

Autism 2002

Mercury, Heavy Metals... Toxicity



Stephanie Cave, M.D., F.A.A.F.P.

Dr. Cave received her M.D. from LSU Medical School in New Orleans, Louisiana in 1983. She completed a residency in 1986 and is board certified in Family Practice. She and her colleague, Dr. Amy Holmes, are presently treating over 1000 children with Autism Spectrum Disorder in a private clinic in Baton Rouge, Louisiana. Dr. Cave lectures on Autism and Vaccines and has recently published a book titled *What Your Doctor May Not Tell You About Children's*

Vaccinations. Last summer she testified before the United States Congressional Committee on Governmental Reform regarding the mercury content in vaccines.

AUTISM AND IMMUNIZATIONS

Stephanie F. Cave, M.S., M.D., F.A.A.F.P.

I am honored that you have asked me to speak at the Autism 2002 conference. I would like to talk to you about a subject close to my heart---autism spectrum disorder and the possible link to vaccines. Presently my colleague and I are treating over 1500 children with this problem. In the past five years we have seen an incredible number of children recover from this devastating illness and take their places beside their schoolmates and siblings. This subject, as you might expect, is a very controversial one, but I think you will agree with me before the end of this lecture that this is an epidemic in medicine unlike anything that we have seen in the past.

The debate about vaccinations has been going on since the smallpox vaccine was given during the early part of the twentieth century. In 1914 in Portland, Oregon, Lora Little became a vaccine activist when her seven year old son died after the smallpox vaccination. That same year, several cases of smallpox occurred in Portland. Unvaccinated children were sent home from school for two weeks. There was a massive showdown between the parents and the health officer. The judge ruled in favor of the parents and the children returned to school.

Lora Little's arguments were very similar to what we are hearing from parents today. She stated that "vaccination is an artificial pollution of the blood with a virus that is capable of propagating itself in the system." She went on to say, "This one is an effort of nature. The other is an artifice of the doctors. Trust nature is a safer motto than trust the doctor. Nature does not contradict herself. Medical authority is a mass of contradictions." Lora Little voiced her objections: "It is a violation of the blood and when performed upon a man against his will is a personal assault of exceptionally outrageous character."

She accused "slick doctors" of lying about statistics in an effort to reap the large amounts of money involved in running the state-sponsored machine. "Smallpox has declined concomitantly with vaccination,, declared Little , only because of improvements in municipal and personal cleanliness." She actually ran a campaign that came close to defeating the mandatory vaccine law that existed at that time for smallpox. (*Oregon Historical Quarterly*, 1998)

A number of parents, doctors, and governmental officials are recognizing a possible link between the epidemic of developmental delays and the growing number of mandatory vaccines. We are fortunate to have stopped the polio, measles, and whooping cough epidemics but have we paid a stiff price for our success?

I am certainly not opposed to giving safe vaccines. I am concerned about the growing numbers of chronically ill children. There are more learning disabled children, and more children with autoimmune illnesses than we have ever had in the history of medicine.

The incidence of autism is rising dramatically. In the fifties, it was 1/10000; 1/2000 in the seventies; 1/500 in 1996; 1/250 in 2000; 1/147 in 2001 according to the noted epidemiologist, Dr. Eric Fombonne. Is this rise in incidence because we have better diagnostic techniques? Are we better doctors now? I believe that if a child could not speak, had no eye contact, mutilated himself, and did not sleep but a couple of hours per night he certainly would have been given some kind of a diagnosis.

Nationwide statistics in US school children for the school years 97-98 vs. 98-99 in children ages 6 to 21 show a 2.6% increase in all disabilities, 2.3% increase in specific learning disabilities, 1% increase in speech impairments, 1.9% increase in severe emotional disturbance, and a 26% increase in autism. Autism is now the number one disability entering California's developmental services system. Historically, autism accounted for 3% of the intakes into the system. Autism now accounts for 37% of the new intakes. From April 3 to July 8, 2001, 664 new children with autism were added to the system. This is the largest number of autistic children added to the system in the 32 year history of the group. At this rate, California will add 2700 new children with autism to its system in 2001 alone. This is more than all of the new cases entering the system in all of 1994, 1995, and 1996 combined.

There have been a number of causes postulated for autism. I believe that it is generally thought that there is a genetic predisposition for these children. Dr. Andrew Wakefield, pediatric gastroenterologist in England has shown live measles particles in the small bowel of many of the autistic children that he treats. Dr. Mary Megson, developmental pediatrician, has a hypothesis that the pertussis vaccine takes vitamin A out of its binding site in cells causing problems in cellular communication. The latest and strongest explanation is that the autistic spectrum of disorders may be caused by mercury poisoning from a number of sources including the mother's amalgam fillings, RhoGam given at 28 weeks gestation to Rh Negative mothers, diet, and the ethyl mercury in the vaccines. Finally there are others who feel that the immune systems of the children are at risk because of the toxins and human fetal tissue in the vaccines.

We are treating over 1500 children in the autistic spectrum in our office. We have learned a lot from these children but we have very few answers for these parents. Are vaccines really involved? We think so but we cannot prove cause and effect yet. We are pushing these young, underdeveloped immune systems beyond their capabilities in our zeal to keep them from being ill. Among other problems, there are not enough safety studies for the vaccines presently on the market.

We realized that the epidemic of autism has escalated in the past ten years. A possible link may be the Hepatitis B vaccine which was introduced in 1991 and was given shortly after birth. This vaccine contained 12.5 mcg of mercury. The EPA "safe limit" is 0.1mcg/kg/day or approximately 0.4mcg/day for the average newborn. 12.5mcg is 25 times the EPA safe limit. Ethylmercury is a neurotoxic form of mercury. A study in the *Journal of Pediatrics*, May, 2000, demonstrated mercury in the blood of newborns before the shot and a higher level after the shot. In some preterm infants the level of mercury was ten times that of term infants. Intrauterine sources may include seafood diet,, maternal amalgam fillings,, RhoGam&endash;given at 28 weeks gestation and influenza vaccine.

Besides the Hepatitis B vaccine the Hib and DTP and DTaP vaccines contained ethylmercury in the form of thimerosal, used as a preservative. In the typical vaccine schedule, at two months an infant received 62,5mcg, at four months, 50mcg, and at six months, 62.5mcg. These were given to infants with minimal bile production (needed for metal removal from the body) and a permeable blood-brain barrier. The total by 5 years of age exceeded 237 mcg.

We are giving too many vaccines in a short space of time. We do not have a clear idea of the effects of some of the components of the vaccines like thimerosal, aluminum, formaldehyde, and human fetal tissue. In addition to this, we are giving combination vaccines which have been questioned for safety.

From 1890 to 1950 mercury poisoning showed up as Pink Disease. The children had apathy, lost play, sound and light sensitivity, insomnia, seizures, poor muscle tone, repetitive behaviors,, pink hands and cheeks. It had a delayed onset and affected 1/500 children. It was traced back to the use of calomel teething powders containing mercury.

If one looks at mercury kinetics, he will find that in blood and hair mercury is cleared in four to six months. In CNS organs it clears more slowly&endash;several years. The brain mercury is removed very slowly. The half-life is estimated to be 20 years.

There is a wonderful article written by a group of parent professionals, Autism: A Unique Type of Mercury Poisoning. It is available on the Autism Research Institute website (www.autism.com/ari). All of the characteristics of mercury poisoning can be found in the autistic children. These include but are not limited to self-injurious behavior, social withdrawal, lack of eye contact, lack of facial expression, hypersensitivity to noise and touch, loss of speck, and repetitive behaviors.

Dr. Bill Walsh of the Pfeiffer Treatment Center has found that 91% of 503 autistic children have a deficiency of metallothionein. This alters the copper/zinc ratio. The normal child has a 1:1 ratio of copper to zinc. The autistic child has a 1.7:1 ratio.

Dr. Boyd Haley, University of Kentucky, has found that the combination of aluminum and thimerosal in the vaccines inhibits at least 40 enzymes in laboratory animals.

After the thimerosal has been removed from the vaccines, I believe that we can give them safely.

There are a number of controversies involving vaccines. Japan made the safer DTaP available to Japanese children in 1981. The CDC did not recommend this form of the vaccine for use in the United States until 1996. The National Vaccine Information Center (NVIC) under the direction of Barbara Loe Fisher was the driving force behind this recommendation. There were 300 lawsuits filed by the mid 1980's against the DTP manufacturers In 1991 Barbara Loe Fisher wrote A Shot in the Dark, discussing the safer version of the vaccine, the DTaP. Whole cell vaccine is widely used in the third world countries today.

After the lawsuits of the 1980's, the vaccine manufacturers asked Congress to limit liability. In 1986 the Vaccine Injury Compensation Act established no fault compensation for the vaccine injured.

The Hepatitis B vaccine has not been without problems. Bonnie Dunbar, PhD, Professor of Cell Biology, Baylor College of Medicine and vaccine researcher had an interesting experience with the Hepatitis B vaccine in her

laboratory. She followed OSHA regulations and gave the Hepatitis B vaccine to three laboratory workers. The first, her brother has been bedridden ever since with a demyelinating disease that the doctors cannot characterize. The second is a medical student. After the third dose of the vaccine, she became blind in one eye. The third person is all right.

Dr Dunbar found that the drug insert mentions that the Hepatitis B vaccine was only monitored for five days for safety. The literature shows plasma immune reactions happening weeks after the shot—neurological, rheumatoid, vascular, and skin. There is a criminal investigation in France regarding the introduction of the vaccine prior to knowledge of reactions. Dr. Dunbar has discussed the fact that the clinical trial data is not available to researchers. The information of adverse reactions reported is not available and the antigens are not available to scientists for research.

The MMR vaccine has sparked much controversy here and abroad. Dr. Andrew Wakefield believes that there is a MMR vaccine/autism link. He has reported persistent measles particles in the GI tract of autistic children. A Japanese group has similar findings. In the presence of mercury, there is a shift from a predominance of the Th1 lymphocytes that fight viruses, yeast, parasites, and cancer cells to a predominance of Th2 lymphocytes and an autoimmune shift.

The new Pneumococcal vaccine, Prevnar, has good efficacy for meningitis and bacteremia but only a four to twenty-three percent efficacy for otitis media. The vaccine only covers seven of ninety serotypes.

Varivax (chicken pox) is grown in human tissue. There is a question of lifetime immunity after the shot. Merck has begun a study to determine how long this vaccine can be expected to last but it will not be ready until 2010. If this vaccine only lasts ten to fifteen years, we may have a serious problem if chicken pox becomes an adult disease.

There is some question that some of the vaccines may trigger insulin dependent diabetes. There have been studies in 1967, 1977, 1990, and 1999 in several countries. The studies demonstrated a twenty to fifty percent rise in insulin dependent diabetes approximately three and one-half years after the vaccines. The vaccines studied were DTP, Hib, MMR, Anthrax, BCG, and Hepatitis B.

There are a number of allergy triggers in the vaccines including baker's yeast in the Hepatitis B, Neomycin, Streptomycin, Polymixin B in the IPV, gelatin, Neomycin, and egg in the MMR, gelatin, Neomycin, and glutamate in the Varivax, and eggs and Neomycin in the Influenza vaccine. A little known fact is that six percent of the commercial vaccines are contaminated with Mycoplasma. (Dr. Garth Nicolson, October, 2001)

Many people do not realize that there are several vaccines that have been grown in human fetal tissue. These include the MMR, Rabies, Hepatitis A, and Varivax. The cell lines are from aborted fetuses secured in the sixties and the seventies.

Neal Halsey, M.D., past president of the American Academy of Pediatrics, has stressed that it is not about vaccinating vs. not vaccinating. It is about giving safe vaccines.

I would like to give you some information about the legal aspects. The National Childhood Vaccine Injury Act of 1986 provided for the establishment of the National Vaccine Injury Compensation Program. It was initially to

help parents of vaccine injured children with the costs of caring for them. In 1995, Dr. Shalala, HHS Secretary, tightened the requirements for compensation and excluded _ of the applicants. This happened in the face of a two billion dollar surplus in the fund. The program is adversarial at best after changes. There presently is a bill at the federal level to reinstate coverage for the autistic children under the compensation program.

Presently all states allow medical exemptions for vaccines. All states except Mississippi and West Virginia allow religious exemptions. Only sixteen states allow philosophical exemptions—Arizona, California, Colorado, Idaho, Indiana, Louisiana, Maine, New Mexico, Michigan, Minnesota, Nebraska, North Dakota, Ohio, Oklahoma, Rhode Island, and Wisconsin.

Congressman Dan Burton has been an advocate for the parents for the past couple of years. He has held several congressional hearings in the Government Reform Committee on vaccine safety. He has a personal interest in this. His grandson became autistic following several vaccines that were given on the same day when he was about fifteen months of age. He feels that the public trust has been violated. After studying the situation, he found that the financial disclosure statements of some of the advisory panel members are incomplete. He also noted that the chairmen and many of the members of both advisory committees own stock in vaccine manufacturing firms, and have research funded with funds from the same. Several members of the advisory committees hold patents for the vaccines. This is a conflict of interest in any book.

The following are landmarks in vaccine history from 1905 to present:

1905. Smallpox mandated

1906. Pertussis developed

- 1921-1928 Diphtheria developed

1954 First polio vaccine (shot)

1961 Oral Polio approved

1962 Grants to states for mass vaccination

1963 Measles vaccine licensed

1981 Japan licensed DTaP

1982 Hepatitis B available

1986 Vaccine Injury Compensation Act

1987 Hib licensed

1991 Hepatitis B licensed—first genetically engineered vaccine

1995 Varivax licensed

1996 DTaP recommended for all US children

1998 French suspends Hepatitis B vaccine for teens when SKB was sued for possible link with MS in a young girl

1999 Hepatitis A recommended for children in endemic areas

1999 ACIP recommends Neisseria vaccine for college students (meningitis vaccine)

1999 Congressional hearings on vaccine safety

1999 FDA admits infants exposed to unsafe limits of mercury in the vaccines.

Government asked the manufacturers to voluntarily remove or significantly reduce the thimerosal by the following spring in all vaccines routinely administered to infants.

1999 Rotavirus vaccine pulled off the market because of ill infants and 1 death

2000 Pneumococcal vaccine recommended for infants

2000 Congressional hearings on MMR, Mercury in Vaccines

2000 IPV replaces OPV

2001 Additional hearings on vaccine safety

2001 Institute of Medicine (IOM) meets regarding possibility of MMR/Autism

link and Thimerosal/Autism link

2001 US contracts for millions of doses of smallpox vaccine in the light of terrorist activity.

The information that appeared in the newspapers across the country following the IOM meetings in no way reflected the conclusions. Examples are the following:

Panel Finds No Link Between Childhood Vaccines, Autism (New York Times)

No Links Found Between Childhood Vaccines, Autism (Los Angeles Times)

US Expert Group Rejects Link Between MMR and Autism (Lancet)

The Actual report regarding the MMR/Autism link was as follows: "Although the committee has concluded that the evidence favors rejection of the causal relationship at the population level between the MMR vaccine and ASD, the committee recommends that this issue receive continued attention...."

"...It's conclusion does not exclude the possibility that MMR vaccine could contribute to ASD in a small number of children..."

On July 16, 2001 the IOM met to study the possible link between autism spectrum disorder and thimerosal in the vaccines. The committee concluded that there is not enough evidence to prove or disprove the hypothesis that mercury containing vaccines have caused children to develop learning disabilities, ADHD, and autism. The IOM found enough evidence that mercury can damage the human brain to say that the theory is "biologically plausible" and to recommend that mercury preservatives be removed from all vaccines and over-the-counter products.

Barbara Loe Fisher, NVIC president feels that we need a comprehensive analysis of the potential toxicity of all other vaccine additives, starting with aluminum. NVIC joined SAFEMINDS in calling for the removal of all mercury containing childhood vaccines from the market in the US and for doctors to warn pregnant women that the flu vaccine contains mercury. (October 1, 2001 press release)

I would like to offer some practical suggestions for giving vaccines. Use thimerosal free vaccines. Do not vaccinate ill children. Space vaccines where possible and do not try to give nine or ten organisms in one day. Give vitamin C before and after the vaccines. Use DTaP consistently. Monitor children for adverse effects of vaccines and report these immediately. Do not give live viral vaccines to immunodeficient children. Do not give vaccines if the child is allergic to one of the components (yeast&endash;Hepatitis B, eggs&endash;MMR, neomycin&endash;MMR or Varicella.

Give a form of natural vitamin A like cod liver oil as a daily supplement keeping the vitamin A level safe for age. I believe that the MMR vaccine should be split into the three components given one year apart. The separate vaccines, however, are not being made anymore by the manufacturer. The MMR hopefully will be safer if vaccines containing thimerosal are not given prior to it. If the MMR must be given as the triple vaccine, do not give it with any other vaccine, cover the child with vitamin C and vitamin A during the week that the vaccine is given and test for immunity before a booster is given prior to school. If the child is already immune after the first dose, do not give a booster. Consider giving the Hepatitis vaccine to a child older than four if not in daycare. Hold Varicella if not mandated by law until the child is four to five years of age if the child is not shown to be immune to chickenpox.. Keep children on nutrient rich diets and limit environmental exposure as much as possible.

I have included a schedule for the safe administration of vaccines in chapter 15 of my new book, *What Your Doctor May Not Tell You About Children's Vaccinations* (Warner Books, 2001).

In conclusion, let me say that we cannot eliminate all infections. We need safety studies on all vaccines. We need freedom of choice for immunization for our children because ONE VACCINE DOES NOT FIT ALL.