## **EXCESSIVE VACCINATION AND AUTISM**

By Russell L. Blaylock, MD

In 1983, children received 10 vaccines before attending school. Today they will receive 23 or more vaccines prior to the age of two years, and over 36 injections by the time of school entry. The American Academy of Pediatrics and the Centers for Disease Control have assured parents that it is safe to not only administer these vaccines, but that multiple vaccines can be given at one time with complete safety. Is this true? Or are we being lied to on a grand scale?

The incidence of postnatal autism has increased dramatically since the mid-1980s, when the U.S. autism rate was on the order of 1 in 10,000. Today it is greater than 1 in 150. A number of studies have related this rise in incidence of Autism Spectrum Disorder (ASD) diagnoses to increases in the number of vaccines added to the childhood immunization schedule at this same time.

A compelling amount of research has shown that repeated stimulation of the systemic immune system results in first priming the brain's immune cells (called microglia) in the developing brain, followed by an intense microglial reaction with each successive series of vaccinations. When activated, especially chronically, microglia secrete a number of inflammatory cytokines, free radicals, lipid per oxidation products, and two excitotoxins—glutamate and quinolinic acid.

Because of the critical dependence of the developing brain on a timed sequence of cytokine and excitatory amino acid fluctuation, sequential vaccination can result in alterations in this critical process that cause brain damage and abnormal pathway development.

The evidence suggests that this overstimulation and persistent activation of the microglia is the central mechanism causing autism.

# **Normal and Abnormal Immune Activation**

Animal and human studies show that both systemic infections and immune activation by vaccinations rapidly activate the brain's microglial (immune) system. The immune system quickly clears a natural infection and then shuts off immune activation, thus allowing repair of any damage done to the brain by the immune reaction. By contrast, there is evidence that with repeated and excessive vaccine-triggered immune stimulation, the microglia do not shut down.

The current vaccination schedule of ongoing injections every month or two in very young children means the priming and activation cycle of the microglia will be virtually continuous. Studies have shown that immune activation following vaccination can last up to two years. This means that the brain's microglial cells are also primed for the same length of time or possibly longer. This has the potential to result in substantial brain damage.

# **Vaccinations Interfere with Brain Development**

Human brain development begins in utero. The most rapid brain development occurs during the last trimester of intrauterine life and two years after birth.

It has been found recently that early in life there is an overdevelopment of synaptic connections that are gradually removed (called pruning) during early childhood and adolescence. There is compelling evidence that the pruning of these excess synapses is essential; otherwise, the brain would be inundated with an enormous array of competing signals—static and misinterpreted messages. This pruning process, as well as the growth, maturation, and migration of neurons, is carried out by a

combination of signals, which include carefully controlled fluctuating glutamate brain levels and appearance of specific microglia-released cytokines in a timed sequence. This is all very exacting and easily disturbed. Anything that alters these fluctuating glutamate and cytokine levels – such as the inflammatory cascade initiated by vaccinations, or the presence of toxins like mercury and aluminum, will affect brain development, sometimes in drastic ways.

## **Vaccinations Interfere with Immune Function**

In the normal adult immune system, different forms of Thelper lymphocytes (Th) – Th0, Th1, or Th2 predominate, depending on the situation. Th0 mode is a neutral, uncommitted phase. If a pathogen invades, the Th1 phase is initiated, activating immune cells to go on the attack. The Th2 phase in general reduces immune reaction and favors the production of antibodies mainly supplied by B-cells.

Infants remain in the Th2 mode during intrauterine life. At birth, the baby remains primarily in a Th2 mode, with a limited ability to switch to the Th1 defensive mode should the need arise—i.e., an infection. Months later, the baby's immune system begins to switch to the adult primarily Th1 mode. If the baby's immune system remains in a Th2 mode or too long, it will exhibit a higher risk of developing an autoimmune disorder, such as eczema, asthma, or other allergies.

Presently, vaccine authorities recommend every baby be vaccinated with the Hepatitis B vaccine (HepB) at birth. But is this safe? A recent study looked at the immune reaction in new born infants up to the age of one year who had received the HepB vaccine to see if their immune reaction differed from that of adults getting the same vaccine. It did. The children responded to the vaccine by having an intense Th2 response (3 times as strong as adults) that persisted long after it should have disappeared—a completely abnormal response.

Autistic children have been described as having a Th2 pro dominance, which would explain their propensity to develop autoimmune diseases and to be more susceptible to infections early in life.

Persistent Th2 responses caused by the HepB vaccine put a child at great risk of developing an autoimmune disorder and weaken resistance to normal childhood infections. Thus, should your child be exposed to measles or chickenpox, they are more likely to suffer neurological damage, seizures, or other systemic disorders. When this occurs, rather than admit that the science indicates that the vaccine program causes complications and deaths, vaccine proponents use it as an opportunity to argue for more childhood vaccinations.

# **Immune Suppression by Live Virus Containing Vaccines**

Certain viruses, including the measles virus, powerfully suppress immunity for up to six months. The MMR vaccine, administered beginning at age one year, contains live measles, mumps and rubella viruses.

Public health officials never address the obvious question: wouldn't the MMR vaccine make the child more susceptible to other naturally occurring infections? This has been strongly suggested by a number of studies. Not only would such children be more susceptible, but severe complications and even death would be more prevalent as well.

Once again, when death and severe complications occur, pediatricians, the CDC, and the American Academy of Pediatrics use them to justify more vaccines, never admitting that the increased incidence of infections and complications was likely precipitated by their very own vaccine recommendations.

## **Adjuvants Exacerbate the Situation**

Added to most vaccines are immune boosters (adjuvant) designed to prolong the immune reaction to the vaccination. These substances include aluminum, monosodium glutamate (MSG), mercury-containing Thimerosal, and various antibiotics.

It is known that aluminum accumulates in the brain and is associated with neuro degeneration. The evidence for a link between aluminum neurotoxicity and Alzheimer's disease continues to mount. Aluminum, like mercury, activates microglia leading to chronic brain inflammation—a major event in both Alzheimer's disease and Parkinson's disease. It is also known that aluminum enhances the toxicity of mercury and that it increases inflammation in the body.

Mercury is an immune suppressant. It also activates microglia in well below the concentrations found in Thimerosal-containing vaccines. Mercury interferes with the removal of glutamate from extracellular spaces, thus causing excitotoxicity. It also damages the brain by interfering with its energy production. The mitochondria (the energy factories) of the neuron (brain cell) accumulate more mercury than any other part of the cell. Interference with a neuron's ability to produce energy greatly magnifies its sensitivity to excitotoxicity— so much so, that even physiological concentrations of glutamate can become excitotoxic.

Mercury poisons antioxidant enzymes (catalase, glutathione peroxidase, and SOD) essential to the protection of brain cells and dramatically lowers glutathione levels by a number of mechanisms.

## **Evidence-Based Medicine**

"Evidence-based medicine" is the mantra of the medical establishment. However a careful examination of many of the accepted treatments reveals that most have little or no scientific "evidence-based" data to support them. One often cited study found that almost 80% of medical practice had no scientific backing.

There exists an incredible double standard when it comes to scientific evidence versus vaccination-supporting evidence. The proponents of vaccination safety can just say they are safe without any supporting evidence. They can proclaim Thimerosal safe to use in vaccines without ever having conducted a single study on its safety in over 70 years of use.

Yet, let anyone suggest that excessive vaccination can increase the risk of not only autism but also schizophrenia and neurodegenerative diseases, and the vaccine apologists will scream like banshees: Where is the evidence? Where is the evidence?

When independent researchers produce study after study questioning vaccination-program safety, the vaccine apologists always proclaim that their evidence is insufficient or has design flaws. More often than not, the evidence is completely ignored.

In the 1950s, there was no proof that cigarette smoking caused lung cancer. The connection was obvious to most, but the medical establishment's position was, "there is no proof." Almost 30 years passed from the time some iconoclastic men of medicine tried to convince the medical establishment that smoking caused most cases of lung cancer until it became generally accepted. How many people died of lung cancer perhaps unnecessarily during this time? Data from the National Cancer Institute indicate almost 4 million.

Today, there are over one million U.S. children and adults with autism, millions more with other identified neurological and behavioral disorders, and the numbers continue to grow. This is a medical disaster of monumental proportions. Like smoking and lung cancer, there is more than enough proof today to call a halt to the present excessive vaccine program and ban *any level* of mercury in vaccines.

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