# Shaken baby syndrome (SBS): general commentary

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### **Abstract**

On August 16, 2003, I received the following communication from a grandmother, whose first name is Sharon, somewhat in the fashion of a desperate plea for help on behalf of her daughter, who has been accused of injuring her infant daughter by Shaken Baby Syndrome (SBS). As a poignant example of what I consider to be ill-advised administration of vaccines to a highly fragile and vulnerable infant, I thought that this story needs to be told, which I am now doing with the permission of the grandmother and her daughter. My response to the letter can in no way be construed as a medical report but rather as a general commentary on my observations in reviewing numerous cases of the SBS during the past four years.

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#### Introduction

The information about the case includes the following message from the grandmother:

My daughter had 'Twin Transfusion Syndrome.' It was diagnosed in her twenty-fifth (25<sup>th</sup>) or twenty-sixth (26<sup>th</sup>) week. She had an amniocentesis three or four times, as Baby B was stuck to the wall of the uterus. The syndrome progressed. It took its toll, and at twenty-nine weeks we lost Baby B.

Her...ObGyn physician wanted her to continue her pregnancy until thirty-five weeks to ensure that Baby A was developed and that her lungs matured. That was the safest thing to do, I felt as well. However, we were told to watch for any discharge with dark color, foul odor, things of that nature. When my daughter developed a dark brown discharge, the doctor on call did a full pelvic exam, including use of a speculum. Two hours after returning home from the examination her water broke.

I then took her back to the hospital and she was admitted. She stayed in the hospital five days after which labor was induced with delivery of a baby girl weighing 2 lbs and 14 ounces. The baby's APGARs were 1 at one minute, 5 at five minutes, and 6 at six minutes. The baby stayed in a newborn intensive care unit for 2 months and was, for example, diagnosed with milk pulmonary valve stenosis, ventricular septal defect, anemia of prematurity, apnea and bradycardia, suspected necrotizing enterocolitismedical, bloody stools, and hyperbilirubinemia.

After discharge from the hospital the baby was visited two or three times a week by a visiting nurse. At approximately two months of age the baby was administered four shots - the DTaP, Hib, IPV, and Prevnar vaccines. She did not do well after the shots. She wasn't eating well. She was fussy and cried with high-pitched screams. Her mother took her to the doctor because she was jerking the second day following the vaccines, but he

was not concerned. She then took her to the sitter where the baby became lifeless. The sitter did not summon help, nor did she call my daughter until it was time to get off work. My baby granddaughter was taken to the ER that night where she was having seizures back-to-back and was admitted to the hospital. Three days later the attending physician said he thought the baby had been injured by Shaken Baby Syndrome.

An MRI confirmed she had a brain they expected to see from a baby that weighed less than 3 pounds. There was no blood on the brain or in the spinal fluid. There were no rib fractures. She had no bruises or broken bones. She has never missed a doctor's appointment. She was on a heart monitor which showed no motion artifacts. *All she had were retinal hemorrhages...* 

My granddaughter was a 30-week gestation baby, small for gestational age...will this SBS stuff ever fade away?

As a sequel to the story, based on the lone finding of retinal hemorrhages, the baby was removed from custody of the mother and placed in a foster home. The grandmother, who is now disabled and unable to work, is trying to gain custody of the baby.

## **Analysis and General Commentary**

In the next 25 years or so, when there is greater knowledge about the adverse reactions and aftermath from current child-hood vaccine programs, physicians and scientists, as well as the lay public, may look back on these programs with embarrassment if not worse. This is not to say that vaccines do not have a proper role in preventive health, which they do, but not with neglect of safety considerations, of which in my opinion this case serves as an example.

The rationale for these statements is based largely on the work of Dr. Archivedes Kalokerinos, who worked as a medical officer among the Australian aborigines in the "outback" in the 1960s and 1970s. Being troubled by very high infant mortality,

in some areas approaching 50%, he began to investigate possible causes. Having noticed signs of scurvy in some of the infants, and observing that the children often died following immunizations, especially if they had colds or minor respiratory infections, the thought occurred to him that there might be a connection between vitamin C deficiency and deaths following vaccines. With improved nutrition, routine oral vitamin C supplementation of children and infants, avoidance of immunizations during minor illnesses, even if just a runny nose, and large doses of injectable vitamin C during crises, infant mortality was virtually abolished. Although Kalokerinos was awarded the Australian Medal of Merit in 1978 for his work, it has never been acknowledged by mainstream medicine. What is worse, it has never been subjected to systematic, meaningful scientific study.

With the work and clinical observations of Dr Kalokerinos in mind, I would next like to turn to the work of attorney Toni Blake of San Diego, who specializes in defending parents and caretakers accused of shaken baby syndrome, and who has described a pattern he has noted with these infants. They tend to have the following characteristics: (1) All babies came from problem pregnancies including prematurity, low birth weights, maternal diabetes or toxemia of pregnancy, maternal drugs or alcohol, (or other prenatal risk factors involving immaturity or compromise of the liver, kidneys, and immune system); (2) all had subdural brain hemorrhages; (3) many had fractures; (4) infant complications occurred in clusters around 2 months, 4 months, and 6 months of age; (5) most infant complications and collapses occurred with 11 or 12 days of vaccinations. (Personal communications 2000 and 2002)

In my opinion, the observations of attorney Toni Blake may hold a key to what is happening in many of these infants now being (mis)diagnosed as victims of shaken baby syndrome; that is, the ill-advised vaccination of fragile infants, as described above, and/or the vaccination in the presence of minor viral or bacterial infections. What is happening in these infants?

In contrast to classical scurvy of earlier times in the days of wooden sailing ships, when scurvy was characterized by a total lack of Vitamin C, what we may be seeing today is something quite different. As described by Dr. Kalokerinos [1] and Alan Clemetson, MD [2] subclinical scurvy is a condition in which apparently healthy infants with marginally low but adequate levels of Vitamin C in unstressed conditions may be suddenly thrown into states of critical Vitamin C depletion by combinations of stresses from common infections and toxins, including the toxins found in vaccines. As one example of marginal Vitamin C deficiency on the modern scene, in a study of people attending an HMO (Health Maintenance Organization Clinic) in Tempe, Arizona in 1998, 30% were found to be depleted with plasma Vitamin C levels between 0.2 and 0.5 mgs/100 ml and to be deficient in 6% with levels below 0.2% [3]. In regards to infants, it is true that infant formulas have been mandated to include Vitamin C at levels providing the required 30 mgs per day. However, this is a maintenance level and makes no allowances for additional stresses which may bring about many-fold increases in need for Vitamin C. Common colds, for instance, have been shown to reduce Vitamin C levels up to 50%[4]. No one knows the effects of vaccines on Vitamin C levels in infants, because before-and-after studies of this type have never

been done, but Vitamin C is known to neutralize the toxins of diphtheria [5-8], tetanus [9], typhoid endotoxin [10], and four varieties of gas gangrene [11]. As will be described below, in the process of neutralizing these toxins, Vitamin C is necessarily used up and depleted.

(Note: If the reader will consult with these references, which were extracted from an article by A Clemetson [12], it will be found that most of these studies are quite old and some published in foreign languages. To me that is the pity of it, as our own scientific and medical system has never recognized their importance or followed through with further investigations.)

It is seldom appreciated that vaccines contain a variety of toxins. In addition to bacterial endotoxins and attenuated live viruses, depending on the vaccines, vaccines may also contain formaldehyde, mercury, aluminum phosphate, antibiotics, phenols, alcohols, mineral oils, animal serums, animal DNA, chicken embryo, aborted fetal tissue (in measles, mumps, rubella, and chicken pox vaccines), Simian Cytomegalo Virus (CMV) in oral polio vaccines, and Mycoplasma. (This list of ingredients has been compiled from current *Physicians' Desk Reference* manuals and from report in the medical literature in the cases of Simian CMV and Mycoplasma).

Returning to the importance of vitamin C in relation to vaccines, one of the prime roles of Vitamin C in the body is its action as an antioxidant in donating electrons to quench freeradial inflammatory damage from infections and/or toxins, with our consideration here being vaccine toxins. However, in the process of donating electrons, Vitamin C necessarily becomes depleted. Once the level of Vitamin C is reduced to the point that it can no longer protect the brain, which is unduly susceptible to toxic and infectious damage, it (the brain) may become subject to free-radical damage. By definition "free-radicals" consist of oxygen molecules with an odd number of electrons in their outer orbits. When uncontrolled, these can be very destructive to the body, such as may take place when exposed to harmful radiation. Vitamin C is critically important in protecting against free-radical proliferation because, in donating electrons, it neutralizes the unpaired electrons in the "free-radical" oxygen molecules. Of all the organs of the body, the brain appears to be most vulnerable to this type of damage because of its relatively high fat content.

For these reasons, the combination of ill-advised vaccines given to fragile infants, as in the present case, with highly immature detoxification organs (liver and kidneys) and immature immune systems, or as often takes place, in the presence of viral or bacterial infections, is in my opinion an invitation to disaster with the brain being potentially subjected to a firestorm of free-radical inflammatory damage. I believe that this is what is likely happening in many of these infants. Once this pattern has been set in motion, there is a variable latent period with gradual progression of inflammatory brain swelling commonly complicated by brain and retinal hemorrhages. As the brain continues to swell, the breathing center, located at the base of the brain, may become herniated into the spinal canal and become constricted, this in turn resulting in respiratory arrest and collapse. In other instances there may be seizures, as in the present case. Among the cases of SBS that I have reviewed, I have found these to be common patterns, too frequent to be coincidental.

As described in his autobiography, Dr. Kalokerinos describes the mechanisms involved in the production of brain edema with retinal and brain hemorrhages in much the same fashion:

- Endotoxin (endogenous and/or from vaccines) damages the endothelial linings of the brain's blood vessels.
- Endotoxin then 'leaks' through to the surrounding brain tissue. This includes the retina that is an extension of the brain
- 3. The brain tissue is damaged.
- The blood supply to the portions of the brain involved is reduced.
- 5. Insufficient oxygen, glucose, and Vitamin C follows.
- Parts of the brain are 'rich' in 'bound' (controlled) iron. This is released.
- Violent free radical reactions result and these cannot be controlled because of a lack of immediately available Vitamin C and other antioxidants.
- 8. So further, and rapid, brain tissue damage results, with more free radical reactions.
- 9. Hemorrhages occur in the area/areas involved.
- 10. After a variable period (depending on a host of factors) some of the red blood cells in the hemorrhages break down and release their stores of iron and copper.
- 11. This results in a further cascade of free radical reactions and tissue destruction.
- 12. Cerebral edema (brain swelling) occurs.

By way of comparison, in Vienna in the 1840s, long before recognition of the importance of sanitation and the role of microbes in causing disease, a doctor named Ignaz Semmelweis was assigned to an obstetrical post at a birthing center which was notorious for its high maternal mortality rates. Based on simple observation, Semmelweis deduced that doctors and nurses were carrying infections from one patient to another and

subsequently required that they wash their hands between patients. As a result, the mortality rate among maternity patients under his care was reduced from nearly 30% in other wings of the hospital to less than 2% for patients under his care or supervision.

Was Semmelweis honored by his peers for this discovery? No, at least not at that time. Instead he was dismissed from the hospital staff because his procedures did not conform to the medical thinking of the time. In the case of Dr. Archivedes Kalokerinos, could history be repeating itself?

#### References

- Kalokerinos, A. Medical Pioneer of the 20<sup>th</sup> Century, an Autobiography, Dr. Archivedes Kalokerinos, Biology Therapies Publishing, Braeside, Melbourne, Victoria, Australia, Fax 011-61-39587-1720, Publ.2000.
- [2] Clemetson CAB. *Vitamin C*, Volume I in a 3-volume set, CRC Press, Boca Raton, 1989, pages 215–21.
- [3] Johnston CS, Thompson MS. Vitamin C status of an out-patient population, J Amer Col Nutr, 1998; 17:366–70.
- [4] Hume R, Weyers E. Changes in the leucocyte ascorbic acid concentration during the common cold, *Scot Med J*, 1973; 18:3.
- [5] Zvirbely JL, Szent-Gyorgyi A. The chemical nature of vitamin C, Biochem J, 1932; 27:279–85.
- [6] King CG, Waugh WA. The chemical nature of vitamin C, J Science, 1932; 75:357–8.
- [7] Harde E. Acide ascorbique (vitamin C) et intoxications, *CR Acad Sci*, 1934; 119:618–20.
- [8] Parrot JL. Richet. Accroissement de la sensabilite a histamine chez le cobaye sournis a un regime scorbutogene, CR Soc Biol, 1945;139:1072–5.
- [9] Dey PK. Efficiency of vitamin C in counteracting tetanus toxin toxicity, *Naturwissenchaften*, 1966; 53:310.
- [10] Fukada T. Koyama T. Prevention by ascorbic acid of liver glycogen depletion in endotoxin intoxication, *Nature* (London) 1963;200:1327.
- [11] Buller Souto A, Lima C. Activity of L-ascorbic acid on the toxins of gas gangrene, Vol 12, Sao Paul, Brazil: Memorias do instituto Butantan, 1939:265–95.
- [12] Sircus MA. Clemetson A. Barlow's disease, Medical Hypothesis, 2002; 59(1):52–6.