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Aluminum and the Neurotoxicity of Vaccines

Information that the Vaccine Industry tries to keep hidden

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"No vaccine manufacturer shall be liable…for damages arising from a vaccine-related injury or death." — President Ronald Reagan, as he signed The National Childhood Vaccine Injury Act (NCVIA) of 1986, absolving drug companies from all medico-legal liability when children die or are disabled from vaccine injuries.

"In young children, a highly significant correlation exists between the number of pediatric aluminum-adjuvanted vaccines administered and the rate of autism spectrum disorders." — C. A. Shaw, MD, Vaccine safety researcher

"…no adequate studies have been conducted to assess the safety of simultaneous administration of different vaccines to young children." Nor has there been " any toxicological evaluation about concomitant administration of aluminum with other known toxic compounds which are routine constituents of commercial vaccine preparations, e.g., formaldehyde, formalin, mercury, phenoxyethanol, phenol, sodium borate, polysorbate 80, glutaraldehyde." — L. Tomljenovic and C.A. Shaw, Vaccine safety researchers

In the last few decades since the "mysterious" autism epidemic began in the late 1980s, the giant pharmaceutical companies, free from the constraints of medico-legal liability, began pumping out more and more highly profitable vaccines, and their lobbyists in D.C., their well-paid spokespersons and the industry-co-opted "regulatory agencies" (like WHO, the CDC, the FDA and NIH) rejoiced.

Then, in 1996, the Big Pharma corporate machine and lobbyists got the US Congress to do its bidding and legalize direct-to-consumer advertising for its products, which up to then was illegal. And Big Pharma has also been bribing most US Congresspersons with lavish campaign donations and totally dominated the mainstream media debates that come up from time to time concerning drug and vaccine injuries, intoxication, sickness and death.. Up until now they have also succeeded in silencing the thousands of anguished parents of vaccine-injured children who are just trying to tell their tragic stories.

At least partly because of the dire financial consequences that these industries may have to face if the stories were to be widely told, these parents and their advocates have been essentially black-balled by every media outlet that takes advertising dollars from Big Pharma. The black-listing is probably welcome to everybody associated with Big Pharma's industries, like Wall Street executives, Big Media executives and others in the investor classes that may have pharmaceutical stocks in their portfolios (or are simply on friendly terms with medical or pharmaceutical establishment types that don't want to destabilize the gravy train).

Tens of thousands of angry and increasingly vocal "Mama Bear" mothers, are no longer

willing to accept the excuse from their clinics that “the neurological catastrophe that your child suffered after the shots was just a coincidence”. And they are demanding an audience, some compassion, some help and some compensation for their losses.

These usually disrespected parents are sometimes fired from their clinics when they try to protect their afflicted child from further vaccine injury. There is no doubt in their minds that, after their child got his standard “well-child” inoculations, that previously healthy baby or toddler died of SIDS or regressed into autism (or had other developmental delays) or started having seizures or developed autoimmune disorders such as allergies or asthma or arthritis or so-called ADHD.

(It must be mentioned that the various combinations of inoculations have never been proven to be safe or even effective in unbiased, independent, well-designed, long-term studies. With no legal liability since 1986, the vaccine industry has very little incentive to make that effort.)

But these parents are persistent and they are continuing to speak out despite being routinely shouted down by the ubiquitous pro-vaccine spokespersons that are invited to appear on radio and TV shows whenever vaccine issues are discussed in the media. Pro-vaccine spokespersons are everywhere (like the multimillionaire academic pediatrician Dr Paul Offit, who developed an anti-diarrhea rotavirus vaccine (Rotateq), and then sold – for tens of millions of dollars – the patents and marketing rights to the giant vaccine manufacturer Merck & Co.

Offit has a lot of prestige to lose if the raw truth about America’s over-vaccination program came out. (Dr Offit, by the way, is the “vaccine expert” who says that all vaccines are perfectly safe and once reportedly said that infants can theoretically tolerate 10,000 of them at once: (See “Addressing Parents’ Concerns: Do Multiple Vaccines Overwhelm or Weaken the Infant’s Immune System?” Pediatrics. 2002 Jan;109(1):124-9.)

Many of the parents whose children are victims of vaccine-injuries have enough common sense to see through the absurdity of Offit’s statement. They know how to find pertinent information on PubMed that their physicians may not be aware of concerning the toxicity of vaccines and vaccine adjuvants, and they are connecting the dots and de-mystifying the causes behind the epidemic of chronic, autoimmune disorders that are occurring in fully vaccinated American children. Those chronic illnesses do not happen in unvaccinated or minimally-vaccinated children like in Amish communities or in the patients of Home First Clinic in Chicago. (For more on that see ”Make an Informed Vaccine Decision”, page 12, where author Mayer Eisenstein, MD, JD, MPH, who started the Home First Clinic [and did not force vaccinations on his 35,000 pediatric patients] discovered that, among his un-vaccinated or minimally-vaccinated patients, there were essentially zero patients with autism, asthma, allergies or diabetes.)

Knowledgeable parents of vaccine-age children correctly fear the rapidly increasing numbers of mandated vaccines all of which have many toxic ingredients in them that are being injected into the bodies of their immune-deficient infants. And the vaccine doses do not vary no matter what is the infant’s age, weight, developmental status, immune status, mitochondrial status, nutritional status, or whether or not the child is currently sick.

Because of the large amount of new basic science studies that have been done on the subject of the neurotoxic vaccine adjuvant aluminum and the recent studies about the

mitochondrial toxicity of vaccine ingredients, I submit the abstracts and portions of articles below from a variety of peer-reviewed medical journals.

Aluminum, as is mercury, is a known potent mitochondrial toxin, and every cell in the body, especially the brain cells of infants, is highly susceptible to permanent damage from those two heavy metals, especially when they are used in combination and especially when they are injected – as was the case during the 1990s when the autism epidemic was escalating from rare (1/10,000 to "normal" (1/150).

The first article in annex (Excerpts) below is from the journal Lupus and the second is from Current Medicinal Chemistry. Neither journal takes pharmaceutical company advertising.

ANNEX

Mechanisms of Aluminum Adjuvant Toxicity and Autoimmunity in Pediatric Populations

Lupus. 2012 Feb;21(2):223-30. doi: 10.1177/0961203311430221.
http://www.ncbi.nlm.nih.gov/pubmed/22235057

Tomljenovic L, Shaw CA.

Abstract

Immune challenges during early development, including those vaccine-induced, can lead to permanent detrimental alterations of the brain and immune function. Experimental evidence also shows that simultaneous administration of as little as two to three immune adjuvants can overcome genetic resistance to autoimmunity.

In some developed countries, by the time children are 4 to 6 years old, they will have received a total of 126 antigenic compounds along with high amounts of aluminum (Al) adjuvants through routine vaccinations.

According to the US Food and Drug Administration, safety assessments for vaccines have often not included appropriate toxicity studies because vaccines have not been viewed as inherently toxic.
Taken together, these observations raise plausible concerns about the overall safety of current childhood vaccination programs. When assessing adjuvant toxicity in children, several key points ought to be considered:

(1) Infants and children should not be viewed as "small adults" with regard to toxicological risk as their unique physiology makes them much more vulnerable to toxic insults;
(2) In adult humans (and animals) aluminum vaccine adjuvants have been linked to a variety of serious autoimmune and inflammatory conditions (i.e., ASIA = Autoimmune [auto-inflammatory] Syndrome Induced by Adjuvants), yet children are regularly exposed to much higher amounts of Al from vaccines than adults;
(3) It is often assumed that peripheral immune responses do not affect brain function. However, it is now clearly established that there is a bidirectional neuro-immune cross-talk that plays crucial roles in immune-regulation as well as brain function. In turn, perturbations

of the neuro-immune axis have been demonstrated in many autoimmune diseases encompassed in “ASIA” and are thought to be driven by a hyperactive immune response; and
(4) The same components of the neuro-immune axis that play key roles in brain development and immune function are heavily targeted by Al adjuvants.
In summary, research evidence shows that increasing concerns about current vaccination practices may indeed be warranted.
Because children may be most at risk of vaccine-induced complications, a rigorous evaluation of the vaccine-related adverse health impacts in the pediatric population is urgently needed.

Aluminum Vaccine Adjuvants: Are they Safe?

Curr Med Chem. 2011;18(17):2630-7

L. Tomljenovic, and C.A. Shaw (article accepted for publication May 12, 2011)

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Full journal article available at: http://www.meerwetenoverfreek.nl/images/stories/Tomljenovic_Shaw-CMC-published.pdf

Abstract

Aluminum is an experimentally demonstrated neurotoxin and the most commonly used vaccine adjuvant. Despite almost 90 years of widespread use of aluminum adjuvants, medical science’s understanding about their mechanisms of action is still remarkably poor. There is also a concerning scarcity of data on toxicology and pharmacokinetics of these compounds. In spite of this, the notion that aluminum in vaccines is safe appears to be widely accepted.

Experimental research, however, clearly shows that aluminum adjuvants have a potential to induce serious immunological disorders in humans. In particular, aluminum in adjuvant form carries a risk for autoimmunity, long-term brain inflammation and associated neurological complications and may thus have profound and widespread adverse health consequences.

In our opinion, the possibility that vaccine benefits may have been overrated and the risk of potential adverse effects underestimated, has not been rigorously evaluated in the medical and scientific community. We hope that the present paper will provide a framework for a much needed and long overdue assessment of this highly contentious medical issue.

INTRODUCTION

Aluminum is the most commonly used vaccine adjuvant and until recently the only one licensed for use in the U.S. In its absence, antigenic components of most vaccines (with the exception of live attenuated vaccines), fail to launch an adequate immune response. Paradoxically, despite almost 90 years of widespread use of aluminum adjuvants their precise mechanism of action remains poorly understood.

Furthermore, a growing number of studies have linked the use of aluminum adjuvants to serious autoimmune outcomes in humans. That concerns about aluminum adjuvant safety are indeed warranted is evident from the summary conclusions of the Aluminum in Vaccines workshop held in Puerto Rico in 2000 [Eickhoff, T.C.; Myers, M. Workshop summary. Aluminum in vaccines. Vaccine. 2002, 20 Suppl 3, S1-4.]. The written consensus amongst the participants of the workshop was listed under the rubric of "pervasive uncertainty", a term used to denote what remained unknown regarding potential aluminum toxicity from adjuvants.

The specific areas of concern were: "1) toxicology and pharmacokinetics, specifically the processing of aluminum by infants and children, 2) mechanisms by which aluminum adjuvants interact with the immune system and 3) the necessity of adjuvants in booster doses." In the concluding paragraphs of the summary, the report nevertheless claimed that "the use of salts of aluminum as adjuvants in vaccines has proven to be safe and effective" [2]. In light of the items of "pervasive uncertainty", this statement remains questionable.

Given that multiple aluminum-adjuvanted vaccines are often given to very young children (i.e., 2 to 6 months of age), in a single day at individual vaccination sessions, concerns for potential impacts of total adjuvant-derived aluminum body burden may be significant. These issues warrant serious consideration since, to the best of our knowledge, no adequate studies have been conducted to assess the safety of simultaneous administration of different vaccines to young children.

Another issue of concern is the lack of any toxicological evaluation about concomitant administration of aluminum with other known toxic compounds which are routine constituents of commercial vaccine preparations, e.g., formaldehyde, formalin, mercury, phenoxyethanol, phenol, sodium borate, polysorbate 80, glutaraldehyde.

In spite of all this, aluminum adjuvants are generally regarded as safe, and some researchers have even recommended that no further research efforts should be spent on this topic despite "a lack of good-quality evidence".

In the following paper we aim to provide an overview of what is currently known about aluminum adjuvants, their modes of action and mechanisms of potential toxicity. We first present well-established evidence that implicates aluminum in a variety of neurological disorders. We then elaborate on the unresolved controversy about aluminum adjuvant safety.

Aluminum Toxicity in Animals and Humans

Aluminum is a well demonstrated toxin in biological systems whose more specific impacts on the nervous system have been widely documented. As early as 1911, Dr. William Gies had summarized data from 7 years-worth of experimental testing in humans and animals on the effects of oral consumption of aluminum salts, then used primarily in baking powders, food preservation, and dye manufacturing. The outcome of these studies led Gies to conclude that: "the use in food of aluminum or any other aluminum compound is a dangerous practice."

Gies' concerns have since been borne out by experimental studies showing that oral exposure to aluminum that is at levels "typically" consumed in an average "Western diet" over an extended period of time, produce strikingly similar outcomes in rodents to those induced by intracerebral injection of aluminum salts with the exception of seizures and fatalities.

Animals intoxicated with dietary aluminum routinely show impaired performance in learning and memory tasks, impaired concentration, and behavioural changes including confusion and repetitive

behaviours. Consistent with these observations, according to the most recent and elaborate toxicological report for aluminum prepared by the Agency for Toxic Substances and Disease Registry (ATSDR): “There is a rather extensive database on the oral toxicity of aluminum in animals. These studies clearly identify the nervous system as the most sensitive target of aluminum toxicity.”

In humans, aluminum toxicity has been solidly linked to dialysis-associated encephalopathy syndrome, also known as dialysis dementia. This syndrome occurs in patients with renal failure subjected to chronic dialysis treatment and is caused by accumulation of intravenously administered aluminum from the dialysis fluid (which is derived from aluminum-treated tap water). Dialysis dementia is associated with abnormally high levels of plasma and brain aluminum and is generally fatal within 3 to 7 months following the sudden overt manifestation of clinical symptoms in patients who had been on dialysis treatment for 3 to 7 years (unless treated with chelating agent such as desferrioxamine (DFO) or reverse osmosis to remove aluminum salts from the water used to prepare the dialysis fluid). Symptoms appear suddenly and worsen either during or immediately after a dialysis session. The first symptom to appear is a speech abnormality, then tremors, impaired psychomotor control, memory losses, impaired concentration, behavioural changes, epileptic seizures, coma and death.

Although frequent ingestion of aluminum-containing medicines was also thought to be a contributing factor in dialysis dementia it should be noted that there were no incidences of this syndrome prior to introduction of aluminum salts in water supplies [21, 27]. Furthermore, symptomatic patients rapidly improved when efforts were made to remove aluminum from the dialysis fluid, despite the fact they still ingested large amounts of aluminum-containing phosphate binding gels.

In addition to dialysis dementia, a host of neurodegenerative complications and diseases such as Alzheimer’s, Parkinson’s disease, amyotrophic lateral sclerosis (ALS) [Perl, D.P.; Moalem, S. [Aluminum and Alzheimer’s disease, a personal perspective after 25 years. J Alzheimers Dis. 2006, 9(3 Suppl), 291-300.], multiple sclerosis, Gulf War Syndrome (GWS), autism, and epilepsy may also be related to aluminum exposure. While it is likely that these diseases are of multifactorial etiologies, aluminum certainly has the potential to serve as a toxic co-factor.

CONCLUSIONS

Aluminum in various forms can be toxic to the nervous system. The widespread presence in the human environment may underlie a number of CNS disorders. The continued use of aluminum adjuvants in various vaccines for children as well as the general public may be of significant concern.

In particular, aluminum presented in this form carries a risk for autoimmunity, long-term brain inflammation and associated neurological complications and may thus have profound and widespread adverse health consequences. The widely accepted notion of aluminum adjuvant safety does not appear to be firmly established in the scientific literature and, as such, this absence may have led to erroneous conclusions regarding the significance of these compounds in the etiologies of many common neurological disorders. Furthermore, the continued use of aluminum-containing placebos in vaccine clinical trials may have led to an underestimation of the true rate of adverse outcomes associated with aluminum-adjuvanted vaccines.

In our opinion, a comprehensive evaluation of the overall impact of aluminum on human health is overdue. Such an evaluation should include studies designed to determine the short and long-term impacts of dietary aluminum as well as the potential impacts in different age groups of exposure to adjuvant aluminum alone and in combination with other potentially toxic vaccine constituents (e.g., formaldehyde, formalin, mercury, phenoxyethanol, phenol, sodium borate, polysorbate 80,

glutaraldehyde).

For the latter, until vaccine safety can be comprehensively demonstrated by controlled independent long-term studies that examine the impact on the nervous system in detail, many of those already vaccinated as well as those currently receiving injections may be at risk for health complications that exceed the potential benefits that vaccine prophylaxis may provide.

The issue of aluminum-adjuvanted vaccine safety is especially pertinent in light of the legislation which might mandate vaccination regimes for civilian populations (e.g., the Biodefense and Pandemic Vaccine and Drug Development Act of 2005). Whether the risk of protection from a dreaded disease outweighs the risk of toxicity from its presumed prophylactic agent is a question that demands far more rigorous scrutiny than has been provided to date.

REFERENCES (and full article) available at:http://www.meerwetenoverfreek.nl/images/stories/Tomljenovic_Shaw-CMC-published.pdf

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