REVIEW ARTICLE

The Perfect Storm Theory for Detecting Vaccine-Induced Toxicity Prior to Immunization

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Commentary

Patient advocacy, informed consent, and bodily autonomy are fundamental factors contributing to the growing escalation of individual resistance to vaccine recommendations of public health agencies. This self-restructuring was present to some extent prior to the Covid-19 pandemic, but its recent acceleration is due in large part to the multiple ill-advised government-directed edicts issued during the first two years of the pandemic. Numerous publications have exposed the lethal consequences of these edicts and the censorship that accompanied them. Disruptions of social, economic and psychological balance were accompanied by distortions of plausible opposing medical opinions, especially with regard to the questionable morbidity and mortality of SARS-CoV-2 infections, bogus Covid-19 vaccine efficacy, and the widely documented toxicity of SARS-CoV-2 vaccines. In the USA alone there have been more than 19,000 deaths and more than 73,000 individuals rendered permanently disabled after receipt of one or more mRNA Covid-19 vaccine doses. When coupled with a number of pre-pandemic publications linking vaccines to autoimmune diseases, cancer, allergies, neurodegenerative disorders, and sudden infant death syndrome, is it any surprise that vaccine skepticism is no longer a fringe element but rather an awakening with profound resilience? Many families are reevaluating all of their children's vaccination schedules. Current pediatric immunization schedules in the USA recommend twenty-one vaccinations by the age of fifteen months, thirty-two vaccine doses by the age of two years, and seventy vaccine doses by the age of eighteen years. Another four vaccine doses are recommended to pregnant mothers while their children are in utero. And yet vaccine manufacturers in the USA have full liability protection for any vaccine-induced side effects following passage of the 1986 National Vaccine Injury Compensation Program.

Excluding anaphylactic and allergic reactions, there have been no unifying theories to account for the extraordinary heterogeneity and genuine reality of vaccine-induced chronic disorders. Although the majority of immunization recipients have no safety issues, four decades of innumerable case reports have documented that any single vaccine is capable of initiating a wide variety of different autoimmune ailments, and conversely any single disease entity is capable of being initiated by a wide variety of different immunizations. Examples of the former include influenza vaccination triggering neurological phenomena (e.g., Guillain-Barre syndrome) and connective tissue diseases (e.g., systemic lupus erythematosus). Examples of the latter include TDaP, MMR, hepatitis B, and/or mRNA vaccines as triggers not only for the above categories but also for a variety of other ailments (e.g., optic neuritis, myocarditis, hemolytic anemia, thrombocytopenia). Additional confusion exists when non-autoimmune conditions with overlapping "features" of the various neurologic fatiguing syndromes arise following vaccination with Gardasil, mRNA, hepatitis B, Fluad, Fluzone, or Trumenba products. True neurologic fatiguing syndromes are familiar entities: chronic fatigue syndrome/myalgic encephalomyelitis (CFS/ME), fibromyalgia (FM), small fiber neuropathy (SFN), dysautonomia, complex regional pain syndrome, and postural orthostatic tachycardia syndrome (POTS).

Vaccine-induced "fatiguing mimics" require some clarification, because biochemical disturbances (and not autoimmunity) comprise the initiating processes. Weeks to months after symptom onset the delayed appearance of a variety of "bizarre" autoantibodies facilitate chronicity and disease perpetuation. Typical chemical and autoantibody targets include G protein coupled receptors that regulate multiple autonomic and non-autonomic physiologic functions; enzymes that regulate the activities of neurotransmitters; heparan sulfate and chondroitin sulfate matrix macromolecules that bind the pre-formed mediators of inflammation inside mast cells, are components of sensory nerve receptors, and comprise the serine protease enzyme affinity site that cleaves brain-derived neurotropic factor (BDNF) into an active molecule; the GAD 65 enzyme responsible for the production of gamma aminobutyric acid (GABA), and proteins regulating ion flow in neuronal membrane channels. Even the etiology of "genuine" idiopathic neurologic fatiguing syndromes has become more confusing, because the demonstration of immune aberrancies, cytokine elevations, and reactivation of previously acquired viruses in these entities are accompanied by biochemical, metabolomic, and mitochondrial disturbances.

It thus seems reasonable to divide vaccine-induced chronic ailments into two categories: (a) autoimmune and/or autoinflammatory disorders; and (b) non-autoimmune neuro-psychiatric fatiguing disorders. Two prior theories have tried to address mechanisms of disease causation in these diverse entities: molecular mimicry and ASIA (autoinflammatory syndrome induced by adjuvants). Both are gross oversimplifications of what is clearly a much more complicated process, and neither theory accounts for susceptibility to chronic adverse ailments triggered by immunizations. Several seemingly unrelated published observations over the past five years have contributed to the formulation of a new theory by this author, known as "The Perfect Storm." These observations include: (a) similarities between long Covid phenomena in non-hospitalized individuals and vaccine-induced "fatiguing mimics," especially with regard to biochemical disturbances in the frontal cortex of the brain; (b) the exacerbation of pre-existing Parkinson's disease after SARS-CoV-2 infections; (c) the relationship of mitochondrial quantum tunneling dysfunction to alterations in gene expression; (d) the verifiable existence of silicone gel-filled breast implant illness and breast implant associated

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anaplastic large cell lymphoma; and (e) the presence of isoform induced autoantibodies directed against the IL-1 receptor antagonist in myocarditis precipitated by the second dose of an mRNA Covid-19 vaccine.

I have used the word "contributed," because the above observations required synthesis with: (a) detailed chronological evolution of disease phenomena in ailing vaccine recipients; (b) the known toxicities of hidden chemical ingredients in dozens of different vaccines; and (c) the documentation of (and/or the necessity for) the presence of several latent genetic defects. Specific components of "The Perfect Storm" theory include: the presence of hidden volatile organic compounds in the toluene and benzene families in at least four common vaccines (hepatitis B, Gardasil, and mRNA Covid-19 products manufactured by Pfizer and Moderna); the presence of hidden organosiloxanes (silicones), silicon dioxide (silica), and sorbitol in at least twenty different vaccines; selective cytochrome P450 (CYP450) enzyme deficiencies which result in impairment of the metabolism of xenobiotics, thereby allowing any hidden toxic vaccine chemicals to hang around longer; the presence of ethylenes in multiple vaccines, which further reduces the already low levels of CYP450 enzymes; variations in the brain concentration of butyrylcholinesterase, an enzyme regulating the interactions between acetylcholine, serotonin, dopamine, and GABA (four neurotransmitters that are crucial to the sleepwake cycle, respiration, muscle tone, nerve transmission, memory, and the maintenance of emotional stability); the presence of one or more innate channelopathies that, in the absence of adverse chemical exposures, are typically innocuous (i.e., without impedance of ion fluxes in and out of neuronal cell membranes); and he known functional existence of ion channels in mast cells, mitochondria, regulatory T cells, and multiple other immunocompetent cells.

Susceptibility to vaccine-induced toxicity is postulated to occur when all of the above components are cojoined together at the time of immunization, thereby creating multiple circuitous amplification loops of biochemical and autoantibody induced disturbances that chronically disrupt routine physiologic functions. These diverse pathophysiologic processes and their sequential development are not mutually exclusive. Complex chronological scenarios, singular or multiple disease manifestations, and broad variability regarding the exact number and types of vaccine exposures required to precipitate symptoms can easily be the rule rather than the exception. As an example, volatile organic compounds can cause changes in transcription regulators, thereby altering gene expression to foster the production of isoform protein mimics which, in turn, may then induce autoantibody formation and/or enzymatic disruption. Conversely, chemical inhibition of protein phosphatases can lead to the unopposed activity of phosphorylases, the latter of which can cause desensitization of G protein coupled receptors and inhibition of ligand stimulation even in the absence of autoantibodies to these receptors. With regard to the more than 400 distinct channelopathies, the vast majority are clinically asymptomatic under innocuous conditions unless the mutated proteins regulating ion channel function are further distorted by environmental events (e.g., chemical exposures or autoantibody production). Can undesirable degranulation of mast cells occur from ion channel malfunction? If yes, their preformed mediators of inflammation are capable of crossing the blood brain barrier to activate microglia cells, thereby fostering neuroinflammation. Altered ion channel activity in mitochondria may lead to DAMPs (damage associated molecular patterns), which are capable of eliciting a variety of inflammatory and immune responses. Ion channel malfunction of regulatory T cells may impair their ability to routinely dampen down the normal generation of anti-idiotypes and autoantibodies after immunization.

Multiple other plausible pathophysiologic mechanisms inherent to vaccine-induced toxicity via "The Perfect Storm" model have previously been published by this author.¹⁻⁷ In the aggregate the potential exists for a limitless variety of adverse vaccine-induced events, all of which are dependent on (a) the presence or absence of biochemical and autoantibody disturbances, (b) their respective targets, and (c) their chronological appearance. Bear in mind that the myriad of vaccine-induced toxicities capable of evolving via "The Perfect Storm" model can paradoxically sometimes be in competition with each other, creating conflicting physiologic havoc at any point in time. Conversely, In some circumstances only a few disturbances may be necessary to trigger a catastrophic event. As an example, "The Perfect Storm" theory can explain SIDS (sudden infant death syndrome) without invoking any aberrant immune responses. Hepatitis B vaccine is typically administered in three sequential doses – at birth, at 2-4 months, and at 6-12 months. Hepatitis B vaccine contains a hidden volatile organic compound that is a serine protease inhibitor. Butyrylcholinesterase is a serine protease enzyme, and low levels of this enzyme have been described in SIDS. SIDS typically will occur in the first year of life, with a peak incidence between 2-4 months. Whether acting alone or in combination with other vaccines, hepatitis B immunization in neonates who manifest one or more CYP450 xenobiotic enzyme deficiencies may explain why 3,000 cases of SIDS were recorded in the USA in 2022 despite three decades of preventive pediatric advice.

Regarding the novel mRNA Covid-19 vaccines, "The Perfect Storm" model is clearly capable of acting in synergy with the two other prominent toxicity mechanisms attributable to this unique immunization, namely "spikeopathy" and persistent nucleotide-induced disturbances. Such synergy can help explain why certain mRNA vaccine-induced ailments

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are predominantly autoimmune mediated, and yet other mRNA vaccine-induced ailments are best suited to the category of non-autoimmune neuro-psychiatric fatiguing disorders. In addition, mRNA vaccines are now often administered in combination with one or more "traditional" immunizations, adding another layer of complexity. Further research will hopefully clarify the validity or non-validity of "The Perfect Storm" theory and whether it is possible to screen for chronic vaccine-induced toxicity prior to immunization.

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