

Breaking News!  
on page 2

May | June 2005

1312 Patton Ave Asheville NC 28806  
828.252.9833 www.gsmcweb.com



# Health Matters

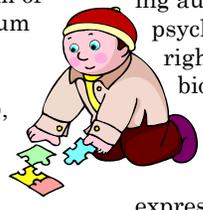
Great Smokies Medical Center of Asheville

A small, occasional publication

Volume 3, Issue 3

## Autism: An Overview

The word autism is derived from the Greek word “autos,” meaning self. It was first used medically in the 1930s to describe a puzzling, self-absorbed behavioral disorder. The term autism is used now to describe a spectrum of illnesses called Autistic Spectrum Disorder (ASD) that includes classic autism, Pervasive Developmental Disorder (PDD), and Asperger’s Syndrome.



The prevalence of autism has risen dramatically in the last decades. National Institutes of Health (NIH) statistics reveal that the prevalence of autism in the United States ranges from one in every 500 to 2,500 (depending on how autism is defined), numbers markedly increased from one per 30,000 in the 1980s.

About 83 percent of autistics are male. The average age at the time of diagnosis is 44 months. Early diagnosis and treatment are critical and tip the odds toward improved outcomes.

Autism has been described as a puzzle. Typically starting in the first three years of life, it affects neurological, immune, and social functioning. Autism stresses a family psychologically (from trying to

cope with a complex, serious disease) and financially (from special education, social, and medical needs).

Some pieces of this tragic puzzle have been found during the last 20 years, taking autism from its originally restrictive psychiatric definition to its more rightful classification as a complex, biological, neurotoxic condition resulting from an interplay between genetics and the environment.

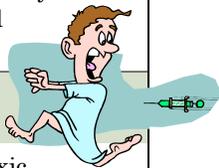
Each autistic child is unique in his expression of autism. In general, however, autistic children seem to be off in their own world. Some are advanced in gross and/or fine motor skills, while others may be normal or delayed. They may have either heightened or decreased responses to sensory input. Autistics live in a world where normal sounds may be painful, light touch may be painful, and firm, hard pressure may be comforting. Some autistics may not do well with change and may find comfort in rigid routines or perform repetitious activities, a trait called perseveration. Repetitive behaviors including hand flapping, finger flicking, head banging or rocking, can result. A small number of autistics will have exceptional ability in specific areas

such as mathematics or music, a condition called Savant Syndrome. Autistics often have some level of cognitive deficit.

Treatment of autism consists of intensive behavioral approaches such as Applied Behavioral Analysis (ABA), pharmaceuticals, speech therapy, auditory integration, neurosensory integration, and special education settings. Alternative medical therapies targeted to address the deficits occurring from the impaired ability to detoxify environmental and metabolic toxins include nutrient-dense diets, vitamin B12, glutathione, magnesium, pyridoxine, carnosine, zinc, folate, cod liver oil, essential fatty acids, probiotics, homeopathics, and chelation therapy.

Autism is a complex illness that involves the gastrointestinal, immune and nervous systems. The biological treatment of autism is similarly complex and can take place over two years, in addition to ongoing support of biological processes. Though there is no cure for autism, autistics can maximize their potential through enhanced detoxification and other supportive biological approaches from physicians who are specially trained in metabolic, nutritional, and chelation therapies.

## Are Some Cases of Autism Really Mercury Toxicity?



Few parents who are required to consent to the administration of vaccines for their children are aware that ethyl mercury, a known neurotoxin, is used as a preservative in many childhood vaccines. Parents aren’t the only ones unaware—many physicians also don’t know the long list of ingredients that comprise vaccines.

A growing number of articulate parents who are reliable observers of their child have reported that their child was “never the same” after receiving a vaccination. They report that their once happy, loving, interactive child is replaced by a child

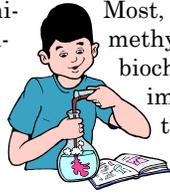
who has lost his former personality, speech, and socialization skills.

Several factors result in infants being more susceptible to mercury toxicity than adults. Due to their immaturity, infants lack a blood brain barrier (BBB) that is a barrier to the entry of toxins into a more mature brain. Once in the brain, mercury is difficult to move back across the BBB. Also, for the first six months of life infants do not make significant amounts of bile, nature’s built-in detoxification system by which most mercury is excreted from the body. Additionally, in-

jected mercury is far more toxic than ingested (dietary) or inhaled environmental mercury. Add the fact that the mercury in thimerosal is ethyl mercury, a form of mercury that is especially toxic to nerve cells. Lastly, there are many opportunities for children to become mercury toxic: The 2005 Centers for Disease Control (CDC) vaccination schedule recommends 22 separate vaccine injections to be administered before age two. We think the ideal tolerated level for *intentional medical* exposure to mercury, a known neurotoxin that has (cont. p. 2)

## Autism and Methylation

Methylation is a very important chemical reaction in the body that is responsible for well-being, health, and longevity. It protects DNA, impacts brain function, regulates detoxification and reproduction, and determines the rate of aging by turning numerous chemical processes either on or off. The ability to methylate naturally slows with aging, but it can prematurely burn out in autistic children.



Most, but not all, autistics are poor methylators, resulting in effect, in a biochemical “short circuit.” When important biochemical circuitry in the body does not work, toxic metabolic byproducts build up and stop important biochemical processes from working. Specific nutrients can help correct impaired methylation circuitry, resulting in symptomatic improvement.

## Mercury Toxicity, cont.

no biological functions in the body, is zero. In 1992, a child receiving the recommended vaccinations was injected with 187.5 mcg of mercury by age six months. All children who receive thimerosal-preserved vaccines don't become autistic because it appears that a *genetic predisposition* that renders a child unable to excrete mercury is also necessary for mercury to bio-accumulate to toxic levels.

The facts that the symptoms of autism and mercury toxicity are very similar, that most physicians lack awareness of the problem, and that physicians do not receive training in medical school in the diagnosis and treatment of heavy metal toxicity often delay an accurate diagnosis. The biological medical assessment of autism should include an assessment to rule out mercury toxicity. When addressing mercury toxicity, early diagnosis and treatment is important to achieve the best possible treatment outcomes.

GSMC is not anti-vaccine, but is a strong proponent of safer vaccines.

Subcutaneous injections of Methylcobalamin (vitamin B12) and sublingual dimethylglycine (DMG), plus oral supplementation of vitamin B6, folic acid, MSM, choline, SAME, selenium, zinc, inositol, and a wholesome, nutrient-dense diet form the nutritional approaches used to help autistics directly or indirectly support undermethylation. A two-month trial may be necessary to see a response.

## Web Resources

Hell hath no fury like a woman scorned—unless it is a mother of a mercury toxic, autistic child. The tragedy of autism has been the birthplace of thousands of activists who want to spare other families from similar tragedies. Check out this small sampling of web sites that are excellent examples of informed activism:

Amy Carson, mother of an autistic son, is a self made one-woman political force to reckon with both nationally and in Western NC. She is unstoppable in her efforts to mandate safe vaccines for children: [www.momsagainstm Mercury.com](http://www.momsagainstm Mercury.com).

Lujene Clark, RN, CPA and her husband,

## Breaking News!

California and Iowa have passed legislation in 2004 to ban mercury from vaccinations. On April 19, 2005, North Carolina joined Nebraska, Missouri, New York, Washington, Ohio, and Pennsylvania, when it became one of the group of seven states with bills in their state legislatures to also mandate safer vaccines.

Asheville's own Amy Carson is the driving force behind the introduction of bill **H1364** that bans the use of thimerosal in vaccines administered to children under the age of eight and pregnant women. The bill's sponsors are Representatives Bruce Goforth from Buncombe County and Nelson Dollar from Wake County.

All NC citizens interested in this important public health issue are asked to support safer vaccine by emailing or FAXing their state senators and representatives and asking them to support NC **H1364**.

You may read NC bill **H1364** at: <http://www.ncga.state.nc.us/Sessions/2005/Bills/House/PDF/H1364v0.pdf>

All content in this newsletter is intended to be informational and is not to be taken as medical advice or to replace medical care.

Alan Clark, M. D., parents of an autistic son, combine science and politics in their web site to educate consumers and help mandate safer vaccines for all children. Check out: [www.nomercury.org](http://www.nomercury.org).

A parent group, the Coalition for SAFE MINDS' (Sensible Action For Ending Mercury-Induced Neurological Disorders) web site is a source of terrific scientific and political data: [www.safeminds.org](http://www.safeminds.org).

Dr. Sherri Tenpenny has produced a DVD that is a comprehensive overview of the use of vaccines titled Vaccines: The Risks, The Benefits, The Choices. Highly recommended and available at GSMC or from: [www.nmaseminars.com](http://www.nmaseminars.com).

## Could Autistics Be All Doped Up?

Though autism is traditionally defined as a psychiatric disorder, we now know that autism has roots in genetics and immunology. Exposure to environmental stressors can profoundly affect neurological and immune development, particularly during the vulnerable times during gestation and early childhood.

Take, for example, the role of damaged intestinal lining present in many autistics. Compared to the general population, autistics have a higher incidence of adverse reactions to the proteins in wheat (gluten) and dairy (casein). These reactions are not primarily allergic in nature, but are a result of toxic byproducts of impaired digestion and metabolism.

Normal, healthy digestion breaks down the proteins gluten and casein into their smallest basic units, amino acids, which play several roles in critical body functions. Amino acids then link together to form peptides that profoundly influence how a person feels and functions.

However, when some autistics with impaired digestion eat wheat or dairy, they form abnormal peptides that function like opiates in the brain. These opiate-like compounds (gluteomorphins and caseomorphins) enter the general circulation and can disrupt brain chemistry. Just like opiates, these mind-altering peptides



result in the autistic person feeling pleasantly “doped up.” While an opiate addict needs his fix of opium, an autistic child needs his fix of wheat or dairy, and a food craving is thus born. Every autistic should have a trial of a gluten free/casein free (GF/CF) diet to see if there is benefit from avoiding these foods that can profoundly affect brain chemistry. Additionally, essential fatty acids, zinc, enzymes and beneficial gut-friendly organisms normally present in healthy intestines are often recommended for intestinal immune support.