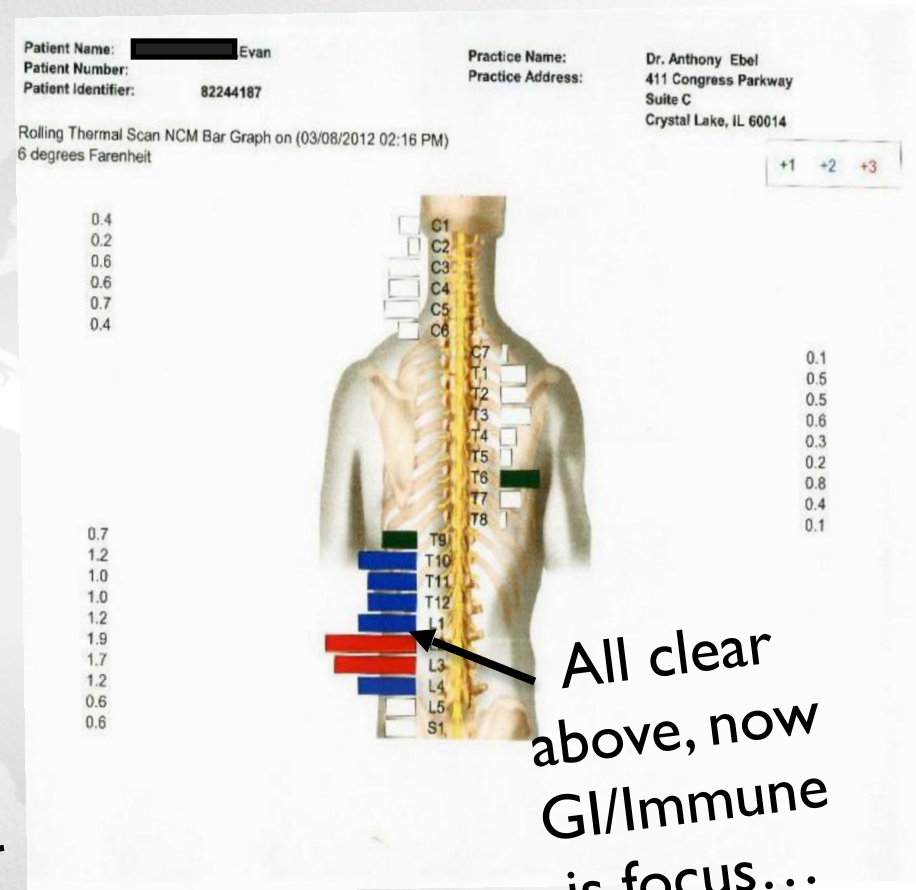
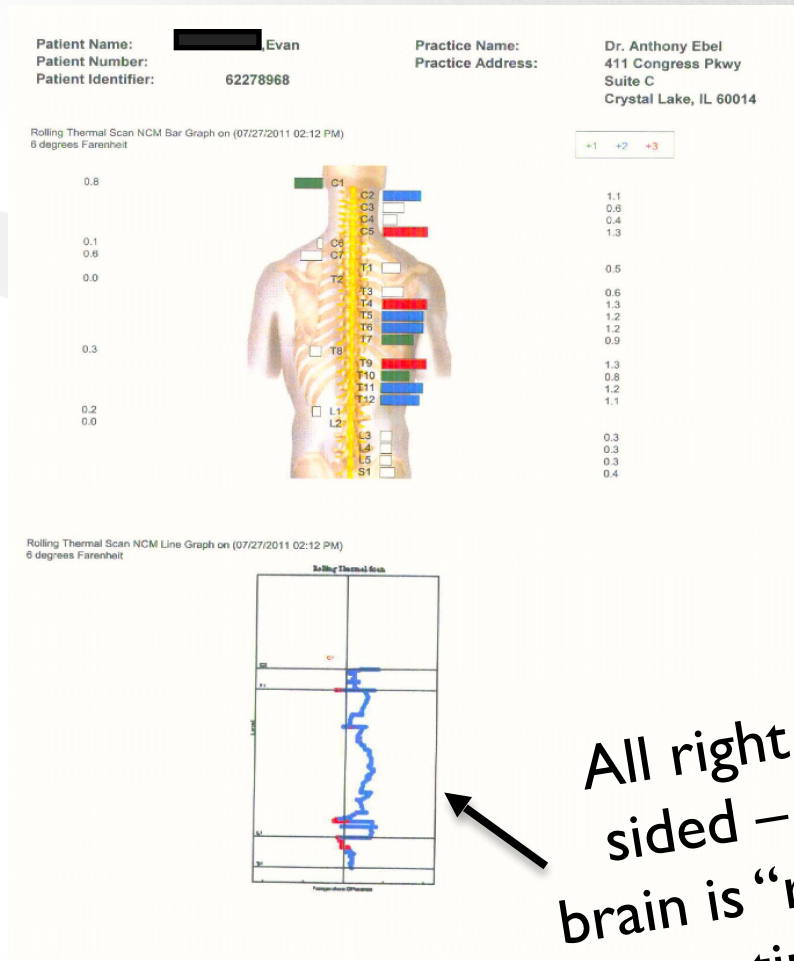
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Autism Unlocked... 2nd and 3rd Scans



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After 10 Months...



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Tonights Opportunity

JUST GET CHECKED!



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