When I first entered the field of neuro development about 15 years ago the number of children with autism was about 1 out of every 650 children. Since then we have witnessed a drastically rising tide in the incidence of autism. Recently the Schafer Report and the CDC announced a staggering new figure; 1 out of every 91 children are now affected by autism. This is a 7 fold increase in a very few years.

**What is Autism?**

Autism is a neuro development disorder. It is not a medical disorder that can be diagnosed with an X-ray or MRI and then treated with drugs or surgery. Though it was once considered to be a “Psycho-social” disorder it doesn’t fall under psychological disorders either, and cannot be treated with psycho-therapy or psychotropic drugs. Autism is a condition where something has gone awry in the developmental order of the brain. I call it a “disorder” of the brain.

Neuro development is about how the brain develops, what goes wrong with the brain and -most importantly- what do to correct the development of the brain. Keep in mind that every child is as unique and individual as a snowflake and there is no “cookie cutter” therapy for autism that works for every child. Even in normal child development there are as many different forms of normal as there are children. That is why autism is a spectrum disorder with features that range from mild to severe.

In the typical onset of autism, the developmental milestones in the child have a regression. Language skills regress, the brain becomes severely disorganized and processing skills drop. For most of the children with autism, sensory perception becomes disoriented, inappropriate and often overwhelming. Neuro-chemically, opioid receptors in the brain become activated by exogenous opioids coming from the intestinal tract. The meninges of the skull become contracted, putting pressure on the brain, spinal cord and sacrum causing toe walking, neurological regression and other aberrations in the child development. Because of regression in visual functions, the child with autism cannot see appropriately from the fine detail central vision of the eye and they develop hyper-peripheral vision. This peripheral vision aberration, when stimulated by spinning objects and hand flapping, generates endorphins in the brain. These over-stimulating endorphins only further the child’s desire for more sensory play and developmentally cause further delays and setbacks in the development.

Children with autism sometimes have some amazingly developed skills. The child with autism often perseverates, or becomes fixated, on either a skill that they hone to an unusual height of perfection or they fixate upon particular subject knowledge such as trains or submarines or animals. The examples in the movie “Rain Man” (the card counting ability and toothpick counting incident) are very real and not exaggerated. These highly developed skills in some children with autism are actually intensified abilities of normal human development. For the child with autism they are coping mechanisms from sensory overload and are often gained at the expense of and exclusion of social skills and other normal development abilities.
Cortical Spillage

As the brain and central nervous system (CNS) develop the body insulates the neuro pathways with layers of a fatty substance called myelin. Myelin is an insulating agent in the brain and CNS that keeps the neuro-chemical synapses in the nerve pathway and prevents the signals from “shorting out”. Myelin also helps accelerate the neuro chemical firing in the nerve pathways reaching speeds of around 195 mph!

In the child with autism there is often a large amount of cortical spillage with a high incidence of Tourette Syndrome. These two conditions are related because of either a myelin shortage and/or injury to the myelin of the brain.

In cortical spillage the nerve’s signals leak out from the pathway and energize other parts of the brain causing general problems with mobility and manual functions. For instance, a child with cortical spillage will not be able to move his hand without engaging other body parts like the feet and toes. Hyperactivity in autism can be caused by the cortical spillage and in fact, hyperactivity can be caused by a myelin deficiency in any child’s brain. The more localized myelin problem in Tourette Syndrome will cause a specific tic, body movement or noise like a grunt or a squeak.

What is the Cause of Autism?

_Using data from the U.S. Centers for Disease Control and Prevention's National Health and Nutrition Examination Survey (NHANES), a researcher from the University of California, Los Angeles, found that in 1999-2000, inorganic mercury was detected in the blood of 2 percent of women aged 18 to 49. This level has risen to 30 percent of women by 2005-2006._

The debate rages over vaccines as a cause of autism. Scientific data indicates that, _Yes_ vaccines can be a precipitating factor in autism. But even before the vaccines are administered to a child the child can be already predisposed for autism because of its mother’s toxicity during fetal development. Fetal and chorionic blood samples taken before birth show the developing fetus to be almost twice as toxic as the mother.

The administration of toxic vaccine adjuvants into the human body over the past four decades along with the ever growing toxic environment we are exposed to has produced several generations of toxic mothers that pass the heavy metals on to the child. This is compounding the toxicity in the next generation and can explain why our rates of autism are still climbing even after mercury was reduced in child vaccines.

_However, mercury has been recently added back into the flu vaccine in the amount of 25 mcg per dose. This exceeds the safe limits set by the EPA at 0.1 mcg per kilogram of weight. This toxic vaccine is being recommended wholesale for pregnant mothers and children. In other words a child (or adult) would have to weigh in at 550 lbs in order to safely handle the mercury in just one flu shot or 1100 lbs for the recommended flu shot._

During the 1990s infants received 12.5 mcg of mercury in vaccines at birth followed by 12.5 mcg at one month, 50 mcg at 2 months, 50 mcg at 4 months, 62.5 mcg at 6 months, 50 mcg at 15 to 18 months. This is a total of 237.5 mcg for a child, who (at best) weighs 10 kg. And remember it is the Environmental Protection Agency that set the safety limits for mercury at 0.1 mcg per kg of body weight.
Generation Rescue survey of vaccinated vs. unvaccinated older boys;
Vaccinated boys were 185% more likely to have a neurological disorder
Vaccinated boys were 279% more likely to have ADHD
Vaccinated boys were 146% more likely to have autism
This survey also concludes that boys represent roughly 80% of child neurological disorders.

The Contribution of Antibiotics to Autism

The sooner after birth a child receives an antibiotic the more predisposed it is for autism. Why? Because antibiotics often kill the healthy bacteria in the intestines along with the bad. This reduction of healthy bacteria in the intestines allows bad fungus to proliferate and take over the intestines. This causes several problems:

- Fungi consumes the nutrients in the food before the body can absorb them.
- Fungi releases neuro-toxic metabolites that negatively affect the brain and neuro development.
- Fungi causes inflammation in the intestinal tract and secondarily in the brain.
- A healthy intestinal bacteria balance is our body’s front line means of carrying toxic metals out of the body.
- The intestines are also responsible for producing a majority of our neuro chemicals.
- Over 80% of our immune system lives in the intestines and is directly affected by the balance of bacteria and fungi.

What do We do Now?

Because autism is a neuro development disorder, some of the solutions for correcting the problems lie in developmental therapies. Developmental therapies and sensory integration therapies normalize brain development and applied correctly will accelerate the child to catch up with its peers. But we have to stop the recurring damage caused by poor digestion and metal toxicity before we can efficiently correct the pervasive developmental problems.

Different methods of chelating therapies help many of these children to detoxify the metals that are damaging their bodies and brains. (Knowing which type of therapy to use on which child is the key to chelating.) It is imperative that we stop injecting mercury into our children and stop putting thimerosal laden diapers on their bottoms (Thimerosal is 49% mercury and can cause severe diaper rash that will not respond to normal diaper rash remedies).

Oddly enough mercury is not used in animal vaccines.

If we keep doing what we are doing we will keep getting what we are getting! It will not be long before it is 1 out of 50 children will fall under the spectrum of autism. We have to stop the freight train before we can back it up. What I mean is, removing mercury and other toxic adjuvants is just a hand brake on autism. We need to detoxify the mother before she becomes pregnant, we need to improve our diets in order to balance of friendly bacteria in our intestines. We need to carefully consider our overuse and abuse of antibiotics and finally we need to address the dumping of toxic waste and metals into the environment.

It took us several generations to arrive at our present state of 1 out of 91 children with autism and it will take several generations to recover from the path we are on. The good news is that it can be done starting with this next generation.
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