Basics of the Human Immune System Prior to Introduction of Vaccines: Are Vaccines Turning Our Children's Immune Systems Inside Out?

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In what may be the most comprehensive review to date on the pathophysiology of adverse vaccine reactions, neurosurgeon Russell Blaylock has compiled a mass of evidence that repeated stimulation of the brain's immune system results in intense reactions of microglial and astrocyte cells, which serve as the brain's immune system, with each successive series of vaccinations. This is primarily the result of **vaccine adjuvants** that are expressly added for this purpose. [1-3]

Although the human immune system is incredibly complex with an immunologic memory capacity that might challenge modern computer systems, its basic structural components are the essence of simplicity with a series of defense systems comparable to a medieval castle with an outer mote, plus outer and inner walls of defense.

The human newborn comes into the world with residual antibodies from the maternal blood stream which, in the absence of breast feeding, would provide overall immunologic protection for about six months, and for measles up to 12 months. For those who do choose or are mandated to vaccinate, why not to vaccinate at five or six months of age rather than compromise and endanger an evolutionary system already in place? Otherwise the newborn immune system is largely rudimentary, *requiring a series of microbe challenges to become fully functional*, a process requiring two or three years. **Without these natural challenges the immune system remains relatively weak and vestigial**. This may be the reason that babies are always putting things in their mouths as an instinctive evolutionary trait similar to mammals in the wild.

Cellular and Humoral Immunity

The immune system is divided into two major classes: *Cellular immunity*, located in the mucous membranes of the respiratory and gastrointestinal tracts and their respective lymph nodes, and *humoral immunity*, with production of antigen-specific antibodies by plasma cells in the bone marrow. For eons of time the mucous membranes of the respiratory and gastrointestinal tracts have been the primary sites of microbe exposure and entry into the body, so that cellular immunity has evolved as the primary immune defense system of the body, [4-5] with humoral immunity playing a secondary or backup role.

In the main, the **cellular system acts through the process of phagocytosis**, which involves engulfing and destroying microorganisms and cellular debris, while the **antibody-producing humoral system produces antibodies** in the forms of opsonins (enhance phagocytosis), agglutinins (cause agglutination or clumping), precipitins (cause an insoluble complex), and bacteriolysis (to break up). **Selected samples from the medical literature indicate that the cellular immune system normally plays a primary or governing role in control of viral [6] and fungal [7] infections**. [Emphasis added]

Generally the cellular and antibody-producing systems are complementary and interdependent. Both cellular and humoral immunities are governed by thymus-helper- lymphocytes (TH lymphocytes), the "T" referring to the thymus gland from which they are derived and the "H" referring to helper activity. Early in life uncommitted or "naïve" TH lymphocytes are differentiated into either armed TH1 cells, which govern in cellular immunity, or TH2 cells, which govern in humoral immunity. It has been found that this differentiation has been profoundly affected by cytokines, which are produced by lymphocytes and which serve as chemical messengers.

The two cytokines, interleukin 12 and interferon gamma promote and govern TH1 cells of cellular immunity, while interleukins 4, 5, 6, and 10 promote and govern TH2 cells of humoral immunity. [8] To repeat, **once one subset becomes dominant, it is difficult to shift the response to the other subset, as the cytokines from one tend to dominate the other**. It necessarily follows that **all current injectable**

vaccines, while bypassing the cellular immune system, are directed toward stimulating the inner or humoral system. This is the key to understanding the route vaccines take when injected into the human body. Furthermore, this will tend to establish the humoral system in relative dominance over the cellular system, entirely the **reverse** of the natural immunologic scheme that humans evolved with. This in turn results in a viral suppression of interleukin 12, on which the cellular system is largely dependent. [8]

Consequently, current childhood vaccine programs may, in a sense, be turning childhood immune systems inside out, with the humoral system being thrown into a dominant position for which it is physiologically unsuited.

Vaccines and Infectious Childhood Diseases

The cellular immune system, in contrast, lacking the challenges of the so-called “minor childhood diseases” of former times (measles, mumps, chickenpox, and rubella), may be going through progressive atrophy from disuse of normal physiological processes. It is true that there are many forms of viral challenges today, but only measles, mumps, rubella, and chickenpox of former pre-vaccine times challenged and therefore strengthened the immunity of both epithelial and endothelial tissues of the body and their associated organs.

As a matter of opinion, vaccinations for chickenpox and mumps were totally uncalled for, as they were almost always benign illnesses that likely were serving a useful and positive role in priming and strengthening cellular immunity and response mechanisms.

As to claims that vaccines have been the major factors in controlling infectious diseases of earlier times, according to the Metropolitan Life Insurance Company, from 1911 to 1935 the four leading causes of childhood deaths from infectious diseases in the USA were diphtheria, pertussis (whooping cough), scarlet fever, and measles. Yet, by 1945 the combined death rates from these causes had declined by 95 percent before implementation of mass vaccine programs. [9] Other sources provided much the same information. [10-11] Furthermore, according to a report in *Morbidity and Mortality Weekly* Report, July 30, 1999, improvements in sanitation, water quality, hygiene, and the introduction of antibiotics have been the most important factors in control of infectious disease in the past century. Although vaccines were mentioned, they were not included among the major factors. [12]

Interestingly, research data indicate certain infectious diseases, e.g., pertussis, measles, and tuberculosis, had declined dramatically BEFORE the introduction of those specific vaccines. [24]

Additional research data indicate 90 percent of those vaccinated for pertussis (1993, Ohio) contracted pertussis, whereas only 10 percent of those not vaccinated contracted pertussis.

For measles, 99 percent of those vaccinated against measles contracted the disease, whereas only 1 percent of the non-vaccinated contracted measles (1985, Texas).

Chickenpox generally was considered as a customary, non-life-threatening benign childhood disease up until the advent of vaccines. Nevertheless, data indicate that 97 percent of those vaccinated against chickenpox contracted it, whereas as only 3 percent of the unvaccinated contracted chickenpox (2001, Oregon). [25]

Multiple Viral Vaccines in Combination: A Powerful Immunosuppressive Mechanism

Few people are aware of the medical fact that the measles, mumps, and rubella vaccines were administered separately for a number of years in the U.S.A. with only slight increases in the incidence of childhood autism prior to the introduction of the MMR vaccine in 1978 in the USA. It was only following the introduction of this triple vaccine that the incidence of childhood autism showed a sharp and dramatic increase. [13-14]

There are two plausible reasons for these increases:

First, protein sequences in the measles virus have been found to have similarities to those in brain tissues [15] so that by the process of mimicry, the formation of antibodies against the measles virus would tend to cross-react adversely with the brain.

Second, and far more importantly, viruses are inherently immunosuppressive, in contrast to bacterial infections, which stimulate the immune system. This is reflected by the fact that viral infections tend to lower white blood cell counts in contrast to bacterial infections, which raise white blood counts.

The measles virus is exceptionally potent in this regard, being powerfully suppressive to cellular immunity, [16-18] largely due to its suppression of the cytokine, interleukin 12, on which cellular immunity is dependent.

[18] Consequently the combination of three-viral-vaccines may substantially increase the inherent immunosuppressive effects of viruses that are somewhat similar to the known effects of toxic chemicals which, when combined, bring exponential increases in toxicity. [19-22]

The measles proclivity alone, mentioned above, ought to encourage medical science, pharmacology, and vaccinologists to revisit the work of Dr. Andrew Wakefield that the *British Medical Journal* published and then retracted on the basis of a journalist's apparently misleading story.

Conclusions

It was during the U.S. Congressional Hearings on vaccine safety (1999-December 2004) that gross deficiencies in vaccine safety tests were revealed, when officials of the FDA (Food and Drug Administration), CDC (Centers for disease Control and Prevention), and other government health agencies were unable to provide a single vaccine safety test that would meet with scientific standards, [23] a pattern that has changed little if any today.

It **cannot be** denied that today's mandatory childhood vaccine programs are little more than blind experiments with the possibility of unthinkable and irreversible consequences for our children's physical, mental, and emotional health in the future. The time is long overdue for a complete reevaluation of the current vaccine formulations and programs.

Dr. Buttram discusses the immune system and the impact vaccines have upon it in his book, *A Commentary on Current Childhood Vaccine Programs*, (ISBN: 1-891485-30-X), published in 2010 by the Philosophical Publishing Company, PO Box 77, Quakertown, PA. 18951.

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References:

1. Blaylock, RI. The danger of excessive vaccination during brain development, *Medical Veritas*, 2008; 5(1): 1727-1741.
2. Blaylock, RI. Chronic microglial activation and excitotoxicity secondary to excessive immune stimulation: possible factors in Gulf War Syndrome and autism, *Journal American Physicians and Surgeons,* 2004; 9(2):46-52.
3. Blaylock, RI. Vaccines, depression and neurodegeneration after age 50: Another reason to avoid the recommended vaccines. *VRAN Newsletter, Vaccine Risk Awareness Network Inc.* Spring, 2008; lead article.
4. Robinson, DS. Predominant TH2-Like bronchoalveolar T-lymphocyte population in atopic asthma. *New England J Med.*, 1992; 326: 298-304.
5. Holt PG, Sly PD. Allergic respiratory disease: strategic targets for primary prevention during childhood. *Thorax*, 1997; 52:1-4.
6. Oakes, JE. Role for cell-mediated immunity in the resistance of mice to subcutaneous herpes simplex virus infection. *Infect. Immunol*, 1975 July; 12(1):166-172.
7. Crameri R, Blaser K. Allergy and immunity to fungal infections and colonization. *Europ Respir J*, 2002; 19: 151-157.
8. Kerdiles YM, Sellin CI, Druelle J. Horvat B. Immunosuppresion by measles virus: Role of viral proteins. *Rev Medical Virology*, 2006; 16: 49-63.
9. Dublin L. *Health Progress*, Metropolitan Life Insurance Co., 1948, pg.12.
10. Miller, NZ. *Vaccine Safety Manual*, 2008; Santa Fe, NM, New Atlantean Press, PO Box 9638; pp.110, 138, 151.
11. Anderson, M. International Mortality Statistics. *Facts on File.* Washington D.C. 1981; pages 161-162; 164-165; 177, 178, and 216.
12. *Morbidity and Mortality Weekly Report*, July 30, 1999; 48:621-628.
13. Sources: Centers for Disease Control and Prevention, California Department of Health and Human Services.
14. See 10 above, p.202.
15. Jahnke, U. Sequence homology between certain viral proteins and proteins related to encephalomyelitis and neuritis, *Science*, 1985; 29: 242-284.
16. Brody JA, Overfield T, Hammes IM. Depression of tuberculin reaction by viral (measles) vaccines. *New England Journal of Medicine*. 1964; 711: 1294-6.
17. Karp C, Wysocka M, Wakefield AJ, *et al*. Mechanism of suppression of cell-mediated immunity by measles virus, *Science*. 1996; 273:228-231.
18. Kerdiles YM, Sellin CI, Druelle J. Horvat B. Immunosuppresion by measles virus: role of viral proteins. *Rev Medical Virology*, 2006; 16: 49-63. 5(2): 1816-1820.
19. Schubert J, Riley EJ, Tyler SA. Combined effects in toxicology: A rapid systematic testing procedure:

cadmium, mercury and lead. *Journal of Toxicology and Environmental Health*, 1978; 4:763-776.
20. Abou-Donia MB, Wilmarth KR, Ochme F, Jensen KF, Kurt, TI. Neurotoxicity resulting from coexposure to pyridostigmine bromide, DEET, and permithrin: Implications of Gulf War chemical exposures. *Journal of Toxicology and Environmental Health*, 1996; 48:35-56.
21.Arnold SF, Koltz DM, Collins B, Vonier PM, Guilette LJ, McLachlan JA. Synergistic activation of estrogen receptor with combinations of environmental chemicals. *Science*, 1996; 272: 1489-1492.
22. Chester, AC and Levine, PH. Concurrent Sick Building Syndrome and Chronic Fatigue Syndrome: Epidemic Neuromyalgia Revisited. *Clinical Infectious Disease*, 1994; 18(Suppl1): S43-8.
23. Kirby, David. *Evidence of Harm*, (New York: St Martin Press, 2005).
24. Frompovich, CJ and Abbey-Katzev, LC. *Vaccines & Vaccinations: The Need for Congressional Investigation*, 2011.
http://vactruth.com/vaccines-vaccinations-the-need-for-congressional-investigation/
Raymond Obomsawin, PhD Charts pp. 82-87.
25. Ibid. Raymond Obomsawin, Ph.D. Charts pp. 69-70.